

**Czech University of Life Sciences Prague**  
**Faculty of Economics and Management**  
**System Engineering and Informatics**



**Data Analysis and Software Tool for  
Indian Travel Tourism (Pre and Post  
Covid Outbreak)**

**Information Technology**

**Diponkar Sinha © 2024 CULS Prague**

**CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE**

# CZECH UNIVERSITY OF LIFE SCIENCES PRAGUE

Faculty of Economics and Management

## DIPLOMA THESIS ASSIGNMENT

Diponkar Sinha

Informatics

Thesis title

**Data Analysis and Software Tools for Indian Travel Tourism (pre and post covid outbreak)**

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### Objectives of thesis

The primary objective of the thesis is to analyze the data on the evolution of tourism promotion and development, to maintain India's competitiveness as a tourism destination, and to improve and expand the current tourism offerings to promote economic growth and job creation in India.

The analysis will be carried out through multiple software tools, and the optimal solutions for data handling and visualization will be sought. The tools used for Business Intelligence will be compared. Comparisons will be made using available software tools for the period before and after the outbreak of the COVID-19 pandemic.

For further comparisons, data analyses will be performed on other sectors outside the tourism sector.

### Methodology

The thesis will contain a theoretical and practical part. Appropriate scientific literature will be used to meet the objectives of the diploma thesis. The theoretical part will describe the methods used and the data collection and analysis process.

The methods of the practical part will include:

- 1) Data cleaning through SQL queries.
- 2) Database processing using SQL server.



3) BI visualization and analysis using the Tableau desktop tool (for creating graphs and outputs for individual industries).

4) Publishing outputs and reports via Tableau server.

5) Comparison of outputs using Microsoft Excel.

As a result – the comparison possibilities and details (from different software tools) will be presented.

The proposed extent of the thesis

60 – 80 pages

## Keywords

Data Analysis, SQL, Microsoft Excel, Tableau, India, Tourism

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## Recommended information sources

BHATI, Abhishek, Zohre MOHAMMADI, Manisha AGARWAL, Zilmiyah KAMBLE a Gerardine DONOUGH-TAN, 2022. Post COVID-19: cautious or courageous travel behaviour?. Asia Pacific Journal of Tourism Research. 27(6), 581-600. ISSN 1094-1665. Available via: doi:10.1080/10941665.2022.2091944

DADASHZADEH, Nima, Taimaz LARIMIAN, Ulysse LEVIFVE a Rok MARSETIČ, 2022. Travel Behaviour of Vulnerable Social Groups: Pre, during, and Post COVID-19 Pandemic. International Journal of Environmental Research and Public Health. 19(16). ISSN 1660-4601. Available via: doi:10.3390/ijerph191610065

SUJIT, Aasha, S. GOKILAVANI, Nittymol ANTONY a Umamaheswari SANKAR, 2023. Paradigm Shift in Marketing Strategies of Hotel Industry in Bengaluru, Post Covid-Customer Perspective. Explore Business, Technology Opportunities and Challenges After the Covid-19 Pandemic. Cham: Springer International Publishing, 2023-07-13, 1275-1282. Lecture Notes in Networks and Systems. ISBN 978-3-031-08953-4. Available via: doi:10.1007/978-3-031-08954-1\_110

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## Expected date of thesis defence

2022/23 SS – FEM

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## Declaration

I declare that I have worked on my diploma thesis titled Data Analysis and Software Tools for Indian Travel Tourism (pre and post covid outbreak) by myself and I have used only the sources mentioned at the end of the thesis.

In Prague on 18.12.2023 \_\_\_\_\_Diponkar Sinha

## Acknowledgment

I would like to express my heartfelt appreciation to everyone who helped make this project on "Hotel and Tourism Management based on PHP in India" a reality. The following people and organizations have been instrumental in making this project a success, and I am grateful to them all. I would like to start by expressing my deepest gratitude to Ing. Václav Lohr, Ph.D. who has been an incredible resource for me throughout this project's creation, for all of their encouragement, advice, and insightful criticism. Their guidance and support have been crucial in determining the course of action for the research and implementation stages.

The development team's efforts are also much appreciated; their perseverance and commitment were crucial in making this project a reality. Thanks to everyone's hard work and special abilities, the Hotel and Tourism Management system is a smashing success. Not only that, but I want to thank everyone who had a hand in testing and refining the product, especially the users and stakeholders. The system's usefulness and efficiency in real-world situations have significantly been improved thanks to their feedback, which has also improved the user experience.

CZECH UNIVERSITY OF LIFE SCIENCE assistance was crucial to the success of this project. The smooth progression of the project from conception to execution was made possible by the institution's resources, infrastructure, and supportive atmosphere, which I am grateful for. Finally, I would want to thank my loved ones for all the support, encouragement, and understanding they have given me throughout this ordeal. Their steadfast support and conviction in the significance of this initiative have served as an inspiration to me. This recognition is a result of the teamwork that has been the driving force behind the creation of the Hotel and Tourism Management system. The success of this project would not have been possible without everyone's efforts, no matter how large or small.

## Abstract

The project " Data Analysis and Software Tool for Indian Travel Tourism (Pre and Post Covid Outbreak) " is a complete and unique approach to addressing the difficulties and possibilities in the changing Indian hospitality sector environment. The purpose of this abstract is to offer a summary of the study, highlighting its primary aims, methods, results, and implications.

The fundamental purpose of this project was to design a management system that was both sturdy and user-friendly, and that was developed specifically to meet the specific needs that hotels and other tourist companies in India. In addition to offering valuable insights for strategic decision-making, the system, which is built on PHP, incorporates a wide variety of features and functions that are designed to simplify operations, improve user experiences, and streamline processes. The technique that was used included doing an in-depth investigation of the current hotel management systems, as well as the best practices in the sector and the input from users. For the purpose of assuring scalability, adaptability, and compatibility with the varied technical environment of the Indian hotel business, the development process included PHP as the fundamental technology.

Some of the most critical aspects of the system include an easy-to-use dashboard that provides real-time measurements, an effective administration system for booking records, and a quarterly user reviews analytics report that provides insights into user happiness. In addition to providing tools for monitoring, analysis, and decision-making, the Manager Panel acts as a centralized center for administrators of lodging establishments. The results of the study emphasize the user-centric design of the system, its flexibility to shift industry trends, and the critical role that data analytics plays in making informed decisions. The Manager Panel has emerged as an essential component because of its ability to provide administrators with a centralized interface through which they can monitor and control many elements of hotel operations.

The implications of this research extend beyond the hotel business in India as a whole, providing a technical solution that is compatible with the varied and ever-changing tourist environment of the nation. Because of its adaptability, the system is an invaluable tool for hotels that range in terms of both their size and the complexity of their administrative processes.

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## Chapter:1 Introduction

In recent years, India's travel and tourism business has grown dramatically, owing to reasons such as growing disposable incomes, improved infrastructure, and more government efforts. Because of the increase in rivalry within the industry, it is necessary to use contemporary technology in order to enhance the quality of the customer experience and make the most efficient use of available resources. In India, the Hypertext Preprocessor, often known as PHP, is becoming an increasingly important technology for the management of hotels and tourism destinations (Ahsan and Sarafath, Kazi Zafarullah, 2022). In addition to being used often on the server side, PHP is well-known for its adaptability, ability to manage enormous amounts of data, and syntax that is simple to understand. As a result of its extensive skill set, PHP makes it possible to design effective solutions for handling the many different areas of India's hotel and travel businesses.

Customers are able to explore various accommodations, compare prices, and make reservations more expediently thanks to the Hypertext Preprocessor, which plays a significant role in the development of online reservation systems for hotels in India (Takunya, 2022). Because of its dynamic and interactive features, PHP is well-suited for the construction of hotel booking websites. These websites may provide comprehensive room information, check for availability, and facilitate the finalization of reservations in a flash. When it comes to the administration of hotels and tourists in India, PHP is an extremely important component of Customer Relationship administration (CRM) systems. Client relationship management (CRM) systems that make use of PHP make it possible to handle client contacts effectively, provide personalized services, and analyse data in order to increase customer happiness and loyalty.

The content management systems (CMS) that are used by travel organizations and lodging facilities in India are another area in which PHP finds new applications (Afnarius, Akbar, and Yuliani, 2020). CMS systems that are based on PHP provide a straightforward method of editing and maintaining website content, which guarantees that it will be updated on a consistent basis. Furthermore, Indian hotels and tourist firms use PHP to construct e-commerce platforms, which ensures that online transactions for a variety of services, such as travel accessories and tour packages, are conducted safely and privately. By studying its advantages and uses for operational advances in these sectors within the context of Indian travel tourism,

both before and after the COVID-19 outbreak, the purpose of this dissertation is to fill a vacuum in the existing research on the usage of PHP in India's hotel and tourist management framework.

## **1.1 Overview**

The hotel and tourist business in India has several challenges while attempting to effectively manage its operations and increase the level of pleasure experienced by its patrons (Raj et al., 2023). Technological improvements are responsible for PHP's growth as a potent programming language that supports various capabilities. This may be linked to the fact that PHP was created. It has rapidly gained traction as a viable option for web development. In the next section, a technical study of the possible uses of PHP will be presented, with a particular focus on how it might be used in the context of hotel and tourist management in India.

The Hypertext Preprocessor is a server-side scripting language that enables developers to create websites and apps that are dynamic and interactive. The program is compatible with various web frameworks, such as Laravel, CodeIgniter, and Symfony. These frameworks provide architected structures and libraries that make it possible to construct software more quickly (Macenski et al., 2022). The frameworks that were discussed give a variety of functions like database abstraction, routing, and templating, among other things. These elements contribute to developing solid management systems for lodging and tourist enterprises like hotels and motels. Because of its ability to interact fluidly with frequently used databases like MySQL and PostgreSQL, PHP is a functional programming language for hotel and tourist administration. This is one of PHP's primary selling points. The combination of PHP with database technology allows the effective storing and retrieval of a wide variety of data, including hotel reservations, customer information, and the number of vacant rooms. The integration to which we refer makes it easier to handle data in real-time, ultimately leading to disseminating accurate and up-to-date information to staff members and customers.

PHP's support for various APIs contributes to the language's impressive adaptability. Integrating services provided by a third party into systems used in hotels and other tourism-related businesses based on PHP is feasible. Payment gateways, weather updates, mapping services, and social media platforms are some examples of the services that may fall under this category. The discussed integration allows consumers to have a more unified and seamless experience by streamlining several processes. These processes include online booking, payment processing, and individualized recommendations. Along with having skills in web

development, PHP offers complete help for scripting operations performed on the server. Hotels and other businesses in the tourist industry may use PHP to automate and simplify repetitive processes, generate analytical reports, and conduct data analysis. PHP's scripting features allow it to create individualized scripts that efficiently handle complex business logic and streamline operational procedures. The user can also generate these scripts.

PHP is well-known for its stringent security features, which protect sensitive data and prevent unauthorized access. The data of both customers and businesses may be protected from prying eyes and altered in any way if the programming language PHP is used with appropriate encryption methods, secure database connections, and input validation systems. Using PHP in administrating hotels and tourist attractions may provide a few issues that must be considered. It is essential to properly configure and maintain servers if PHP-based applications are to achieve their potential in terms of both speed and security (Kuo et al., 2020). Implementing new software updates and security patches regularly is necessary to close security loopholes and reduce the likelihood of being attacked by malicious actors. When integrating PHP-based systems into the hospitality and tourist industry, carefully considering scalability and performance optimization is essential. It is vital to employ efficient database architecture, caching mechanisms, and code optimization methods, particularly during peak hours, to provide speedy response times and handle increasing traffic. This is especially true during peak periods.

## **1.2 Research Gap**

The term "research gap" refers to a region within a particular field of study with a shortage of previously conducted research or inadequate prior information. It refers to the gap between what is now known and what remains undiscovered despite extensive study efforts. Finding research holes is essential because it enables researchers to concentrate on problem areas, increasing the likelihood of new findings and technological breakthroughs in the relevant industry. Many studies have been done on hotel and tourist management recently. However, there is still a significant knowledge gap when it comes to using PHP as a programming language in the context of India (Shrivastava and Rathore, 2020). The general public's preference for PHP as a scripting language may be attributed to its adaptability and readiness for use in web development. The hospitality and tourist industry may significantly profit from the wide variety of frameworks, libraries, and tools that are now on the market to develop

management systems that are powerful and efficient. Much hasn't been done in terms of study about the use and efficiency of PHP in the context of the Indian market for this sector as of yet. Most of the present research on hotel and tourist management has focused on broad topics such as customer happiness, service quality, marketing strategies, and sustainable practices. The studies discussed give valuable insights into the sector; moreover, they must comprehensively survey PHP's specific applications and benefits in the context of the hotel and tourist management in India. The user's comment needs to demonstrate more awareness regarding the possible advantages, problems, and implementation techniques of PHP-based systems in this specific setting, highlighted by the fact that the user made the assertion. Although there has not been enough study done on PHP in the Indian hotel and tourist business, getting hands-on guidance relevant to implementing PHP solutions might be difficult for experts. It may be easier for a person to make informed decisions about the implementation and optimization of technology at their place of employment if they have access to sufficient information. The present state of the study suggests that there needs to be more inquiry into the use of PHP in the hotel and tourist management in India for there to be any conclusive findings. As a result, it is essential to carry out such an inquiry to fill up this research void as quickly as possible.

The purpose of this dissertation is to address a research gap that has been identified in the current body of research and to provide new perspectives that may be of help to industry professionals, academics, and policymakers. This research aims to investigate whether PHP helps increase operational efficiency, the quality of the customer experience, and overall performance in the hotel and tourist business in India. This study aims to give complete knowledge of the possible advantages of using PHP in this sector via research.

### **1.3 Research Aim**

The aim of this research is to investigate the effectiveness of PHP in hotel and tourism management in India. It seeks to assess the benefits, challenges, and potential areas of improvement in implementing PHP-based systems and applications in the hospitality and tourism sector.

### **1.4 Research Question**

- What are the current practices and technologies employed in hotel and tourism management in India?

- This question aims to explore the existing systems and technologies used by hotels and tourism establishments for various management functions, such as reservations, customer relationship management, inventory management, and financial operations. It will provide a comprehensive understanding of the prevailing practices and technologies in the industry.
- How can PHP be effectively utilized to improve operational efficiency and customer experience in the hotel and tourism sector?
  - This question aims to explore the potential applications and use cases of PHP in enhancing operational efficiency and customer satisfaction in hotels and tourism establishments. It will investigate the various functionalities and features of PHP that can be leveraged to optimize management processes, automate routine tasks, and provide personalized experiences for customers.
- What are the key challenges and barriers to implementing PHP-based systems in the Indian hotel and tourism industry?
  - This question seeks to identify the obstacles and limitations faced in the adoption and implementation of PHP-based systems in the Indian hotel and tourism industry. It will explore factors such as infrastructure requirements, technical expertise, training needs, cost implications, and potential resistance to change. Understanding these challenges will enable the development of strategies to overcome them and ensure successful implementation of PHP-based systems.

## **1.5 Research Objectives**

- ◆ To study the current practices and technologies employed in hotel and tourism management in India.
- ◆ To assess the challenges and barriers faced in the implementation of PHP-based systems in the Indian hotel and tourism industry.
- ◆ To implement a robust and user-friendly PHP-based system that enhances operational efficiency and customer satisfaction in the hotel and tourism industry in India

## 1.6 Research Scope

The research will primarily focus on the utilization of PHP in hotel and tourism management within the Indian context (Manhas and Nair, 2020). It will involve an in-depth study of various PHP frameworks, libraries, and tools that are suitable for developing robust and efficient management systems in the hospitality and tourism sector. The purpose of this investigation is to examine the current procedures and tools employed in India's hospitality and tourist management industries. The work at hand calls for reviewing the present systems and technologies used by hotels and other tourist businesses for various management reasons, such as reservation management, customer relationship management, inventory management, and financial operations management.

In the context of hotel and tourist management, this research investigates the possible benefits and advantages of adopting PHP. This study aims to evaluate the different features of PHP that apply to the hospitality and tourist business. These features include PHP's adaptability, scalability, database compatibility, integration capabilities, performance, and security (S, V and V, 2023). This research aims to evaluate how effectively PHP can improve operational efficiency and the quality of service provided to customers in the hospitality and tourist industries. This section will review the many possible applications and use cases for PHP. Among them include the improvement of management procedures, the automation of mundane work, and the provision of individualized experiences for clients.

This study aims to investigate and examine the difficulties and obstacles that stand in the way of deploying PHP-based systems in the Indian hotel and tourist sector. The current endeavor calls for an exhaustive investigation of a wide range of parameters that may or may not impact the effective deployment of PHP-based systems (Ponnusamy and Eswararaj, 2023). Infrastructure requirements, technical knowledge requirements, training requirements, economic implications, and the possibility of opposition to change are all examples of these variables. The application of PHP in hotel and tourist management within the framework of Indian culture would be the primary focus of this study. On the other hand, it also includes practices and experiences from other countries to provide a more holistic perspective and insights.

The scope of the study is centered on analyzing the use of PHP in the hotel and tourist management in India to comprehend how it is utilized in these fields comprehensively (Shekhar

and Valeri, 2022). In the Indian hotel and tourist sector, industry experts, researchers, and policymakers are the intended audience for this study. The study aims to give relevant insights and suggestions. This will be accomplished by investigating the practices already in place, analyzing the advantages and difficulties, and determining methods for successful implementation.

## **1.7 Rationale**

This rationale is to provide valuable insights and suggestions to people working in the hotel and tourist business in India (Hussain, Ahmad Shah and Kareem, 2020). In the hotel and tourist industries, this research aims to investigate the possible advantages that PHP-based systems may provide. The primary emphasis is on how these technologies may improve the operational efficiency, overall performance, and delight of customers. This research aims to investigate the prevalence of the hypertext preprocessing language known as PHP in the Indian hospitality and tourist industry (Mohammed Abdulrahman, R. M. Zeebaree and Omar, 2022). The ease of use, versatility, and broad compatibility of the PHP programming language with various computer operating systems and database types are primarily responsible for the language's widespread adoption in web development. Examining the technical features of PHP-based systems is the focus of this research, with the final goal being to provide experts working in the hospitality and tourist industries with helpful insights and suggestions based on those findings.

The fact that PHP can facilitate the development of dynamic and interactive websites is one of the primary reasons this programming language is suitable for use in the hotel and tourist sectors. The Hypertext Preprocessor, also known as PHP, is a programming language that facilitates the creation of webpages with more complex capabilities (Purbo, 2021). Customers can get up-to-date information from these websites, such as the cost of rooms, availability, and the opportunity to make reservations online. Because of the dynamic nature of PHP-based systems, their employment may increase the operational efficiency of hotels and other tourism-related businesses by automating a variety of procedures, hence lowering the amount of human labor required.

Integrating PHP with databases is a prominent characteristic that makes it appropriate for properly handling considerable amounts of data in the hospitality and tourist industry (Ahsan and Sarafath, Kazi Zafarullah, 2022b). This makes PHP a good option for data management in these industries. By using the database connection options offered by PHP, hotels can



efficiently store and retrieve a wide variety of data, such as information about their customers and the specifics of their reservations. This technology has the potential to make it easier to provide individualized experiences for customers, streamline the processes involved in making reservations, and manage visitor information effectively. Because it comes with such a large array of frameworks and tools, PHP has a significant competitive edge. PHP frameworks like Laravel, Symfony, and CodeIgniter provide developers with pre-built modules and libraries that make creating frequently used functions such as authentication, user management, and payment processing simpler. The use of frameworks has a noticeable influence on the pace at which the development process is carried out, significantly reduces the amount of code that must be repeated, and ensures the security and dependability of systems driven by PHP.

PHP is distributed under an open-source license has resulted in the growth of an active and supportive community of software developers (Fiorina et al., 2021) The professionals working in the hotel and tourist industries have access to various resources, which may work in their favor. These resources include internet forums, documentation, and pre-existing solutions. The availability of community assistance is one factor that may contribute to the effective deployment and ongoing maintenance of systems based on PHP (Faid, Sadik and Sabir, 2021). it has the potential to encourage the sharing of insightful ideas and innovative strategies adapted to meet the specific requirements of the hospitality and tourist industry.

## **1.8 Methodology**

The present research attempts to employ a qualitative technique to attain its objectives. To obtain and evaluate secondary data, the approach largely depends on a comprehensive literature review, a review of research papers, and an assessment of pertinent industry reports. The selected approach will allow for a full study of the research questions and will encourage a complete grasp of the subject. A thorough literature review will identify relevant research, ideas, and concepts related to the study subject. Searching across multiple databases, particularly those holding scientific articles, conference papers, and trusted online archives, is the best strategy to ensure that all relevant content is included in this evaluation. The secondary data collected will be examined, processed, and organized into a logical framework for the research.

To assess the data, appropriate statistical analysis procedures will be employed. Methods employed may vary from descriptive statistics to regression analysis to inferential statistics,

depending on the data and the questions being answered (Ruggiano and Perry, 2019). Data must be statistically analyzed to draw meaningful conclusions and generate reliable predictions to uncover patterns, trends, and correlations. The waterfall methodology will be used to carry out the research systematically and well-organized. The waterfall model, a sequential technique for generating software, comprises distinct operations such as requirements analysis, system design, development, testing, and deployment. The waterfall model will guarantee that each stage of the research process is fully addressed before moving on to the next.

## **1.9 Limitations**

While this research method provides some important insights, several downsides must be considered (Ipsen et al., 2021) This study is confined to using PHP as a programming language in the hotel and tourism industries. Despite their widespread usage in this business, Python, Java, and mobile application development frameworks, which are all extensively used in this industry, are not discussed. Consequently, the study findings may not consider all the technologies relevant to the industry. Since the scope of the research was limited to India, its results may not be relevant to other countries or places. Cultural, economic, and technological variations across contexts may significantly influence PHP's usefulness and acceptance in the hotel and tourism industries. Consequently, caution must be used when projecting the findings to other locations.

It is critical to be open about the time and financial restrictions that affect the majority of research endeavors. The dissertation deadline may limit how in-depth the research may be. Practical restrictions, such as participant access and data source availability, may limit the sample size employed for data collection. These limits should be addressed since they may impact the study's outcomes.

Although the waterfall model is a proven and reliable approach, it has numerous significant limitations preventing it from being used in current software development (M Alenezi, 2019). Because of its linear and sequential nature, it may not be suitable for research that requires iterative techniques or flexibility to new findings or adjustments in emphasis. Researchers must be aware of these limits and adapt their research appropriately. The chosen technique has disadvantages, but it provides a good platform for diving into the research issues and giving helpful insights concerning PHP's role in hotel and tourism management. The study attempts to add to the body of knowledge on the topic by offering a thorough and nuanced grasp of the

problem, and it does so by acknowledging and correcting these flaws within the scope of the research.

## **1.10 Overview of the structure**

The Hotel and Tourism Management system based on PHP in India has been thoroughly created with many components seamlessly integrated for optimal performance. The Dashboard, Booking Options, and Room Details portions of the user interface are designed to be easy to use and understand so visitors can have a straightforward and intuitive experience. At the same time, the Manager Panel coordinates all of the hotel's administrative functions, providing a one-stop shop for all things related to reservations, room data, and general operations. In order to keep the system running smoothly, provide necessary features, and provide a solid base for effective hotel administration, organized datasets are crucial.

## **Chapter: 2 Literature Review**

### **2.1 Introduction to Data Analysis and Software Tools for Indian Travel Tourism (Pre and Post-COVID Outbreak)**

The travel and tourism business in India is a fundamental component of the country's economy, and it makes a considerable contribution to the expansion of the country's gross domestic product (GDP), employment, and profits in foreign currency (Khan et al., 2020). India, which is renowned for its abundant cultural history, historical landmarks, and magnificent natural beauty, is a popular destination for tourists from all over the world (Menon, Bhatt, and Sharma, 2021). In 2019, there were 10.93 million visits from foreign visitors, which is a 3.2% rise from the previous year (Ministry of Tourism, 2020b). Recent years have shown significant development, with the latter year seeing 10.93 million arrivals. Travel agencies, tour operators, transportation services, and other businesses that are closely tied to tourism are included in this diversified industry. These businesses are responsible for operating hotels, resorts, restaurants, and other tourist-related institutions.

Recognizing the sector's potential, the Indian government has begun initiatives to promote expansion, with the Ministry of Tourism conducting infrastructure development, talent training, and marketing plans (Dash and Sharma, 2021). Increasing the quality of service, generating job opportunities, and enhancing the visitor experience are the goals of these programmes. According to the Ministry of Tourism (2020b), the domestic tourism scene has

also seen a spike, with the number of visits by domestic visitors reaching roughly 2.6 billion in 2019. This represents a 15.5% increase from the previous year. According to the Ministry of Tourism's 2020b report, projections indicate that profits in foreign currency would increase by 3.9% to reach USD 29.96 billion in 2019. This will contribute to 6.8% of the nation's employment, which will result in the creation of 87.5 million jobs. In this dissertation, the author investigates the use of data analysis and software tools within the dynamic environment of Indian travel tourism. Specifically, the author looks at situations that occurred both before and after the COVID-19 epidemic.

### **2.1.1 Significance of the hotel and tourism industry in India**

India's hotel and tourism industry are crucial in terms of its function as a generator of economic growth, employment, and foreign currency earnings (Khyat, Yadav and Johri, 2020). The hospitality and tourism business in India contributes significantly to the country's work population and offers job opportunities to those with a wide variety of degrees of skill. According to the World Travel and Tourism Council (WTTC), the sector directly supported 42.6 million jobs in 2019, accounting for 8.1% of total employment in the country (WTTC, 2020). This includes positions in hotels, restaurants, travel agencies, tour operators, transportation services, and other related businesses (A Marin-Pantelescu, 2019). Employment created by an industry benefits individuals and communities by improving socioeconomic situations and providing opportunities for individuals' lives.

The tourist sector in India contributes significantly to the country's gross national product. According to the Ministry of Tourism figures (2020b), the country's tourist sector produced USD 28.8 billion in income in 2019, making it the country's third-largest source of foreign currency profits overall. These gains help to boost the nation's overall economic growth as well as the country's trade balance (Irwin, 2019). Only a few sectors that gain from higher earnings from foreign money include infrastructure development, healthcare, educational possibilities, and technological innovation. The growing hospitality and tourism industries in India contribute significantly to the country's gross domestic product (GDP). According to the World Travel and Tourism Council, the travel and tourism sector contributed INR 16.91 trillion to India's GDP in 2019, accounting for 6.8% of the country's total GDP. This contribution is expected to grow, reflecting the business's growth potential and the government's initiatives to encourage tourism and hospitality.

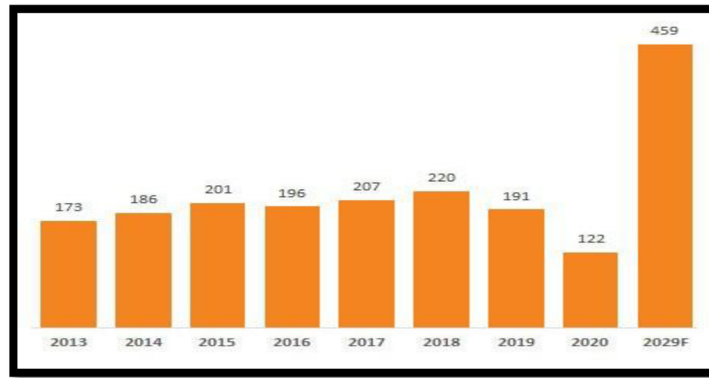


Figure 11 Significance of the hotel and tourism industry in India

Image Source: (IBEF, 2023)

The above graph shows the, GDP contribution of 6.8 per cent in 2019, India's tourism industry brought in Rs. 1,368,100 crores (US\$ 194.30 billion), placing it tenth worldwide. In 2020 the sector accounted for 39 million of the country's total jobs or 8% (Ram et al., 2022). The industry contributed \$178 billion to GDP in 2021, and with annual growth of 7-9% from 2019 to 2030, it is projected to reach \$512 billion by 2028. Improvements in airport infrastructure and better access to passports are expected to propel India's travel sector from US\$ 75 billion in FY20 to US\$ 125 billion in FY27. It is predicted that by FY27, the global hotel industry will be worth US\$ 52 billion. Domestic travellers will likely drive growth, while overseas visitors are estimated to hit 30.5 billion by 2028 (Khanna et al., 2020). In August of 2022, the United States, the United Kingdom, Australia, and Canada were among the top nations from which visitors to India originated.

### 2.2.2 Role of PHP in Improving Operational Efficiency and Customer Satisfaction

The usage of the server-side scripting language PHP is critical in raising operational efficiency and increasing levels of customer satisfaction in India's hotel and tourism sectors (Sangmanee and Suwanwerakamtorn, 2023). It has become the platform of choice for creating web applications in this area because of its versatility, user-friendliness, and strong backing from the open-source community.

#### *Efficient Management of Operational Processes*

It is crucial to recognize PHP's role in efficiently managing operational processes in the hotel and tourism industries. Hotels may automate and streamline a range of procedures by using PHP-based solutions. Room reservations, check-in and check-out procedures, and payment

transactions are examples of these processes (Suparini, Adnyani and Armawan, 2020). PHP's database integration capabilities come in handy when storing and retrieving client information. This enables hotels to provide customized experiences for their customers by tailoring their services to each patron's preferences. Hotels with access to their customers' data may keep track of guest preferences, previous stays, and other relevant information. This allows hotels to provide tailored recommendations and anticipate their customers' needs. Furthermore, PHP enables effective customer relationship management (CRM) systems. These technologies enable hotels to maintain detailed client profiles, track customer interactions, and perform targeted marketing campaigns.

According to a 2019 survey by the Federation of Indian Chambers of Commerce and Industry (FICCI), 72% of Indian hotels have used PHP-based solutions for their operational operations. These technologies have been quite useful in automating procedures and reducing the amount of human labor required. Hotels may manage reservations more effectively by using automated room reservation systems, minimizing the possibility of errors, overbooking, and repeated bookings (Antonio, de Almeida and Nunes, 2019). Automated check-in and check-out operations give visitors a seamless and problem-free experience, leading to a rise in overall customer satisfaction. Furthermore, integrating payment gateways with PHP makes transactions easier and safer, reduces administrative workload, and boosts the efficiency of corporate operations.



Figure 2: Operational Process

Image Source: (HotelRez, n.d.)

PHP's appeal in the Indian hotel industry may be attributed to the programming language's ease of use and the extensive open-source community support it gets (Oreoluwa, 2022). The programming language has a complete set of frameworks and libraries that aid development by providing ready-to-implement solutions for periodic functions. Laravel is a well-known PHP framework offering routing, caching, and database management features. These characteristics significantly speed up the development process and increase the efficiency of hotel management systems. Furthermore, the availability of pre-built PHP modules and extensions allows developers to quickly include additional functionality into their applications, increasing operational efficiency.

### ***Development of Online Travel Agencies (OTAs) and Booking Platforms***

The importance of PHP in creating and spreading online travel agencies (OTAs) and hotel booking systems in India cannot be overstated (Oreoluwa, 2022b). These platforms, built on PHP frameworks and systems, have transformed how travelers search for, compare, and book hotel accommodations. As a consequence, the sector's revenue has skyrocketed. According to Statista, the amount of money earned by online hotel bookings in India will reach 1.8 billion USD by 2020. This large amount demonstrates the rising reliance on online channels for hotel room reservations. Furthermore, the expected compound annual growth rate (CAGR) of 9.5% from 2020 to 2024 demonstrates the business's ongoing development and potential, with revenues expected to reach USD 2.4 billion by 2024 (Statista, 2021).

PHP is an ideal choice for creating online travel and hotel booking services due to its dependability and scalability (Rajapaksha, 2021). Building feature-rich and user-friendly applications requires a solid foundation, which PHP frameworks such as Laravel, Symfony, and CodeIgniter deliver. These frameworks provide critical tools and libraries that make it easy to develop adaptable interfaces, seamless search and filtering functions, and secure payment gateways. Furthermore, the success of online travel agencies (OTAs) and booking platforms may be ascribed to PHP's user-friendliness and the extensive open-source community support provided by PHP. PHP is accessible to developers of all levels of competence due to its user-friendly syntax and moderate learning curve. Due to the strong community support, developers have access to a comprehensive library of PHP-based solutions, modules, and plugins. As a result, they may devote less time and effort to implementing complex functionality.



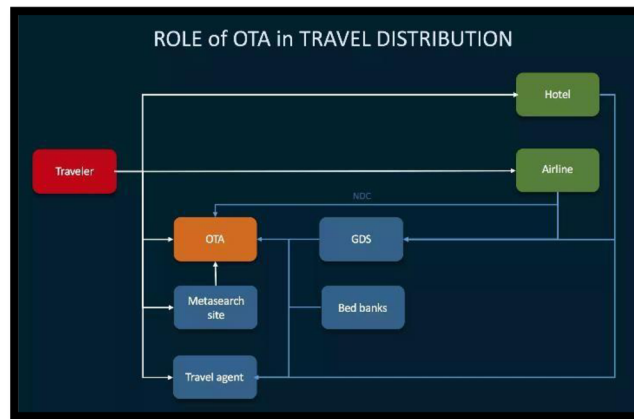


Figure 3: Development of Online Travel Agencies (OTAs) and Booking Platforms

Image Source: (Lobo Jeong, 2020)

Online travel agencies (OTAs) like the one shown above function as middlemen between clients and the suppliers of various travel-related goods and services, such as, but not limited to, hotel rooms, flights, rental cars, vacation rentals, and excursions. They make money by charging users a percentage of all site transactions. Online travel agencies (OTAs) create inventory lists by establishing API (Application Programming Interface) connections with different partners (Berndt, 2022). Extranet, Channel Manager, and Application Programming Interfaces (APIs) may all be used to connect hotels and central reservation systems. Another sort of partner is the "bed bank" or "wholesaler," which purchases rooms in bulk from hotels and resells them to OTAs, travel agencies, and airlines. Regarding the distribution of travel services, global distribution systems (GDSs) are essential data warehouses for inventory, scheduling, and pricing information. Leading global distribution systems (GDSs) include Sabre, Amadeus, and Travelport. NDC (New Distribution Capability) links allow airlines to become partners and sell their goods to customers directly (Foris, Matei and Foris, 2021). There is also cooperation between OTAs and metasearch engines like Google Flights and Skyscanner, which provide a consolidated view of available flights and direct customers to OTA websites. The ability of OTAs to deliver competitive pricing and maximise revenues depends on their ability to find the optimal combination of suppliers and distributors.

Online travel firms and booking platforms that employ PHP's capabilities give travelers smooth and uninterrupted experiences (Tepe, 2022). Consumers may define their travel preferences, filter search results, and compare other hotel choices using these systems' user-friendly search interfaces. Because PHP can handle complex database operations quickly, users may get hotel

information quickly and correctly, ensuring that consumers always have access to the most up-to-date pricing and availability information. Moreover, since PHP can interface with several payment gateways, customers may feel more secure while making payments. PHP-powered platforms expedite the booking and payment processes by integrating popular payment gateways like PayPal and Stripe and local payment systems.

### ***Integration with Payment Gateways***

PHP's integration capabilities with payment gateways have revolutionized how transactions are conducted in the hotel and tourism industries (Kapil, Kanwal and Kapil, 2021). This has enabled secure and easy payment processing for hotel bookings and other associated services. PHP's adaptability allows it to easily interface with popular payment gateways such as PayPal and Stripe and local payment systems. This link enables hotels and travel agencies to offer their customers a wide range of payment options, catering to a wide range of preferences while ensuring a streamlined and hassle-free payment experience. PHP-powered applications may handle many payment channels, allowing them to cater to a diverse customer base locally and abroad.

In India, there has been a noticeable growth in the number of individuals adopting digital payment methods during the previous several years (Patil et al., 2020). According to the Reserve Bank of India (RBI), the total volume of digital transactions conducted inside the country's borders will reach an incredible INR 4,300 trillion (USD 61 trillion) in 2020 (RBI, 2021). This exponential development reflects the rising reliance on secure online payment methods. PHP's ability to link with various payment gateways is critical in facilitating these transactions in the hotel and tourism industries.

One of the most crucial advantages of PHP is its ability to communicate with well-known payment gateways such as PayPal and Stripe, as well as localized payment systems (Arner et al., 2022). Because of this connectivity, hotels and travel companies may offer their customers various payment options, including credit cards, debit cards, digital wallets, and online banking. PHP-powered applications may enhance conversion rates and customer satisfaction by catering to consumer preferences and convenience by providing several payment methods. This leads to higher conversion rates. Safety is paramount when conducting online financial transactions, and PHP's integration features to ensure proper safety procedures are followed (Limon, 2021). Payment gateways use industry-standard security mechanisms such as

encryption and tokenization to secure sensitive customer information. These security features are used by PHP-powered applications to transfer and keep payment data safely. This helps lessen the risk of data breaches while maintaining consumer trust. Furthermore, PHP's support for secure socket layers (SSL) and transport layer security (TLS) protocols increases the security of financial transactions. These protocols encrypt data in transit to prevent unwanted access.

PHP integration capabilities enable hotels and travel organizations to process payments safely, securing sensitive customer information. PHP-powered applications protect the payment data of their consumers by using encryption options and built-in security features provided by payment gateways. This ensures that the data is secure during the transaction procedure (Delgado-Segura et al., 2017). This increases consumer trust and confidence, which adds to an overall improvement in customer satisfaction and a more pleasurable user experience. The integration of PHP with several payment gateways is also significant since it enables the processing of payments in real-time (Chong and Diamantopoulos, 2020). When a consumer initiates a payment, PHP ensures the payment information is smoothly sent to the payment gateway. This enables real-time payment authorization and verification. Customers benefit from quick confirmation of their bookings and reservations because this real-time processing prevents delays and ensures they are confirmed on time. Real-time processing also allows hotels to increase the efficiency of their inventory management, lowering the possibility of overselling or uneven supply.

## **2.2 Current Practices and Technologies in Hotel and Tourism Management in India**

The hotel and tourist business in India has adopted various management practices and technology to increase operational efficiency, improve the overall visitor experience, and promote overall industry development. In this regard, solutions based on PHP have been crucial in allowing these improvements and playing a vital part in doing so (Ali Qalati et al., 2021). The creation of hotel management systems is one of the most famous sectors in which PHP has been employed widely. These systems simplify and automate various operational tasks, such as hotel bookings, guest check-in and check-out, inventory management, invoicing, and report generation (Coelho, 2022). The adaptability of PHP and its widespread support from the open-source community have led to the development of many frameworks and libraries that are

especially geared toward use in hotel management systems. Popular PHP frameworks like Laravel, CodeIgniter, and Symfony provide a platform for constructing complete hotel management systems. These frameworks provide powerful tools and capabilities for rapid development, assuring scalability and offering rapid development.

The method in which hotels interact with their visitors has been fundamentally altered due to the integration of PHP with customer relationship management (CRM) systems (Anabila et al., 2021). Because PHP can connect with databases, hotels can save and retrieve information about their guests, enabling hotels to provide personalized services and conduct focused marketing efforts. CRM systems that PHP drives make it easier to maintain visitor profiles by keeping tabs on preferences, prior stays, and comments; consequently, customers have more opportunities to have their experiences personalized to their needs, leading to increased customer satisfaction. These customer relationship management systems also enable efficient guest communication, which enables hotels to deliver personalized offers, incentives, and post-stay surveys to guests. As a result, guest loyalty is increased, and repeat reservations are driven.

In addition to this, PHP has been a significant contributor to the expansion of online travel agencies (OTAs) and hotel booking platforms in India. These platforms, constructed on PHP frameworks and systems, provide travelers with user-friendly interfaces that allow them to search for, compare, and book hotel stays comfortably (Khan, Kashem and Khan, 2021). Because of its reliability and scalability, PHP is an excellent option for developing such platforms, which helps ensure that users have positive online experiences and contributes to the expansion of the sector. Customers are more likely to trust and be satisfied with a company if it has integrated PHP with payment gateways, enabling safe and seamless online transactions (Khan, 2023).

Data analytics and business intelligence tools are other developing trends in the hospitality and tourism management industry. These tools are often connected with systems that are based on PHP. With these technologies, hotels can analyze large volumes of data, such as the preferences of their guests, booking patterns, and general industry trends. Hotels can extract important insights, optimize revenue management techniques, and make choices based on the data generated by their operations by exploiting PHP's ability to communicate with databases and APIs. In addition, the fact that PHP is compatible with visualization libraries and frameworks makes it possible to create interactive dashboards and reports, making monitoring and analyzing key performance indicators much easier.

Further, mobile apps are becoming more popular in the hospitality and tourist industries. These applications offer visitors increased ease of use and opportunities to customize their experiences. The use of frameworks like React Native or Flutter in conjunction with PHP allows the creation of mobile apps that are cross-platform and are thus compatible with both iOS and Android devices. These mobile apps allow users to make bookings for rooms, check-in and check-out online, use digital concierge services, and communicate in real time with hotel staff members (Nilsson, 2022). The integration capabilities of PHP with application programming interfaces (APIs) and web services provide easy communication with backend systems, guaranteeing that users will have a pleasant and productive experience.

### **2.2.1 Overview of existing management systems and technologies employed in the industry**

India's hotel and tourism sectors have upgraded their management techniques and technological infrastructure to keep up with the demands of an expanding global market (George, 2020). PHP-based solutions have grown in popularity in recent years due to their versatility, broad community support, and ability to fulfill the specific needs of numerous sectors. Property management systems (PMS) built on PHP frameworks are critical to keeping hotels functioning properly. These systems include substantial capability for handling reservations, room allocation, check-in and check-out processes, and visitor contacts. PHP's database integration features enable effective saving and retrieval of reservation data, ensuring that all information is valid and facilitating the seamless functioning of activities.

A proficient inventory management component is always required in hotel management systems (Mondol, 2021). With the aid of PHP-based systems, hotels may monitor and manage their room inventory, as well as their amenities and other resources. Property Management System (PMS) systems based on PHP provide real-time information on room availability, allowing personnel to allocate rooms as efficiently as possible. Interaction with front-desk operations does this. Furthermore, PHP's integration capabilities extend to other departments, such as cleaning and maintenance, allowing for more effective resource management and collaboration.

Customer relationship management (CRM) systems, often based on PHP frameworks, are increasingly required for hotels. This enables hotels to provide their visitors with more customized experiences. PHP-powered CRM systems may preserve and manage guest profiles,

allowing hotels to record visitors' preferences, stay histories, and communication records. By utilizing this information, hotels may better respond to their visitors' demands, give more relevant promotions, and achieve greater customer satisfaction. The seamless data exchange offered by integrating PHP-based PMS and CRM systems allows staff members from many departments to access essential information about visitors and create customized experiences. Research conducted by the Federation of Indian Chambers of Commerce and Industry (FICCI) found that 89% of hotels in India had implemented property management systems (PMS), and 81% had used customer relationship management (CRM) systems (FICCI, 2019). These systems, often based on PHP frameworks, enable hotels to automate processes, manage reservations, streamline operations, and increase the quality of their client interactions.

Another important function that PHP-based solutions may help with is payment processing. Integration with payment gateways enables hotels to securely take online payments, giving guests an easy and trustworthy payment experience. The ability of PHP to interface with a broad range of payment gateways, such as PayPal, Stripe, or regional payment systems, ensures flexibility and compatibility for a wide range of payment preferences. The encrypted transmission of payment information, compliance with industry standards, and secure communication of payment information assure the security of sensitive financial data (Bhutta et al., 2022). The usage of mobile applications in the hospitality and tourism sectors has increased significantly, allowing clients to access hotel services and information while on the move. The usage of PHP in combination with mobile development frameworks such as React Native or Flutter enables the creation of cross-platform mobile applications (Andersson, 2022). These programs include real-time interaction with hotel workers, mobile check-in and check-out, digital concierge services, and the ability to book rooms. Visitors may have a consistent experience across various devices according to the data synchronization provided by the seamless integration of PHP and mobile platforms.

### **2.2.2 Examination of traditional systems versus technology-driven approaches**

The change in India's hotel and tourism sector from one based on traditional techniques to one driven by technology has substantially impacted many aspects of corporate operations and consumer experiences. This shift has been fueled by introducing PHP-based systems, which provide several benefits over manual operations and previous systems (Amini et al., 2021). The adoption of PHP-based solutions has mostly driven this transition.

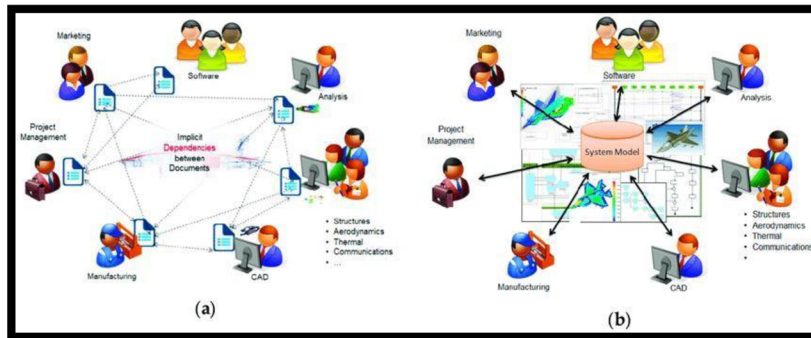


Figure 4: Traditional System vs model-based system

Image Source: (Azad M. Madni, n.d.)

As per the images requirements are determined up front in the conventional system engineering method, followed by design, implementation, and testing (Kasauli et al., 2020). The manual techniques and reliance on textual documentation may need to be more efficient and error-prone. Model-based engineering (MBE) is an alternative approach that relies on representational models to document system characteristics such as functionality and structure. With MBE, stakeholders may work together more effectively to communicate and verify various system components via a unified, iterative model. It encourages the use of automation, simulation, and analysis to boost the knowledge of, efficiency, and quality of a system. Advantages of MBE include better system visualisation, earlier problem identification, and automatic code and documentation generation from models. MBE facilitates a quicker and more accurate system development process compared to more conventional approaches.

Traditional hospitality and tourism approaches relied heavily on human effort, paperwork, and outmoded technology equipment (Le et al., 2020). This approach was not only inefficient but also time-consuming and prone to errors. Inventory control, visitor record keeping, and reservation administration all required significant human effort and were prone to mistakes. Furthermore, the lack of centralized data storage made it impossible to have timely access to information and undertake analysis. The emergence of technology-driven initiatives, particularly PHP-based systems, has radically changed how hotels and tourism groups operate. Using the advantages of automation, digitalization, and centralized data management, these systems improve efficiency, accuracy, and the overall experience clients enjoy with a firm.

One of the primary advantages of implementing technology-driven initiatives is increased operational efficiency. Traditional approaches often require the performance of manual actions,



which are both time-consuming and prone to error. On the other hand, PHP-based systems automate many of these procedures, reducing the time and effort required to complete a range of tasks. For example, when automated methods are used to book, update availability, and confirm bookings, reservation management may become more simplified and productive. According to a study by Sainagendra et al. (2020), adopting PHP-based systems for reservation management resulted in a 30% reduction in booking processing time and a 20% increase in income for hotels in India.

Moreover, technology-driven solutions enable hotels and tourism groups to handle a growing number of bookings appropriately (Balasubramanian et al., 2022). Because reservation administration was done manually in the earlier days, only a specific number of reservations could be fulfilled in a given length of time. PHP-based systems are straightforward to link with online travel agencies (OTAs), allowing for real-time updates on room availability and quick confirmation of bookings. This connection eliminates human intervention, shortens processing time, and allows hotels to accept more bookings efficiently.

Data management is another area where technology-driven techniques excel. Traditional systems often rely on human record-keeping, which may result in data conflicts, loss, or retrieval inefficiencies. PHP-based systems offer centralized and automated data management, allowing hotels and other tourism-related enterprises to preserve accurate and up-to-date records of information relevant to their visitors, including bookings and other essential data. This unified data storage makes it simpler for enterprises to do better analysis, reporting, and decision-making, allowing them to gain insights into their operations and implement data-driven improvements.

### **2.2.3 Review of existing studies on the adoption of technology in the Indian hotel and tourism sector**

The adoption of content management systems (CMS) based on the PHP programming language in the Indian hotel industry has resulted in significant gains for both hotel administration and the overall client experience. Anand et al. (2019) conducted a study exploring the impact of using PHP-based CMS in Indian hotels, and the findings shed light on the following benefits.

Website maintenance time is reduced significantly when a content management system (CMS) is based on PHP (Drivas et al., 2021). Hotels will find managing and updating the material on their websites simpler because of its strong and versatile base. PHP CMS's user-friendly

interface allows hotel personnel to add, edit, and remove information such as room descriptions, amenities, rates, and promotions. This minimizes the need for hotel workers to have extensive technological knowledge. This simplifies keeping the website current, ensuring that potential customers have access to accurate and relevant information.

Also, using a PHP-based content management system in hotels may significantly enhance the establishment's online presence. These content management systems often have SEO tools or extensions that can be put on, enabling hotels to optimize meta tags, URLs, and other SEO-related parts of their websites. The significance of search engine optimization (SEO) in increasing a website's online visibility cannot be emphasized. According to a BrightEdge study, organic search accounts for 53% of all website traffic. Hotels may boost their chances of appearing in relevant search results by optimizing their websites for search engines. This increases their online presence, which attracts organic traffic, resulting in a rise in the number of potential consumers who become aware of their services.

An enhanced user experience is essential for obtaining and retaining new customers. Hotels may create websites with user-friendly navigation, responsive design, and flexible layouts using PHP-based content management systems (Elenyu, Akello and Nabbuto, 2022). Because of PHP's versatility, hotel websites may be modified to give consumers a consistent and delightful experience regardless of device or screen size. According to a Google study, 53% of mobile site visitors would quit a website if it takes more than three seconds to load. As a result, to deliver a pleasing experience for users, responsive design and fast loading speeds are required. Hotels can engage visitors and encourage them to explore the website further by offering an easy-to-use interface. This boosts the chances of a conversion and the probability that the consumer will be happy.

Client engagement is made simpler by PHP-based content management systems that allow for the insertion of interactive components. Hotels may employ contact forms, feedback sections, and social network plugins to actively engage with visitors and gather relevant comments, questions, and suggestions. According to a HubSpot study, ninety per cent of customers want an "immediate" response if they have a question concerning customer service. If hotels offer a communication platform, they may develop tighter ties with their customers, react to their concerns more rapidly, and customize their services based on their customer's preferences. This generates repeat business and excellent word-of-mouth recommendations from current consumers.

## **2.3 Applications of PHP in Hotel and Tourism Management**

PHP is utilized in various ways in the hotel and tourism sectors since it is a universal programming language (Tepe, 2022b). Its versatility, ease of use, and widespread support from open-source developers make it suitable for building a wide range of systems and features that improve operational efficiency and customer satisfaction.

### **2.3.1 Online hotel reservation systems**

The introduction of Internet reservation systems profoundly impacted how hotels do business and connect with clients. These systems, particularly those driven by PHP technology, provide a wide range of benefits, leading to their increasing adoption in India's hotel and tourism industries.

Real-time availability is one of the most essential advantages of online hotel reservation systems (Clariz et al., 2020). Hotels with PHP-based systems may provide clients with up-to-date information on room availability, allowing consumers to make speedy bookings. This real-time feature ensures that clients have accurate information about hotel availability, reducing the chance of customers being disappointed upon arrival or having duplicate bookings. Real-time availability also assists hotels in optimizing inventory management, ensuring the most efficient use of available room space and maximizing the potential for financial benefit.

The availability of secure online payment options is another significant feature of PHP-based online reservation system (Monzo et al., 2021). These systems include secure payment gateways, which give customers the confidence they need to complete online transactions and payments. When secure payment options are accessible, customers know the reservation process will keep their financial information private. This contributes to the company's credibility. Customers are encouraged to make bookings online due to the enhanced convenience and security, which increases the hotel's overall conversion rate and revenue.

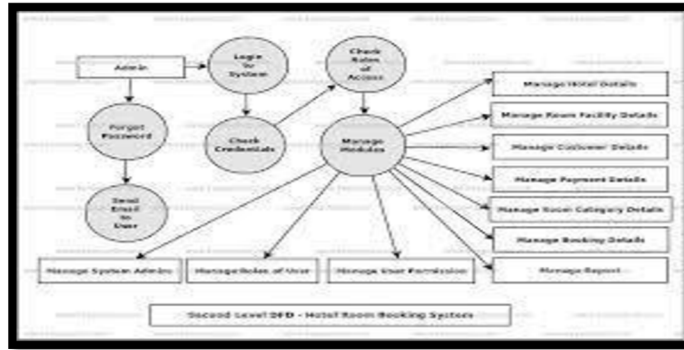


Figure 5: hotel reservation system based on PHP

Image Source: (freeproject, 2017)

The flowchart of a PHP-based hotel reservation system shows the sequential steps required to reserve a room online. The first step is usually for the user to go online and choose their preferred dates, venue, and guest count (Bueno et al., 2021). After entering specific parameters, the system will see if any matching rooms are available. The user checks the availability of rooms and then chooses a room type and enters their information. The system contains the data for accuracy and determines the final price after adding optional extras. The user is sent to a secure payment processor after clicking the "Proceed to Payment" button. As soon as the money is received and processed, the system will immediately issue a confirmation and adjust the room availability. Confirmation and reservation information are sent to the customer through email or posted on the website. A hotel reservation may be made quickly and easily with the help of this flowchart, which outlines the many procedures that must be taken in order.

PHP-based online reservation systems provide various advantages, including simple integration with distribution channels (KUMAR, 2022). These systems may communicate with multiple channels, including global distribution systems (GDS), online travel agencies (OTAs), and metasearch engines. This relationship allows hotels to widen their reach and visibility, making their rooms available to a bigger pool of possible customers. Hotels may expand their number of bookings and overall online presence by connecting with various distribution channels, ultimately increasing revenue.

### 2.3.2 Dynamic pricing and revenue management systems

Hotels increasingly rely on dynamic pricing and revenue management technologies to optimize their room rates and increase revenue. With these systems, often built in PHP, hotels may automate their pricing plans and make real-time changes based on variables such as demand,

seasonality, and competition analysis. Although specific research on the deployment of PHP-based dynamic pricing systems in India is sparse, studies from other locations have provided insights into the efficacy of PHP-based dynamic pricing systems in maximizing revenue (Petricek, Chalupa and Melas, 2021)e. For example, Guttentag conducted a study titled "Dynamic Pricing Systems and Hotel Revenue" in 2019 to investigate the impact of these systems on hotel revenue. According to the study's results, hotels that employed dynamic pricing experienced a 4.3% boost in average income compared to regular pricing techniques. The data shown here highlights the potential benefits of dynamic pricing systems for hotels regarding revenue optimization.

Hotels may utilize dynamic pricing systems to respond to market and guest demand changes in real time by adjusting the prices of their available rooms (Mohammed, Guillet and Law, 2019). These systems aid hotels in identifying the best room costs at any given time by analyzing a range of parameters such as occupancy rates, booking patterns, competitor pricing, and market trends. When hotels can make data-driven pricing decisions in real-time, they may optimize profitability by capitalizing on times of high demand and changing rates during periods of low demand to boost bookings. Kapoor and Gupta (2018) investigated the adoption of PHP-based revenue management systems in the Indian tourism industry. They tackled the integration of PHP frameworks such as Yii and CakePHP with online booking systems to build dynamic pricing strategies. The study emphasized the need to consider numerous factors when setting prices, including seasonality, customer segmentation, and market demand.

Moreover, owing to the advantages of dynamic pricing systems, hotels may implement tailored price plans based on the preferences of specific clients. Hotels may adjust pricing and promotions to certain client segments using customer data such as past booking history, loyalty status, and demographic information (Aluri, Price and McIntyre, 2019). Using this method may increase customer satisfaction, increasing the possibility of repeat reservations, and revenue can be maximized by providing personalized price options. Patel and colleagues (2021) research focused on the role of PHP in the revenue management systems of India's smaller and medium-sized hotels. It investigated the challenges these organizations face when implementing dynamic pricing techniques and highlighted how PHP frameworks like CodeIgniter or Yii might offer more cost-effective solutions. The research also emphasized the importance of controlling one's online reputation and consumer feedback while making price decisions.

By implementing dynamic pricing systems, hotels may save time and money, which automates pricing methods. These systems handle the process automatically rather than manually changing prices, ensuring that pricing decisions are made correctly and on schedule (Khatib, Mulla and Ketbi, 2022). Instead of manually modifying pricing, hotel revenue managers can now focus on making strategic choices and performing in-depth analysis. It is vital to highlight that the quality and accuracy of the data utilized for analysis are critical to the success of dynamic pricing systems. Hotels must obtain and assess relevant data from various sources, including historical booking data, market trends, and rival pricing, to make smart price decisions. Because of the integration of dynamic pricing systems with online reservation systems and other data sources, hotels may acquire valuable insights for price optimization. This simplifies data collection and analysis.

### **2.3.3 Customer relationship management (CRM) systems**

Customer relationship management (CRM) systems are critical tools in the hotel and tourism sectors for successfully managing client connections and increasing the overall quality of the experiences delivered to visitors. CRM solutions based on PHP offer several functionalities enabling hotels to collect, evaluate, and utilize guest data effectively.

Customer relationship management (CRM) solutions powered by PHP are becoming more popular in the Indian hotel industry (Sota, Chaudhry and Srivastava, 2019). According to 2019 research by the Federation of Indian Chambers of Commerce and Industry (FICCI), 81% of the hotels surveyed in India have already deployed CRM systems (FICCI, 2019). This highlights the widespread use of PHP-powered customer relationship management (CRM) approaches, emphasizing their importance in managing client contacts and enhancing service quality. Hotels may use CRM systems based on the PHP programming language to collect and evaluate guest data such as preferences, booking history, and feedback. When hotels access this information, they may provide customized communications, targeted offers and specific services. CRM systems may be customized to match the particular needs of any hotel by using PHP's versatility and open-source support. This enables hotels to deliver more personalized service to their customers.

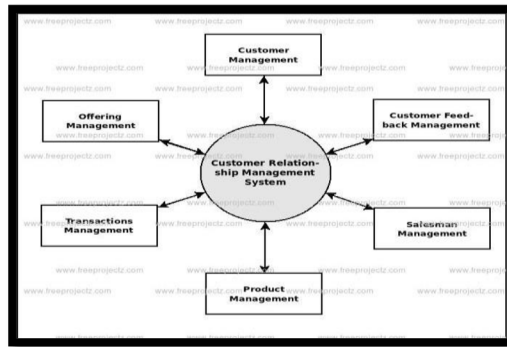


Figure 6: CRM

Image Source: (namita, 2023)

A CRM system's Data Flow Diagram (DFD) is shown at the linked link. Customers, salespeople, and admins are just outside parties whose interactions initiate the data flow in a customer relationship management system. The salesperson starts the data flow by creating a customer record (Bharadwaj and Shipley, 2020). The customer's name, contact information, and preferences are all recorded and kept in the CRM system. After collecting this information, it is used for various things, including reporting, and studying client habits. Customers can make orders, which triggers a two-way flow of information between them and the CRM platform. Information like the products ordered and their quantities are included here. Using this data, the CRM system modifies the customer's order status. The order information may also be sent to other methods for inventory management and invoicing for streamlined order processing.

The CRM software also allows salespeople access to customer files, where they may see and alter existing data and monitor past communications with clients. Effective customer management and individualised service are made possible by the two-way exchange of information between the sales professional and the CRM system. In addition, the CRM software allows administrators to control things like configurations, roles, and access. Company executives log into the CRM to adjust the settings as part of the data flow.

In the Indian hotel industry, adopting customer relationship management (CRM) systems based on PHP provides a variety of advantages. First, it enables hotels to centralize guest data, eliminating the need for several procedures and human data entry. This centralization aids in effective guest management and communication by simplifying operations, lowering the number of errors, and offering a comprehensive view of visitor information. PHP-powered

CRM systems enable hotels to automate and tailor their interactions with visitors. Hotels, for example, may send automated e-mails or text messages to tourists before their arrival, wishing them a happy welcome and alerting them of important information concerning their stay. Furthermore, clients may get customized recommendations and discounts based on their preferences and prior interactions with the institution. Personalization not only makes visitors happy, but it also motivates them to stay loyal in the long term.

#### **2.3.4 Content management systems (CMS) for hotel websites**

Hotel and tourist administration in India have benefited dramatically from PHP-based content management systems (CMS) because of the ease with which they allow hotels to administer and update their websites. This section will build on the literature study of PHP-based CMS for hotel websites, emphasizing the relevance of these systems in ensuring that information is kept up to date, content is engaging, and increased online visibility.

CMS systems based on PHP provide hotels with powerful tools that are simple to use for managing the content of their websites (Akter et al., 2022). These systems offer a centralized platform via which hotel owners and managers can update information on the availability of rooms, the pricing for those rooms, the facilities, and any other relevant facts. The intuitive interfaces of PHP-based content management systems make it possible for hotel employees with the minimum technical ability to utilize the platform. This enables hotel personnel to make changes quickly and effectively without depending on external web developers or IT help (Akter et al., 2022b). Because of its versatility, PHP enables content management systems to provide a wide variety of design choices and levels of personalization. The design and feel of a hotel's website may be customized to represent the hotel's brand identity, providing website visitors with an experience that is both aesthetically attractive and engaging. Hotels can choose a design that complements their one-of-a-kind aesthetic and satisfies their unique needs when they use CMS systems based on PHP. These platforms provide a wide variety of templates and themes. This customization option guarantees that hotel websites are functional and aesthetically beautiful, enhancing the entire user experience for those visiting the sites.



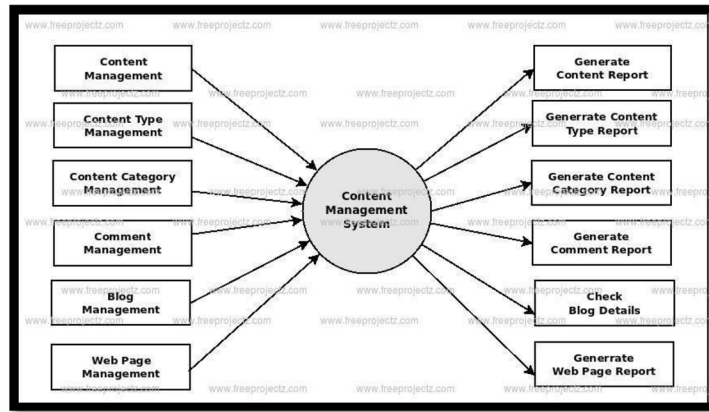


Figure 7: Content management system (CMS)

Image Source: (namita, 2023b)

Integration is yet another significant benefit that comes with using PHP-powered CMS systems. These platforms can be combined with other capabilities, such as booking engines, customer review systems, social networking plugins, and analytics tools, without causing any disruption to the user experience. The integration of booking engines enables guests to make reservations directly via the hotel's website, resulting in a more streamlined booking experience and an increase in direct bookings (Devadoss et al., 2023). Integration of customer review systems allows hotels to display guest comments, enhancing their legitimacy and trustworthiness. Plugins for social media platforms make social sharing and interaction easier, expanding the scope of the audience that hotel promotions and marketing initiatives may reach. Integration of analytics solutions allows hotels to monitor website performance, visitor behavior, and conversion rates. This provides hotels with valuable data that can be used to improve marketing campaigns.

Implementing PHP-powered CMS is limited in the Indian hotel and tourism industry; however, studies from other regions demonstrate the benefits of CMS adoption. For instance, Anand et al. (2019) found that adopting PHP-based CMS in the Indian hotel business boosted online visibility and consumer interaction. This was stated by the researchers in their study. Hotels may boost their search engine results and raise their online exposure by frequently updating and optimizing the content of their websites using content management systems (CMS) platforms driven by PHP. Increased customer engagement and visitors' time on a website due to engaging content, such as blog entries, destination guides, and multimedia features, may contribute to increased conversion rates.

Besides that, content management systems based on PHP make it possible for hotels to adjust the content of their websites to reflect changing client tastes and the dynamics of the market. As a result of having the capability to update material swiftly, hotels are in a better position to react to developing trends, events, and promotions, ensuring that the content of their website remains relevant and appealing to prospective visitors. This skill in content management assists hotels in maintaining their competitive edge in the dynamic and quickly transforming hospitality and tourist business.

## Research methodology

The phrase "research methodology" refers to the systematic and scientific technique used in collecting, analyzing, and interpreting data to resolve questions related to research or testing hypotheses (Haydam and Steenkamp, 2020). Researchers have access to a wide variety of research methodologies, and the one they choose will depend on the specifics of the research topic, the resources at their disposal, and the study's objectives. Quantitative research, qualitative research technique, mixed-method research, experimental research, and case study research are some of the more popular research methodologies. These many research procedures have advantages and disadvantages, and they are most effective when applied to specific categories and subcategories of research topics and scenarios. To conduct research that is dependable, significant, and legitimate, one of the most important steps is to choose the most suitable research technique approach.

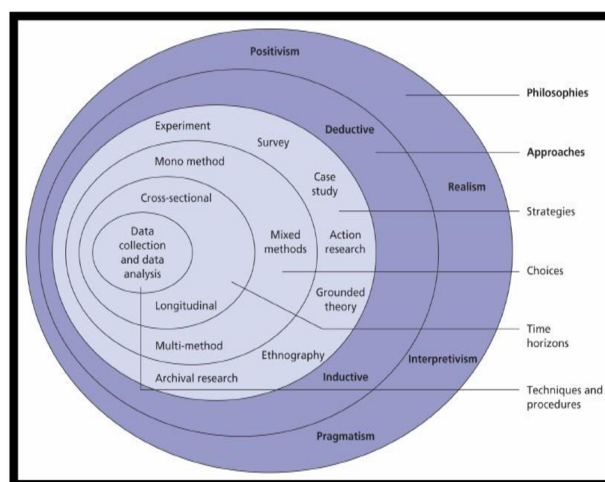


Figure 8: Research methodology onion

Image Source: (sales and service management, 2016)

## **Research philosophy**

The research philosophy that guides the investigation is an essential component of the research technique (Bleiker et al., 2019). These philosophical perspectives make it possible to select which strategy should be taken by the researcher and why doing so should be appropriate, which is derived from the research questions. The key assumptions are included in the research philosophy, which provides the researcher's perspective on how the world works. The research plan, as well as the methodologies used in that strategy, will be determined by these assumptions. The topic of research philosophy is concerned with the origin, nature, and progression of knowledge. A research philosophy may be defined as beliefs about the appropriate methods for gathering, analyzing, and applying data about certain phenomena. Although knowledge production may strike as deep, they are involved in creating knowledge as part of the dissertation. To respond to the research question, they must gather secondary and primary data and participate in data analysis. The conclusion they reach will represent the invention of new information. At each level of the research process, there is a set of presumptions about the information sources and the kind of knowledge being sought.

- Positivism
- Pragmatism
- Realism
- Interpretivism

### **Positivism**

Positivism is an approach of thought that adheres to the concept that the only reliable information is "factual" knowledge, which is the knowledge obtained from observation (using the senses), including measurement. When doing research following positivism, the researcher's responsibility is restricted to the collecting of data and the interpretation of that data objectively (Mwita, 2022). The outcomes of research conducted using these sorts of investigations may often be seen and quantified. The positivist worldview is predicated on collecting measurable data that can be analysed statistically. It has been pointed out that positivism, as a philosophical system, is consistent with the empiricist idea that knowledge originates from human experience. It is characterized by an atomistic and ontological view of the universe, according to which "the world is made up of separate, observable elements and events that interact in an observable, determined and regular manner." Additionally, in

positivist investigations, the researcher is considered separate from the study, and the research itself does not account for human motivations in any way. Second, Crowther and Lancaster contend that positivist analysis often uses an inductive method. They say this in their argument. In contrast, inductive research methodologies are often connected with a phenomenological philosophical orientation.

## Interpretivism

Interpretivism, often known as interpretivism, is a research methodology that requires researchers to interpret aspects of the study; as a result, interpretivism incorporates human interest into research. As a result, "interpretive researchers assume that access to reality (given or socially constructed) is only through social constructions such as language, consciousness, shared meanings, and instruments" The criticism of positivism in the social sciences served as the foundation for the development of interpretivism in philosophy (Ikram and Kenayathulla, 2022). As a result, this school of thought places a greater emphasis on qualitative than quantitative analysis.

Interpretivism is "associated with the philosophical position of idealism," and it is used to group a variety of approaches, such as social constructivism, phenomenology, and hermeneutics; these approaches reject the objectivist view that meaning resides within the world independently of consciousness. The interpretivism approach maintains that it is essential for the researcher, in their role as a social actor, to appreciate the distinctions between individuals. In addition, interpretivism studies often concentrate on the meaning and may use various research methodologies to reflect multiple facets of the subject matter.

## Pragmatism

The philosophical school known as pragmatism occupies a position of compromise between positivism and interpretivism. Pragmatists place a high priority on the application of research findings and stress the significance of using various methodologies and strategies tailored to the specific research topic at hand. Researchers should be adaptable and choose the most suitable methods to meet the study topic, considering both qualitative and quantitative data sources. The school of thought known as pragmatism acknowledges that different research topics may call for various philosophical perspectives and that selecting a philosophical perspective ought to be guided by the aims of the study and the nature of the phenomena being investigated.

### *Justification*

Positivism believes that objective, scientific analysis is ideal. Knowledge is formed by determining causal linkages between variables using visible and perceptible evidence (Garcés Velástegui, 2019). Positivism may improve the PHP study of Hotel and Tourism Management in India. The following arguments demonstrate why positivism is appropriate as a research philosophy in this field: The positivist researcher would take an empirical, fact-based approach to their study. When making choices that will affect hotels' bottom lines and guests' overall experiences, it's essential to have a clear, non-emotional perspective. Researchers may use positivism and PHP to conduct a thorough and evidence-based investigation of the topic. The positivist viewpoint aligns well with the quantitative approaches to study that are standard in the hospitality and tourism industries. Using statistical methods, researchers may now gather and analyze massive datasets with the help of PHP. This quantitative study may obtain insights into client habits, market tendencies, and operational efficacy, allowing for more informed decision-making. Positivism addresses the practical challenges of the hospitality and tourism sector in PHP-based Hotel and Tourism Management. Data-driven insights greatly help revenue maximization, client satisfaction, and streamlined operations in the hospitality and tourist industries. Researchers in India may improve the development and competitiveness of their sector by using positivism to create empirical data that can be used to change current practices. Positivism's focus on objectivity, empirical method, data analysis, industry relevance, replicability, and generalizability make it an appropriate research philosophy for Hotel and Tourism Management utilizing PHP in India. Researchers can help India's hotel and tourist industries by providing evidence-based insights when they adopt positivism.

### **Research Approach**

A research approach is a general method researcher use to conduct a study and collect data to answer research questions or test hypotheses (Asenahabi, 2019). It entails picking methodologies, tactics, and processes to guarantee a systematic and stringent examination. The nature of the research topic and the study's aims should guide the selected research method. While quantitative research places a greater emphasis on numerical data and statistical analysis, qualitative research places a greater emphasis on rich, detailed data and interpretation. Both methodologies are brought together in mixed-methods research. Researchers must consider various criteria, including the availability of resources and skills and ethical concerns.

Researchers can create findings that are dependable and valid, which contribute to the overall development of knowledge in their area when they follow a research method that has been established.

likewise contend that research methodology is best understood as an overarching strategy and set of methods for carrying out the study. As such, there are three broad systems of thought that may be applied to the study's methodology: Deductive approach, Inductive approach, Abductive approach.

## **Qualitative**

Collecting non-numerical data to gain insights is the goal of qualitative research, a technique. It relies on something other than statistics and is either wholly unstructured or somewhat organized. It does this by relying on data gathered based on a study strategy that explains "why." Information is gathered for qualitative data collection when it focuses more on describing a subject than measuring it. Instead of measuring factual data, such as those shown in a graph or chart, this study evaluates opinions, perspectives, and qualities. Qualitative research approaches often require first-hand observation, such as interviewing participants or holding focus groups. It is market research that is usually carried out in natural settings. This means that the researchers analyze items in their natural state without making any changes; there are also no trials or control groups.

## **Quantitative**

Quantitative research techniques are geared toward collecting numerical data that may be used in measuring a variety of factors (Betzler et al., 2020). Quantitative data collection is organized and systematic, and the conclusions that may be drawn from it are unbiased and indisputable. It uses a methodology known as grounded theory, which is predicated on the gathering and methodical examination of evidence. When they need to draw broad conclusions from their study and forecast results, quantitative research might help. The ability to gather data from a relatively wide sample size while keeping costs low makes surveys an excellent instrument for quantitative research. Other advantages of surveys include their adaptability and cost-effectiveness.

## **Deductive approach**

In deductive approach, researchers using the deductive method begin with a broad hypothesis or principles, then narrow in on supporting evidence such as concrete examples and statistical analyses. This strategy is often used in quantitative studies and scientific research. The process includes a literature search, the development of specific hypotheses based on the theory, the planning and execution of a survey to gather the necessary data, applying statistical analysis to that data, and the drawing of findings that either confirm or deny the theory. By delivering evidence-based insights and hypothesis testing, the deductive method guarantees an organized and rigorous research process that adds to the body of knowledge on a given topic. However, it is critical to recognize the restrictions imposed by the deductive method, such as the assumption that current theories are correct and exhaustive and the possibility of missing emerging events or alternative explanations.

### **Inductive approach**

Research methods using inductive reasoning begin with concrete examples or data, then progress to further generalizations, patterns, or theoretical formulations (Angraini et al., 2023). Qualitative data collection methods include in-depth interviews, participant observation, and document analysis, and the results are analyzed for patterns. Researchers use these patterns to create new hypotheses or improve old ones to account for the world around them. The inductive method is helpful because it paves the way for investigating uncharted territory, developing testable hypotheses, and learning more about intricate social processes. It is often connected with qualitative research methodologies and is best used to go into uncharted territory or fill in the gaps where previous explanations fell short. Smaller sample sizes and subjective interpretations of the data mean that inductive conclusions may not be definitive or generalizable, but this method is still worth exploring.

### *Justification*

Qualitative methods help study hotel and tourist administration in PHP in India. Researchers may use the deductive approach, to begin with overarching assumptions or principles and then methodically restrict their emphasis as they collect data to back them up. After performing a thorough literature review and developing testable hypotheses, researchers may test those ideas via quantitative techniques like surveys and statistical analysis, therefore adding to the body of knowledge. Keep an eye out for further information and possible explanations, However, qualitative data collection and analysis may better explain the reasons for underlying



occurrences. Researchers may learn more about customers' experiences, perspectives, and motivations using methods including interviews and participant observations. They can build online tools for interacting with participants and collecting qualitative data using PHP. Findings from qualitative research provide a more in-depth insight into the complex dynamics of the sector, but they are more challenging to evaluate and generalize. PHP-based research in hotel and tourist management in India benefits significantly from deductive and qualitative methods.

## **Data Collection Method**

The term "data collection" refers to the process of gathering and analyzing information for study and validation utilizing a variety of different methods (Angraini et al., 2023b). Data collecting is performed to examine an issue and get insight into its outcomes and potential tendencies in the future. Data-gathering techniques help make assumptions about the development of a problem or issue that must be solved when there is a requirement to arrive at a solution. To facilitate the process of computation and analysis, it is of the utmost importance to get data that can be trusted from the appropriate sources. There may be roughly broken down into two categories of data gathering techniques. This is contingent on the kind of data that is being gathered.

- Primary Data Collection Methods
- Secondary Data Collection Method

### **Primary Data Collection Methods**

Data from primary sources originate using first-hand experience and are not compared to data from secondary sources (Grossman and Gerrand, 2021). Preceding data-collecting procedures provide highly accurate and information to the study's purpose. Quantitative and qualitative methods are the two distinct classifications that may be used for primary data-collecting techniques.

### **Secondary Data Collection Method**

"Secondary data" refers to information compiled by a different organization (Taherdoost, 2021). The collection of this data is significantly more straightforward and less costly than that of primary data. Even while preliminary data collecting yields more genuine and unique information, there are many situations in which organizations may benefit tremendously from secondary data collection.



## *Justification*

There are numerous reasons to use PHP for hotel and tourist management in India, one of the many reasons for using secondary data-gathering techniques. Secondary data are not only easily accessible but also very inexpensive, and they provide helpful information without the need for lengthy original data collecting from the online dataset, which includes "rating review and booking\_order" was obtained from Jim's Motel. Using this information to improve the current system with an emphasis on customer ratings, reviews, and booking orders is the technique used in the project. It gives a more significant viewpoint and a historical context, enabling scholars to see patterns and trends that have developed through time. Additionally, primary research is supplemented with secondary data, which increases the credibility and validity of the conclusions via data triangulation. Researchers can extract more valuable insights from massive datasets because of the utilization of PHP, which makes retrieving and analyzing these databases more efficient. Extreme vigilance is required while assessing the quality and dependability of the data sources. In the hotel and tourist business, secondary data-gathering methods have shown to be a significant resource, helping to complete research and informed decision-making.

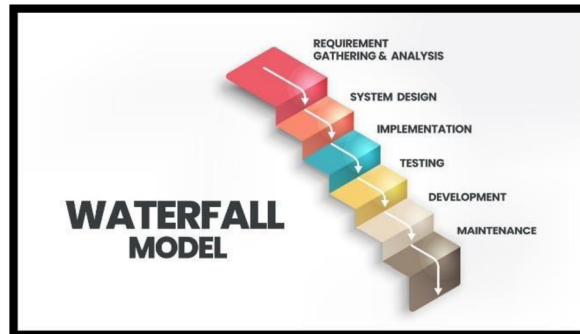
## **Data Analysis**

PHP for dynamic web development, SQL for quick database connectivity, and Tableau for data visualization are all part of the technique. Scripting in PHP makes it easy to connect to databases and generate content without any hitches. For accurate data management and retrieval, SQL is necessary. To manipulate and extract data, SQL queries are used. Tableau plays a crucial role in making charts and dashboards that are easy to understand visually. The visualization features of Tableau are used in the bar chart that is provided to show revenue increases. As a result of this unified strategy, revenue forecasting patterns may be effectively understood via interactive visualizations, precise data analysis, and a responsive user experience.

## **Waterfall Model**

The Waterfall model is a software development technique that takes a step-by-step and sequential approach to the problem-solving process (Aroral, 2021). In the context of hotel and tourist management using PHP in India, the Waterfall model may be utilized to construct an all-encompassing system that caters to all hotel and tourism operations areas. This system can

be used to handle various parts of hotel and tourism management. The following is a comprehensive rundown of the many ways in which the Waterfall model may be used to accomplish this goal:



*Figure 9: Waterfall model*

Image Source: (vectors, 2020)

**Requirements Gathering:** In the project's initial phase, they will be responsible for obtaining specific requirements for the hotel and tourist management system. This involves awareness of the needs placed upon the hotel, its services, and the necessary tourism-related capabilities. It also entails determining the user responsibilities, required features, and the target audience and user roles.

**System Design:** The system architecture design is the following stage once the requirements have been gathered and organized. Creating a high-level plan that describes the general structure of the system, including its modules, components, and interfaces, is one of the steps involved in this process. In addition, the design of the database schema and the user interface design should be determined during this phase.

**Implementation:** The development phase starts after the system design is finalized and in place. To implement the system's capabilities, PHP, which is widely used as a server-side scripting language, may be deployed. The code for the various modules and components of the system is written by developers based on the design requirements. Integration with databases, application programming interfaces (APIs), and other external systems could also be carried out during this phase.

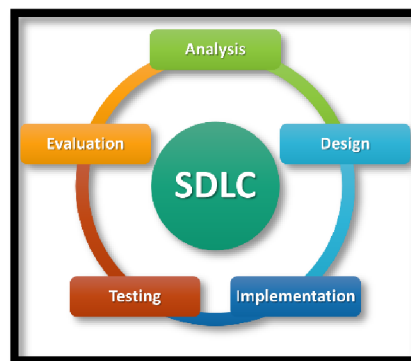
**Testing:** During the testing phase, the constructed system is checked to see whether it satisfies the criteria initially outlined. Various kinds of testing, including unit testing, integration testing,

system testing, and user acceptability testing, need to be carried out so that any problems or flaws in the system may be found and fixed.

**Deployment:** After the system has been tested extensively and determined to be ready for production, it may be implemented in settings related to hotels and tourism. In order to do this, the required hardware and software infrastructure must first be configured, after which the database must be set up, and the PHP codebase must be installed on the server. The deployment process must be meticulously thought out and carried out to cause the slightest disturbance to the hotel's operations.

**Maintenance:** Following the implementation of the system, continuous maintenance and support will be required. This involves resolving any difficulties that may crop up, delivering updates and additions to the system, and ensuring it remains dependable and secure. To maintain compatibility with ever-evolving business requirements and ensure that the system is always up to date, it is necessary to execute routine monitoring, bug fixes, and periodic upgrades.

## SDLC Model



*Figure 10: SDLC Model*

Image Source: (Mohamed sami, 2023)

When creating and deploying functional software systems in the hospitality and tourist industries, following the steps outlined in the Software Development Life Cycle (SDLC) model is essential.

**Analysis:** An analysis is an initial step, and its primary purpose is to collect and comprehend the needs of the hotel and tourist management system (Nguyen et al., 2021). Stakeholder interviews, process and workflow analyses, and detailed requirement documentation are all

part of this process. This phase lays the groundwork for the next by providing a profound grasp of the system's requirements.

**Design:** In the design phase, the software system's architecture and its constituent parts are specified considering the requirements analysis. During this stage, they create the overall system architecture, design the database, map out the security measures, and write comprehensive design documents. The objective is to create a detailed plan that directs the development process and guarantees the final product satisfies user expectations in terms of both functionality and ease of use.

**Implementation:** The next step is implementation after the design is complete. The software design phase is when the system is created. Developers are responsible for creating new software, modifying existing programmes, integrating new techniques, and enforcing business logic. To guarantee a high-quality and manageable codebase, it is essential to use coding standards and best practices, do code reviews, and use version control.

**Testing:** Testing is an essential aspect of the software development life cycle (SDLC) for hospitality management systems. Here, researchers extensively test the produced software system to ensure its correctness, robustness, speed, and safety. Unit testing, integration testing, system testing, and user acceptability testing are only a few of the testing performed. To guarantee the system is up to par, any problems or flaws found are documented, monitored, and fixed.

**Evaluation:** In this last stage, test the built programme to see how well it performs. System performance indicators, stakeholder input, and user comments are all considered. Companies may perform usability tests and surveys to get user feedback and information. The software system undergoes iterative development to increase its usefulness, efficiency, and usability considering the assessment outcomes. Continuous communication, cooperation, and stakeholder participation are essential throughout the SDLC. The needs of the hotel's personnel, management, and guests may be ascertained and implemented into the system via consistent communication and feedback loops. The SDLC is iterative, so it can be adapted to meet the evolving requirements of hotel and tourist management software considering new information and technological developments.

## **Ethical Consideration**

Ethical concerns are essential in maintaining responsible and sustainable practices in the hospitality and tourist industry (Achmad and Yulianah, 2022). These factors inform the industry's decision-making, policy-making, and day-to-day operations. For this reason, researchers using Google Scholar data, papers, journals, and citations from 2019-2023 must be aware of their responsibility to protect individual privacy and adhere to the highest ethical standards. Data collection, analysis, and use in the hospitality and tourist industries must adhere to the core ethical premise of respecting privacy. Getting permission from people whose information could be used in the study is crucial. Any personal or sensitive information must be anonymized and managed with the greatest secrecy before researchers may use data from Google Scholar, papers, journals, and citations. Names, addresses, and other identifying information must be removed or "de-identified" before this can happen. When using the information found on Google Scholar, in papers, journals, or citations, it is also essential to consider the sources' legitimacy and dependability. Researchers need to rigorously assess the quality of the publications they are using, ensuring that the data they rely on comes from reliable sources.

This aids in preserving the reliability of the study and halting the spread of erroneous data. Ethics demand that they give credit where credit is due when using someone else's words or ideas. Proper citation of sources is essential to maintain trustworthiness and credibility in academic work. The authors, names, journals, and publication dates of the publications or papers cited must all be included. Researchers show respect for the authors of the work they are studying and help improve the state of the art in the area.

Researchers must also account for the possibility of bias or conflict of interest when using data from outside sources (Bergen and Labonté, 2020). It is vital to analyze the sources used thoroughly to ensure the research's neutrality and trustworthiness. Researchers may guarantee reliable and unbiased results by recognizing and addressing these biases. Beyond the study of the data, ethical issues also play a role in the administration of hotels and tourist attractions. It is essential to think about how the investigation could affect different players in the business. This includes the hotel's visitors, staff, neighbors, and Mother Nature. Sustainable development, social responsibility, and the industry's general well-being are all areas that researchers should actively attempt to improve.

## **Risk Assessment**

Risk assessment should be performed before introducing PHP into India's hotel and tourist management systems (Sasikumar Nair et al., 2023). This will allow for the identification of possible vulnerabilities and the protection of sensitive information. Using information from free resources like Google Scholar and Google Plate presents a potential threat. Although a wealth of knowledge is available via these channels, there are certain dangers to be aware of. Data quality and accuracy are two significant concerns when using open-source resources. There is a chance of discovering erroneous or stale data on these sites because of the wide range of contributors. This may cause people to make judgements based on dubious evidence. Therefore, it is essential to double-check and cross-reference the information gleaned from various sources to confirm its accuracy and applicability. The possibility of copyright infringement is another danger of using data from open-source platforms. There may be legal ramifications for utilizing protected material without the proper permissions while using these services. Adherence to copyright rules or the acquisition of appropriate licensing for the usage of the data being employed is crucial.

Data privacy and security are essential factors that should be addressed alongside copyright concerns (Keshta and Odeh, 2021). The most outstanding care should be taken with any private or sensitive data found on open-source platforms. The data must be protected from unauthorized access and data breaches. These robust data security mechanisms, such as encryption and access restrictions, must be implemented. Open-source systems are often vulnerable to hacking and other types of cybercrime. Cybercriminals may attack these systems to exploit security flaws for financial benefit. To reduce these threats and safeguard data, rigorous security procedures, such as routine system upgrades, vulnerability assessments, and penetration testing, must be implemented. It is advised that appropriate risk management protocols and processes be established to handle these hazards. As part of this process, it is necessary to define data validation and verification methods and undertake periodic risk assessments. Furthermore, to proactively address new threats, keeping abreast of the most recent advancements in cybersecurity and data protection is crucial. Data received from open-source platforms may be trusted, kept private, and used responsibly by hotel and tourist management systems utilizing PHP in India, if a thorough risk assessment is performed and suitable risk mitigation methods are put into place. This facilitates deliberation, boosts consumer confidence, and encourages responsible and ethical business behavior.

## Flowchart Diagram

### PHP based Hotel and Tourism Management system (Forntend)

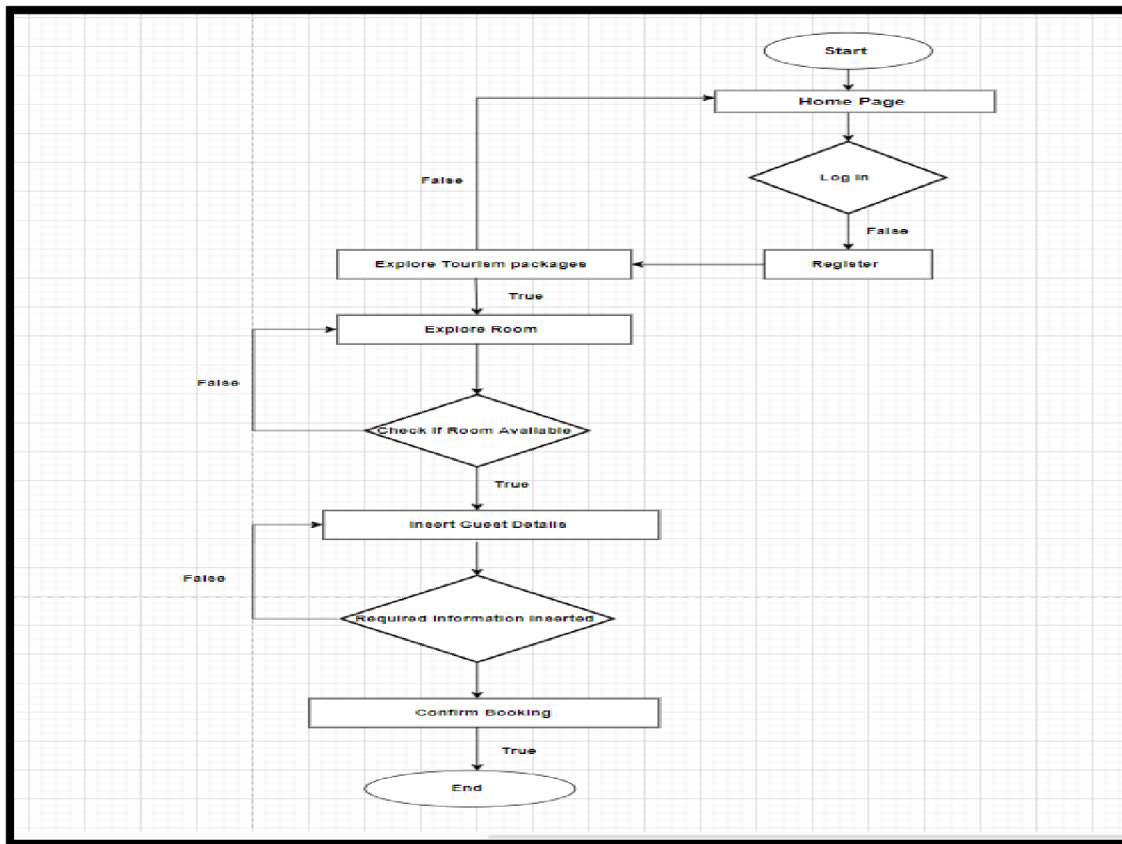


Figure 11: Flowchart of Hotel and Tourism Management

Image Source: Self Evaluated

The hotel and tourist management system is shown as a flowchart. The first step for users is to go to the homepage and either sign in or create an account (Koh and Hassim, 2021). New users must first register by supplying personal information, while existing users may go straight to the login page. After logging in, customers may look through the available rooms and travel packages on the system's homepage. When a guest selects a room, the system verifies availability and suggests an alternate. Users who want to reserve a space must submit their details using a form. Once they have confirmed, they may sign out of the service. The flowchart summarizes users' steps to make a reservation, from landing on the homepage through signing in or registering, reserving a hotel, confirming the reservation, and logging out.

## Use Case Diagram:

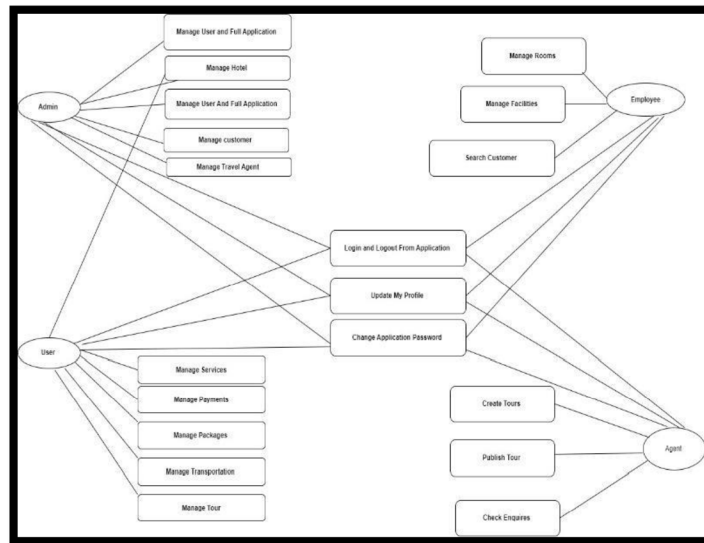


Figure 12: Use case diagram of Hotel and Tourism Management

Image Source: Self-Created

The use case diagram offered illustrates the capability of a complete application for managing hotel and travel-related services. Admins, employees, users, and agents are just a few of the many players in the system. Admin may manage users, limit program access via login and logout features, edit profiles, and change passwords. Hotel room management, general hotel operations, and client searches are all within the purview of Admin. The Admin is also in charge of handling payments, packages, transportation, and excursions in addition to the facilities and services. The user can access their profile, change their password, and log out. They may use the app to look for hotels, make reservations, and see what packages and services are available to them. Customer service, data management, and collaboration with travel agencies are all responsibilities of the staff. But the Agent is in charge of answering questions, making tours, and putting them online.



## Chapter 4: Analysis and Discussion

### 4.1 Admin Panel

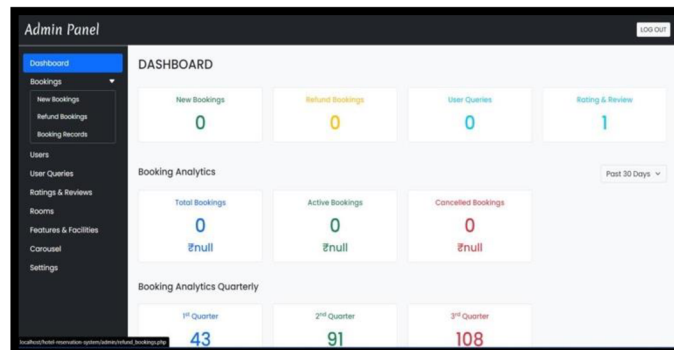


Figure 13: Dashboard

Image Source: Self-Evaluated

The Hotel and Tourism Control Admin Panel, which was built in India using PHP, has a user interface that is both comprehensive and user-friendly, allowing for the effective management of hotel-related activities. Key metrics and categories are shown on the Dashboard, which acts as a primary point for rapid access (Kerzner, 2022). The Bookings area offers a live view of the hotel's occupancy status, broken down into three sections: New Bookings, Refund Bookings, and Active Bookings. A dedication to customer happiness and involvement is shown by including the User Queries and Rating & Review sections.

Administrators may efficiently monitor and manage bookings with the help of the Booking Records component, which organizes data into three categories: Users, Booking Analytics, and Rooms. Total Bookings, Features & Facilities, and Carousel are just a few of the variables that the analytics section breaks down further, giving helpful information for strategic decision-making. Booking Analytics Quarterly now includes a dynamic display that gives hotel managers a look back at booking trends to see patterns and prepare for busy times.

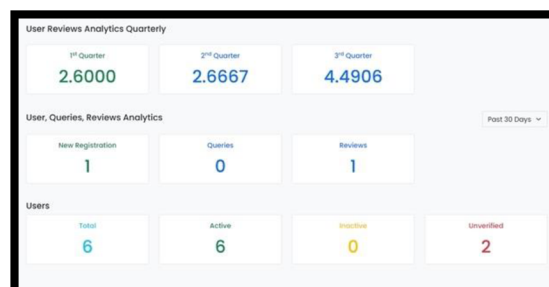
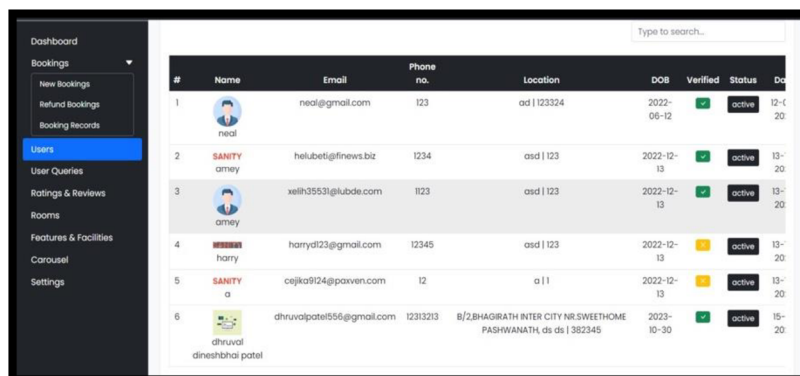


Figure 14: user reviews analytics quarterly

### Image Source: Self-Evaluated

The User Reviews Analytics Quarterly part of the Hotel and Tourism Management Admin Panel, designed using PHP in India, gives vital data about user involvement and satisfaction. The quarterly breakdown of user evaluations demonstrates a variable satisfaction rating, ranging from 2.6000 in the 1st quarter to 2.6667 in the 2nd quarter and a considerable rise to 4.4906 in the 3rd quarter. This data shows a changing user experience impacted by seasonal conditions or enhancements made to the hotel's amenities and services.

The New Registration measure of 1 in the 1st quarter suggests a constant flow of new users joining the website, which is indicative of the hotel's rising popularity. The lack of Queries in the 2nd quarter shows that consumers may have found the site straightforward, resulting in fewer queries. However, the Reviews counter incrementing by 1 in the previous 30 days' highlights continued user interaction, with the hotel actively collecting and reacting to criticism. The Users section breaks down user status into Active, Inactive, and Unverified categories.



The screenshot shows a web application interface with a sidebar menu on the left containing options like Dashboard, Bookings, Users, and Settings. The main content area displays a table titled 'User's List' with columns for #, Name, Email, Phone no., Location, DOB, Verified, Status, and Date. The table contains six rows of user data.

#	Name	Email	Phone no.	Location	DOB	Verified	Status	Date
1	neal	neal@gmail.com	123	asd   123324	2022-06-12	✓	active	12-1-20
2	SANITY amey	helubeti@finews.biz	1234	asd   123	2022-12-13	✓	active	13-1-20
3	amey	xelth35531@lubde.com	1123	asd   123	2022-12-13	✓	active	13-1-20
4	harry	harryd123@gmail.com	12345	asd   123	2022-12-13	✗	active	13-1-20
5	SANITY a	cejka9124@pavven.com	12	a   1	2022-12-13	✗	active	13-1-20
6	dhrupal dineshbhai patel	dhrupalpatel556@gmail.com	12313213	8/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHYANATH, ds ds   382345	2023-10-30	✓	active	15-1-20

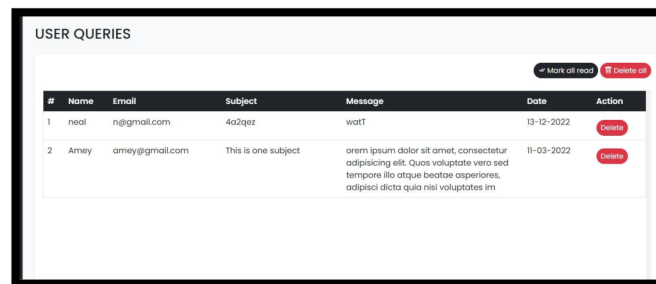
Figure 15: User's List

### Image Source: Self-Evaluated

Bookings and user information may be efficiently managed with the use of the PHP-based admin panel for Indian hotel and tourist administration. Admins may simplify their operations with the help of the search capability, which enables them to access certain information rapidly. New Bookings, Refund Bookings, User Queries, Ratings and reviews, Booking Records, and Rooms are just a few of the essential categories shown on the above Dashboard. Information about users, including their names, phone numbers, email addresses, locations, dates of birth, and verified status, is conveniently shown in the Booking Records area (Surekha, U and Dhinakaran, 2022). The hotel management can quickly resolve any difficulties that may arise

by gaining insights into the current reservation status and refund requests via the New Bookings and Refund Bookings categories.

Details such as Name, Email, Phone Number, and Verification Status are shown on the Users part of the site for each registered user. The fact that these people have the "active" designation means that they are actively participating in the platform right now. An integral part of any platform in the hospitality sector, the addition of features like customer Queries Ratings and reviews demonstrates how seriously the developers take customer input and happiness.



#	Name	Email	Subject	Message	Date	Action
1	neal	n@gmail.com	4a2qez	watT	13-12-2022	Delete
2	Amey	amey@gmail.com	This is one subject	orem ipsum dolor sit amet, consectetur adipiscing elit. Quis voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates im	11-03-2022	Delete

Figure 16: User Queries List

Image Source: Self-Evaluated

The above table is provided to be a data table or user interface that deals with query management. Email, Name, Subject, Message, Date, and Action are some of the columns in the table. The inquiries include people with the names Neal and Amey, as well as their email addresses (Hayashi et al., 2021). An individual question, together with its associated topic and message, is represented by each entry. In Neal's case, the issue is "4a2qez," while in Amey's case, it's "Amey." The message for Neal's question is either sample text or a placeholder. The dates of the inquiries are shown in the Date column, which has entries from 13th December 2022 and 11th March 2022. There is a delete mark next to both queries in the Action column.

#	Room Name	User Name	Rating	Review	Date	Action
1	Luxury Room	neal	4	3asdikfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero	25-09-2023	Delete
2	Luxury Room	neal	4	3asdikfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero	25-09-2023	Delete
3	Deluxe Room	neal	4	3asdikfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis	25-09-2023	Delete

Figure 17: Ratings & Reviews

Image Source: Self-Evaluated

The above image shows the hotel's ratings and reviews management system, which is most probably integrated with some lodging app. Columns in the table include Room Name, User Name, Rating, Review, Date, and Action. Review kinds, such as "Luxury Room" or "Deluxe Room," are organized in the "Room Name" column. Reviewers are identified in the User Name field; in this instance, the reviewer is Neal. In the Rating column, they can see how people rated each room numerically. In the instances given, Neal ordered the Deluxe Room and the Luxury Room, both at 4. Each rating is accompanied by written input in the Review section. Users typically leave comments or evaluations about their experience with the individual rooms. However, the lorem ipsum content is a placeholder.

The reviews were submitted on September 25, 2023, as shown by the entries in the Date column. The Action column shows choices for managing the reviews. With their respective timestamps, two items have been marked for deletion. It alludes to the possibility of erasing thoughts in some cases according to administration or user preferences. As a bonus, they can use the bulk management tool to either designate all reviews as read or remove them entirely.

#	Name	Area	Guests	Price	Quantity	Status	Action
1	Simple Room	250 sq. ft.	Adult: 5 Children: 3	₹500	10	active	[Edit] [Add] [Delete]
2	Deluxe Room	300 sq. ft.	Adult: 3 Children: 2	₹1000	10	active	[Edit] [Add] [Delete]
3	Luxury Room	600 sq. ft.	Adult: 8 Children: 8	₹1500	2	active	[Edit] [Add] [Delete]
4	Supreme deluxe room	500 sq. ft.	Adult: 8 Children: 10	₹2000	12	active	[Edit] [Add] [Delete]

Figure 18: Details of Rooms

Image Source: Self-Evaluated

The above image shows the room management system, which is one used by hotels or other lodging establishments. There are four distinct room categories included in the table: Simple, Deluxe, Luxury, and Supreme Deluxe. From "Simple" to "Supreme Deluxe," the "Name" column identifies the different room kinds. The "Area" column, which indicates the space's size in square feet, describes the unique qualities of each room type. As an example, the Luxury Room measures 600 square feet. Each room type's ability to accommodate adults and children is detailed in the "Guests" column. The number of rooms available for each kind is specified, and the "Status" column shows whether the room is active or inactive.

The respective costs of all of the room types are shown in the "Price" column. As an example, the cost of the Luxury Room is ₹21,500. Each room type's "Quantity" column indicates the total number of available rooms. Room management-related tasks are probably accessible via the "Action" column.

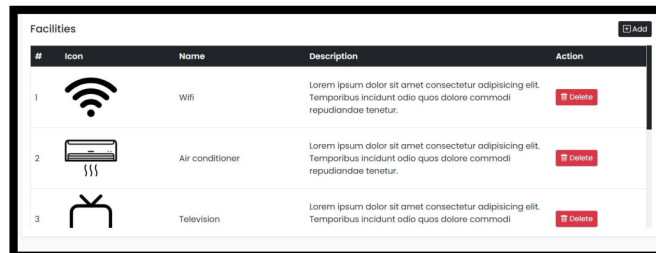
#	Name	Action
1	bedroom	[Delete]
2	balcony	[Delete]
3	kitchen	[Delete]
4	sofa	[Delete]

Figure 19: Features & facilities of the Rooms

Image Source: Self-Evaluated

The image above appears to be from a Features and facilities management system, which would make sense in a hotel or residential application (Cheshire, 2019). An organized representation of the various features is provided by the table's columns, which comprise Features, Names, and Actions. It would seem that the "Features" column has distinct IDs for various characteristics, such as 1, 2, 3, and 4. The "Name" column lists the descriptive names of each of these features, which stand for the characteristics linked to the configuration. Features such as "bedroom," "balcony," "kitchen," and "sofa" are included in the given instances.

The "Action" column gives the control over these features; for example, also may add new ones by clicking the "Add" button or remove old ones by clicking the "Delete" button. Room and space-related amenities may be defined and customized using this interface. The word "bedroom" might mean that there is a bedroom in a living space, "balcony" can tell that there is a balcony available, "kitchen" can mean that there is a cooking area, and "sofa" can mean that there are couches in the space. The "Add" button implies that new features may be added to meet changing needs or preferences. On the other side, they may uninstall things that aren't necessary or relevant anymore by clicking the "Delete" option.






#	Icon	Name	Description	Action
1		Wifi	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incididunt odio quos dolore commodi repudiandae tenetur.	<a href="#">Delete</a>
2		Air conditioner	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incididunt odio quos dolore commodi repudiandae tenetur.	<a href="#">Delete</a>
3		Television	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incididunt odio quos dolore commodi	<a href="#">Delete</a>

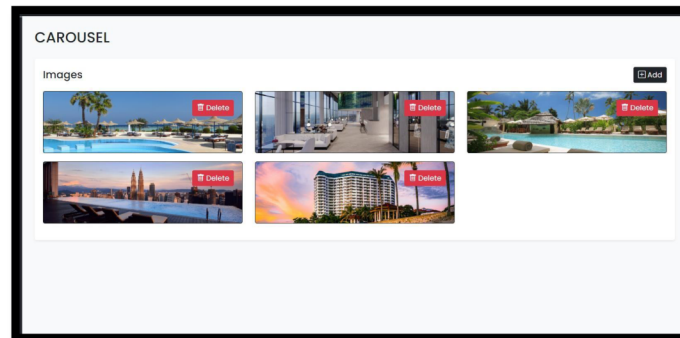
Figure 20: Facilities Given by Hotel

Image Source: Self-Evaluated

The above image shows the facilities management system, which may be used in a hotel or lodging application (Munawar et al., 2020). The table provides an organized representation of the available facilities with columns such as Icon, Name, Description, and Action. Each facility is probably represented visually in the "Icon" column. The offered language does not show the particular symbols, although they help to identify the amenities quickly.

The "Name" column provides a rundown of several amenities, like Wi-Fi, air conditioning, and televisions. All of these facilities work together to make the institution what it is today. Extra

information on each facility is provided in the "Description" column. As an example, the "Air Conditioner" placeholder text describes the product's characteristics and advantages. To manage these facilities, see the "Action" column and use the "Add" and "Delete" buttons, respectively, to add new facilities and remove old ones. This means that the list of available facilities may be adjusted to suit the users' evolving requirements and tastes.



*Figure 21: Images of the CAROUSEL*

Image Source: Self-Evaluated

The above image shows the Settings area, which is most likely part of a website or application for operating a hotel or lodging business (ÖZKUL and Kumlu, 2019). General Settings and Contacts Settings are the two main sections into which they may navigate the settings.

Under "General Settings," they may change the title of the site, which is "Get Hotels," and add an "About Us" section. During the design or development stages, the "About Us" section sometimes comprises placeholder text (asdikfj Lorem ipsum...) that stands in for genuine material. Another feature is a "Shutdown Website" mode that, when used, stops users from making hotel reservations.

The "Contacts Settings" section includes the business's address (VJTI, Matunga, Mumbai, Maharashtra) and a link to Google Maps for easy reference. Included are social links to Facebook; however, there may be duplicate connections due to an oversight or mistake. Additionally, phone numbers may be edited, indicating that contact information can be updated with ease.



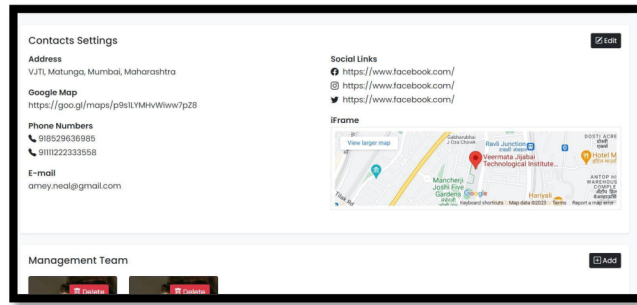


Figure 22: Contact Settings

Image Source: Self-Evaluated

The image displayed appears to be a continuation of the "Contacts Settings" section and is most likely part of a website or application for administering a hotel or lodging business. The address, phone number, email, social media connections, and integrated map may all be customized in this area. Listed under "Social Links," and find three Facebook connections.

The store's precise location is given in the "Address" box as "VJTL, Matunga, Mumbai, Maharashtra." Users will find it easier to access and navigate using the "Google Map" link, which offers a reference to the location on Google Maps. There are two contact numbers provided in the "Phone Numbers" section, 918529636985 and 9111222333558, so there are several ways to get in touch. Users are able to contact us by email since an email address, "amey.neal@gmail.com," is provided.

A smaller map with a link to a bigger one is included in the "iFrame" section. Adding a visual depiction of the establishment's location may improve the user experience and make it simpler for clients to discover and navigate the business. Some of the places mentioned, such as "DOSTI ACRE," "Ora Chow," and "Ravi Junction," could be specific sites or local attractions. If visitors want to know what the area around the accommodation is like, this information might be helpful. If the "Management Team" section contains names like "Deista," it means that the business has a management team. The "Add" and "Delete" buttons imply that the list of members of the management team may be managed and customized.



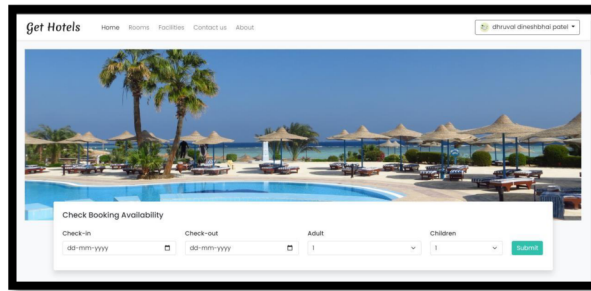


Figure 23: Booking Options

Image Source: Self-Evaluated

The above image is an illustration of a hotel booking website or app interface. Various navigation features, such as "Home," "Rooms," "Facilities," "Contact Us," and "About," are included in the interface and serve to direct the user to various parts or pages inside the program. Making a hotel reservation takes up much of the user interface. An initial headline reading "Get Hotels" gives the impression that this is the app's primary function for helping users locate and reserve rooms at various hotels.

Users are able to submit pertinent information to the booking availability form. For both the arrival and departure dates, the user is asked to use the format "dd-mm-yyyy." Users will have no trouble selecting the dates that work best for them, thanks to this functionality. Users may further personalize their search experience by specifying the number of visitors using the "Adult" and "Children" dropdowns.

After users have filled out the necessary information, they may submit their choices for hotel booking by clicking the "Submit" button that is located underneath the form. Search through available rooms, get geographical details ("Facilities"), get in touch with the business, and read up on the hotel ("About")—all from the convenience of the top navigation bar.

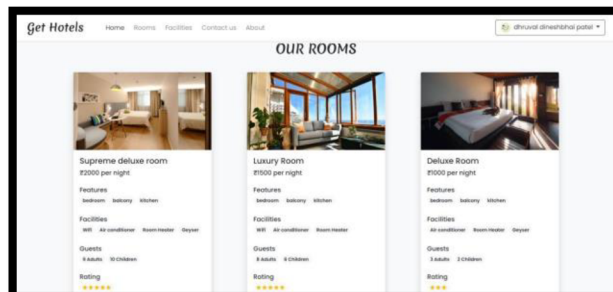


Figure 24: Room Details

Image Source: Self-Evaluated

The image shown here is a small excerpt from a hotel's or other lodging establishment's website that gives potential guests an idea of the rooms' layout and amenities. "Home," "Rooms," "Facilities," "Contact Us," and "About" are some of the navigation bar choices that users may utilize to reach different areas of the site quickly and easily. In the section called "OUR ROOMS," they also find descriptions of the various room kinds. Like "dhruval dineshbhal patel," each room entry is linked to a guest's name, suggesting a possible customization option. The three different room categories are as follows: "Supreme Deluxe Room," "Luxury Room," and "Deluxe Room," with the Supreme Deluxe Room costing #2000 per night, the Luxury Room 21500 per night, and the Deluxe Room 21000 per night.

The amenities and characteristics of each accommodation category are described in great depth. Air conditioning is one example of a basic excess; room heaters and geysers are two examples of luxuries. Each room type has its maximum capacity listed, so they know exactly how many people can stay there. Curiously, a possible rating is mentioned for some room types, suggesting a feature for user input or quality evaluation. Potential visitors may get a better idea of the quality and happiness of the place based on this function, which provides another layer of information.

## 4.2 Manager Panel

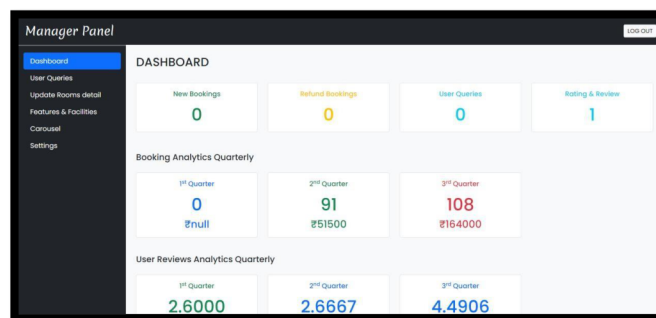


Figure 25: Manager dashboard

Image Source: Self-Evaluated

The above image represents the Manager Panel interface, most likely used by a system for managing lodging establishments. In the menu bar at the top, there are choices like "Dashboard," "User Queries," "Update Rooms Detail," "New Bookings," "Features & Facilities," "Carousel," "Settings," "Booking Analytics Quarterly," and "User Reviews Analytics Quarterly."

The "Dashboard" component is most likely the core center, offering an overview of the hotel's activities. It consists of parts such as "User Queries," "Update Rooms Detail," "New Bookings," "Features & Facilities," "Carousel," "Settings," "Booking Analytics Quarterly," along with "User Reviews Analytics Quarterly." By breaking the hotel's performance into its parts, the management may more easily explore and keep tabs on individual metrics. It would seem that essential indicators pertaining to bookings are broken out quarterly under the "Booking Analytics Quarterly" section. Quarterly parameters like total revenue, number of bookings, and additional KPIs are included in the data. A thorough examination of trends and performance over time may be achieved by presenting data in a quarterly manner.

ID	Name	Area	Guests	Cleaned	Action
1	Simple Room	250 sq. ft.	Guest: 1 Deluxe: 2	Cleaned	🔍
2	Deluxe Room	300 sq. ft.	Guest: 2 Deluxe: 2	Not Clean	🔍
3	Luxury Room	600 sq. ft.	Guest: 4 Deluxe: 3	Not Clean	🔍
4	Supreme Deluxe Room	1000 sq. ft.	Guest: 8 Deluxe: 10	Not Clean	🔍

Figure 26: Update Rooms details

Image Source: Self-Evaluated

The image appears to be a section of a dashboard used by a hotel or other lodging management system; more significantly, it pertains to duties like cleaning and updating guest rooms. A manager or employee may probably use the Dashboard as a hub to keep tabs on and handle all the different parts of room management.

The many kinds of rooms are listed under the "ROOMS Cleaning" section. These include "Simple Room," "Deluxe Room," "Luxury Room," and "Supreme Deluxe Room." There are specifics like "Area" (square feet) and "Guests" (capacity) that are linked to each room type. In addition, they can see if each room is clean or not by looking for the labels "Cleaned" or "Not Clean." From the Dashboard, the user can access various functionalities or modules—like "User Queries," "Update Rooms Detail," "Features & Facilities," "Carousel," and "Settings"—that allow them to manage user queries, update room details, configure features and facilities, handle carousel content, and adjust general settings, among other things. Managers and employees may conduct room cleaning-related actions in the "Action" column, which has choices like "Cleaned" and "Not Clean."

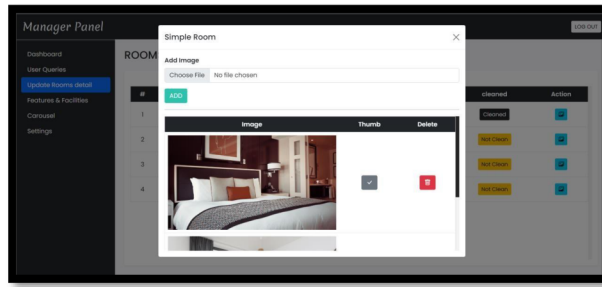


Figure 27: Rooms details

Image Source: Self-Evaluated

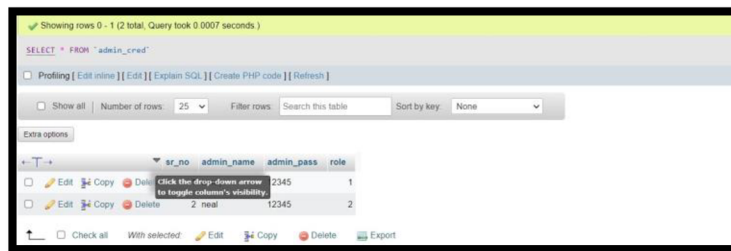


Figure 28: dataset

Image Source: Self-Evaluated

The provided user interface is a representation of a database or administrative system that takes a snapshot of a table called "admin\_cred." This table is primarily dedicated to the maintenance of admin credentials. Based on the data shown, a query has been run, which has exposed information from the top two rows of the database. their query returns four columns: "admin\_name," "admin\_pass," "sr\_no," and "role." According to the data in the rows, the first item seems to include the following information: "neal" as the admin name, "2345" as the admin password, "1" as the serial number (sr\_no), and an unclear role. It seems like "sr\_no" is set to 2, "admin\_pass" is set to "Check all," and "admin\_name" is "12345" in the second item. Editing, copying, and removing items are just a few of the functions provided by the interface. Filtering, searching, and exporting data are other available choices. Efficient administration of several entries concurrently is implied by the bulk action capabilities and checkboxes. This interface is a helpful tool for administrators to manage admin credentials in the database, even if there may be some strange data.



Figure 29: administrative system

Image Source: Self-Evaluated

The shown interface is a database or administrative system, exposing facts about admin roles by running a SELECT query on a table called "admin role." It takes only 0.0005 seconds for the question to run, and it delivers the top two rows from the result set out of a total of two. The two columns that make up the table structure are "id" and "name," which stand for the identification numbers and names of the admin roles, respectively. It is clear from the rows that there are two positions: "admin" and "manager." Action buttons are provided for each row, offering options for editing, copying, and deleting roles, while checkboxes suggest the possibility of performing bulk actions on selected entries. Information pertaining to roles may be efficiently organized and retrieved using the various sorting and filtering tools. The "Show all" option and export capabilities provide administrators more freedom when managing and operating the dataset.

### 4.3 Dataset

The dataset includes a number of important categories that are necessary for a thorough knowledge of a system. These categories are Carousel, Contact Details, Facilities, Features, Rating Reviews, Rooms, Room Facilities, Room Features, Room Images, Settings, Team Details, User Credentials, and User Queries. Datasets are organized to match certain system aspects, allowing for more efficient handling of information.

#### carousel

			sr_no	image
<input type="checkbox"/>	Edit	Copy	Delete	4 IMG_62045.png
<input type="checkbox"/>	Edit	Copy	Delete	5 IMG_93127.png
<input type="checkbox"/>	Edit	Copy	Delete	6 IMG_99736.png
<input type="checkbox"/>	Edit	Copy	Delete	8 IMG_40905.png
<input type="checkbox"/>	Edit	Copy	Delete	9 IMG_55677.png

Figure 30: Dataset of carousel

Image Source: Self-Evaluated

### contact\_details



sr_no	address	gmap	pn1	pn2	email	fb	insta
1	VJTI, Matunga, Mumbai, Maharashtra	<a href="https://goo.gl/maps/p9s1LYMHvWiww7pZ8">https://goo.gl/maps/p9s1LYMHvWiww7pZ8</a>	918529636985	91111222333558	amey.neal@gmail.com	<a href="https://www.facebook.com/">https://www.facebook.com/</a>	<a href="https://www.facebook.com/">https://www.facebook.com/</a>

Figure 31: Dataset of Contact Details

Image Source: Self-Evaluated

### facilities



id	icon	name	description
13	IMG_43553.svg	Wifi	Lorem ipsum dolor sit amet consectetur adipiscing...
14	IMG_49949.svg	Air conditioner	Lorem ipsum dolor sit amet consectetur adipiscing...
15	IMG_41622.svg	Television	Lorem ipsum dolor sit amet consectetur adipiscing...
17	IMG_47816.svg	Spa	Lorem ipsum dolor sit amet consectetur adipiscing...
18	IMG_96423.svg	Room Heater	Lorem ipsum dolor sit amet consectetur adipiscing...
19	IMG_27079.svg	Geyser	Lorem ipsum dolor sit amet consectetur adipiscing...

Figure 32: Dataset of Facilities

Image Source: Self-Evaluated

### features



id	name
13	bedroom
14	balcony
15	kitchen
17	sofa

Figure 33: Dataset of Features

Image Source: Self-Evaluated

### rating review

	sr_no	booking_id	room_id	user_id	rating	review	seen	datetime
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	6	4	2	3	1asdflkj Lorem ipsum dolor sit amet, consectetur a...	0	2023-11-15 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	9	4	2	3	2asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	10	4	2	3	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	11	4	2	2	1asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	35	4	2	3	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	36	3	2	3	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	7	37	4	2	3	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	8	42	4	2	3	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	9	68	3	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	10	69	4	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	11	75	3	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12	77	3	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-01 12:30:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13	101	3	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-02 16:45:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	102	4	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-03 18:20:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15	104	3	2	2	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-04 10:10:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	16	110	3	2	4	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-05 08:30:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	17	138	3	2	4	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-08 14:15:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	18	139	3	2	4	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-07 17:45:00
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	19	140	3	2	4	3asdflkj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-08 09:25:00

Figure 34: Dataset of Rating Reviews

Image Source: Self-Evaluated

rooms

	id	name	area	price	quantity	adult	children	description	status	removed
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	1	simple room	159	58	56	12	2 asdf asd	1	1	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	simple room 2	785	159	85	452	10 adfasdfa sd	1	1	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	3	Simple Room	250	500	10	5	3 Lorem ipsum dolor sit amet, consectetur adipiscing...	1	0	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	4	Deluxe Room	300	1000	10	3	2 Lorem ipsum dolor sit amet, consectetur adipiscing...	1	0	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	5	Luxury Room	600	1500	2	8	6 Lorem ipsum dolor sit amet, consectetur adipiscing...	1	0	
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	6	Supreme deluxe room	500	2000	12	9	10 Lorem ipsum dolor sit amet, consectetur adipiscing...	1	0	

Figure 35: Dataset of Rooms

Image Source: Self-Evaluated

room facilities

	sr_no	room_id	facilities_id
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	29	4	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	30	4	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	31	4	19
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	35	6	13
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	36	6	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	37	6	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	38	6	19
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	39	5	13
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	40	5	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	41	5	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	42	3	14
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	43	3	15
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	44	3	18
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	45	3	19

Figure 36: Dataset of Room Facilities

Image Source: Self-Evaluated

room features



				sr_no	room_id	features_id			
<input type="checkbox"/>		Edit		Copy		Delete	16	4	13
<input type="checkbox"/>		Edit		Copy		Delete	17	4	14
<input type="checkbox"/>		Edit		Copy		Delete	18	4	15
<input type="checkbox"/>		Edit		Copy		Delete	22	6	13
<input type="checkbox"/>		Edit		Copy		Delete	23	6	14
<input type="checkbox"/>		Edit		Copy		Delete	24	6	15
<input type="checkbox"/>		Edit		Copy		Delete	25	5	13
<input type="checkbox"/>		Edit		Copy		Delete	26	5	14
<input type="checkbox"/>		Edit		Copy		Delete	27	5	15
<input type="checkbox"/>		Edit		Copy		Delete	28	3	13
<input type="checkbox"/>		Edit		Copy		Delete	29	3	14
<input type="checkbox"/>		Edit		Copy		Delete	30	3	17

Figure 37: Dataset of Room Features

Image Source: Self-Evaluated

### Room images

				sr_no	room_id	image	thumb			
<input type="checkbox"/>		Edit		Copy		Delete	15	3	IMG_39782.png	0
<input type="checkbox"/>		Edit		Copy		Delete	16	3	IMG_65019.png	1
<input type="checkbox"/>		Edit		Copy		Delete	17	4	IMG_44867.png	0
<input type="checkbox"/>		Edit		Copy		Delete	18	4	IMG_78809.png	1
<input type="checkbox"/>		Edit		Copy		Delete	19	4	IMG_11892.png	0
<input type="checkbox"/>		Edit		Copy		Delete	21	5	IMG_17474.png	0
<input type="checkbox"/>		Edit		Copy		Delete	22	5	IMG_42663.png	1
<input type="checkbox"/>		Edit		Copy		Delete	23	5	IMG_70583.png	0
<input type="checkbox"/>		Edit		Copy		Delete	24	6	IMG_67761.png	0
<input type="checkbox"/>		Edit		Copy		Delete	25	6	IMG_69824.png	1

Figure 38: Dataset of Room images

Image Source: Self-Evaluated

### settings

				sr_no	name	picture			
<input type="checkbox"/>		Edit		Copy		Delete	16	Diponkar	IMG_38410.jpg
<input type="checkbox"/>		Edit		Copy		Delete	17	Dhruval	IMG_69823.jpg

Figure 39: Dataset of Settings

Image Source: Self-Evaluated

### team details



	sr_no	name	picture
<input type="checkbox"/> Edit Copy Delete	16	Diponkar	IMG_38410.jpg
<input type="checkbox"/> Edit Copy Delete	17	Dhruval	IMG_69823.jpg

Figure 40: Dataset of Team details

Image Source: Self-Evaluated

### user\_cred

id	name	email	address	phonenum	pincode	dob	profile	password	is_verified	token
2	neal	neal@gmail.com	ad	123	123324	2022-06-12	3135715.png	S2y\$10\$21sUjalwab/UuaR7abvUNOzVkmwy640VPsNnsiF4bl...	1	NULL
5	amey	helubetu@finews.biz	asd	1234	123	2022-12-13	IMG_84786.jpeg	S2y\$10\$NKNL5Ogn.m3NVVvu/DKievNlms7hwZPqTnPpooon...	1	24f6267a
6	amey	xelih35531@lubde.com	asd	1123	123	2022-12-13	3135716.png	S2y\$10\$aoCaCM6Ji3VuZiOOYFI.YO4v2cqJr0HIT2oVH5y3...	1	ef6dc7ba3
7	harry	harryd123@gmail.com	asd	12345	123	2022-12-13	IMG_33353.jpeg	S2y\$10\$kw8LOLF9eI4u5i3vOO.GkMpBKAbEzguOqtp1HD0m...	0	5c9f04397
8	a	cejka9124@paxven.com	a	12	1	2022-12-13	IMG_62937.jpeg	S2y\$10\$0KAvtcnPie9\$0W2DQjpaBuil8rvrC5zq7BVUjYnmST14J...	0	250dd456
14	dhruval dineshbhai patel	dhruvalpatel556@gmail.com	B/2, BHAGIRATH INTER CITY NIR SWEET HOME PASHWANATH...	12313213	382345	2023-10-30	IMG_77627.jpeg	S2y\$10\$MggL.GJD/n8BVHXwcBOd4E0FYkbZtxErPbLTHBJKYG...	1	7e87966a

Figure 41: Dataset of user cred

Image Source: Self-Evaluated

### user queries

	sr_no	name	email	subject	message	datetime	seen
<input type="checkbox"/> Edit Copy Delete	11	Amey	amey@gmail.com	This is one subject	orem ipsum dolor sit amet, consectetur adipiscing...	2022-03-11 00:00:00	1
<input type="checkbox"/> Edit Copy Delete	13	neal	n@gmail.com	4a2qez	watT	2022-12-13 10:10:48	1

Figure 42: Dataset of User Queries

Image Source: Self-Evaluated

## 4.4 Tableau Forecasting



Figure 43: Revenue Forecasting with trends additive

Image Source: Self-Evaluated

Revenue projection for future year trends using an additive model predicts a 40% increase in revenue, given a baseline of 20,000 units. The prognosis indicates an incremental growth trend with a total revenue projection of 36,000 units, achieved by an additive method. An extra fourteen thousand units are accounted for in the total estimate by this model. With the trend's additive nature, we can see how the 40% rise will affect our forecasts for the meat market next year and get a more nuanced picture of our predicted financial success.

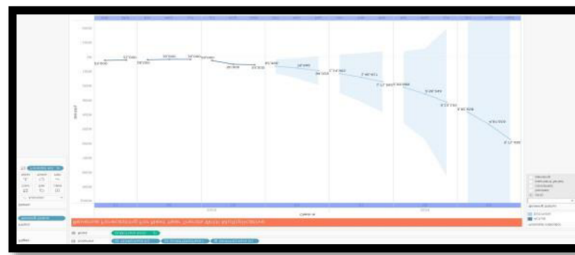


Figure 44: Revenue Forecasting with trends multiplicative

Image Source: Self-Evaluated

The revenue forecasting using multiplicative trends assumes a baseline revenue of 50,000 units. To better account for different rates of growth, a multiplicative model expresses the trend as a proportionate component. In a multiplicative model, changes are proportionate rather than constant, as opposed to an additive model. With the 50,000-unit baseline as a starting point, the prediction is dynamically impacted by the multiplicative trend.



Figure 45: Revenue Forecasting with trends None

Image Source: Self-Evaluated

The revenue forecasting data supplied with trends set to "None" shows a static prediction. The word "Poc" could mean a foundation or initial location. Possible future scenarios or variables are represented by the following numbers: 44,370, 4,370, 24,000, and 26,000. These numbers

can represent static circumstances or steady revenue if no trend is shown. The data presented presumably reflect discrete periods in time without any directional effect, and the lack of a trend shows that the projection stays constant during the specified timeframe. In order to get valuable insights, it is essential to interpret these values within the context of the dynamics of the company or market.

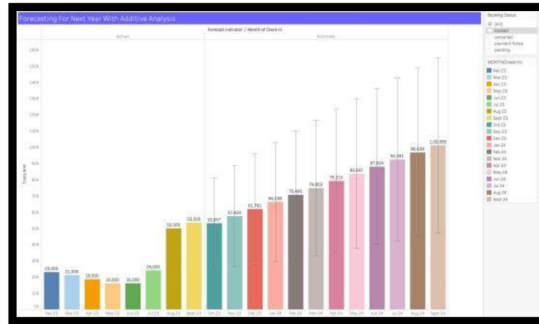


Figure 46: Revenue Increment with trends with Bar chart

Image Source: Self-Evaluated

The bar chart depicts revenue increment patterns throughout time with an additional analysis for the following year. Actual, estimated, cancelled, and payment-failed categories are shown by each bar, which shows the status of monthly bookings. The reservations gradually grew from February 23 to September 24, reaching a high on January 24. All booked categories are taken into account in the additive analysis, and the statistics, which range from 24,000 to 160,000, show how revenue estimates are dynamic. In addition to depicting the current booking status and the expected increase over the given term, the chart does a good job of capturing the patterns of growth and changes in monthly income.

## Discussion

The analysis of the Hotel and Tourism Control Admin Panel provides a comprehensive understanding of the PHP-based system tailored for efficient hotel management in India. The system's various components, including the Dashboard, Booking Records, and User Reviews Analytics Quarterly, collectively contribute to a user-friendly interface. The intuitive design allows for effective monitoring and management of hotel-related activities, reflecting a dedication to customer satisfaction and involvement.

The Dashboard serves as a central point, offering quick access to critical metrics and categories. The Bookings area provides a live view of the hotel's occupancy status, with a breakdown of New Bookings, Refund Bookings, and Active Bookings. The inclusion of User Queries and Rating & Review sections underscores the system's commitment to customer engagement and feedback.

Administrators benefit from the efficient management of bookings through the Booking Records component, which categorizes data into Users, Booking Analytics, and Rooms. The analytics section further breaks down variables like Total Bookings and Features and facilities, offering valuable insights for strategic decision-making. The addition of dynamic displays in Booking Analytics Quarterly allows managers to analyze booking trends and prepare for peak periods.

The user-centric approach is evident in the User Reviews Analytics Quarterly section, providing essential data on user satisfaction over quarters. Fluctuations in satisfaction ratings indicate seasonal influences or improvements to hotel amenities and services. The New Registration metric and the absence of queries in the 2nd quarter suggest a straightforward user experience, while the Reviews counter highlights continuous user interaction and feedback collection.

Efficient management of user information and bookings is facilitated through the Users and Booking Records sections. Details such as names, phone numbers, email addresses, and booking status are readily available, streamlining conflict resolution and improving customer service. The Rooms section provides an overview of room-related information, emphasizing the significance of amenities in delivering an excellent guest experience.

The User Queries List and Ratings & Reviews sections illustrate the system's commitment to addressing user concerns. The former presents a straightforward interface for query management, displaying essential information like email, name, subject, message, and date. The latter showcases a ratings and reviews management system, enabling administrators to track user feedback on specific rooms.

The Features & Facilities of the Rooms section demonstrates a robust management system for defining and customizing room amenities. The interface allows for the addition or removal of features based on changing user preferences, contributing to a flexible and adaptable system.

The Facilities Given by Hotel section further emphasizes the importance of clear communication about available amenities. The organized representation of facilities with icons, names, and descriptions aids users in understanding the services offered, enhancing their overall experience. The ability to manage facilities through the "Add" and "Delete" buttons ensures that the hotel can adjust its offerings to meet evolving customer needs.

The Settings section provides administrators with control over the system's configuration. Divided into General Settings and Contacts Settings, this area allows for the modification of the site title, the addition of an "About Us" section, and the ability to shut down the website temporarily. Contact details, including the business address, phone numbers, and social links, can be easily edited to keep information up-to-date.

The continuation of the Contacts Settings section provides additional details such as the business's precise location, multiple contact numbers, and an email address for user inquiries. The integration of Google Maps and a smaller map with links enhances user accessibility and navigation. The mention of specific locations like "DOSTI ACRE" and "Ora Chow" adds a local flavour and potential insight into the surrounding area for prospective guests.

The Booking Options and Room Details sections exemplify the user interface for hotel bookings. The precise navigation features and the ability to input arrival and departure dates, along with the number of visitors, provide users with a seamless booking experience. The top navigation bar offers quick access to various sections, emphasizing user convenience.

The Room Details section offers potential guests insights into different room categories, including their layouts, amenities, and prices. The inclusion of a possible rating for some room types adds a layer of information that can aid users in making informed decisions based on the experiences of previous guests.

The Manager Panel interface introduces a hub for lodging establishment management. The menu bar offers choices like Dashboard, User Queries, Update Rooms Detail, New Bookings, Features & Facilities, Carousel, Settings, Booking Analytics Quarterly, and User Reviews Analytics Quarterly. The Dashboard component serves as the central hub, providing an overview of the hotel's activities.

The Update Rooms Details section caters to duties related to cleaning and updating guest rooms. Room types like Simple Room, Deluxe Room, Luxury Room, and Supreme Deluxe Room are listed, with details such as area, guest capacity, and cleanliness status. The Action

column allows managers to perform room-related actions, indicating whether a room is cleaned or requires cleaning.

The Rooms Details and Dataset sections provide additional insights into room management. The former offers details about various room categories, including their names, areas, guest capacities, prices, quantities, and statuses. The latter showcases a snapshot of the "admin\_cred" table, dedicated to maintaining admin credentials. The interface allows for editing, copying, and removing items, providing efficient administration of entries.

The Manager Dashboard, Update Rooms Details, and Rooms Details sections collectively highlight the Manager Panel's role in facilitating the effective management of lodging establishments. The inclusion of various functionalities like User Queries, Features & Facilities, and Settings allows managers to oversee different aspects of hotel operations from a centralized interface.

The dataset section introduces datasets crucial for a thorough understanding of the system. Organized into categories like Carousel, Contact Details, Facilities, Features, Rating Reviews, Rooms, Room Facilities, Room Features, Room Images, Settings, Team Details, User Credentials, and User Queries, these datasets support the structure and maintenance of essential components.

The discussion on dataset organization emphasizes its role in efficient management, with tools for editing, copying, deleting, filtering, searching, and exporting data. The availability of bulk action capabilities and checkboxes enhances the administration of multiple entries simultaneously, ensuring the integrity and security of admin credentials.

The integration of visual elements, such as the CAROUSEL and Settings interfaces, contributes to the system's aesthetics and configurability. The Settings section allows for modifications like changing the site title and adding an "About Us" section, enhancing the overall visual appeal and informative content of the online platform.

In conclusion, the PHP-based system for hotel and tourism management in India stands out as a robust and user-friendly solution. Its flexibility, adaptability, and emphasis on user engagement and satisfaction position it competitively in the dynamic hospitality industry. Despite challenges related to data accuracy discrepancies, the system's Manager Panel proves to be a central hub for effective monitoring and decision-making. Future implications involve addressing challenges and embracing emerging trends for sustained relevance in the evolving

landscape of hotel and tourism management in India. Continuous development, integration of artificial intelligence, enhanced data security measures, and scalability improvements are potential areas for future enhancement, ensuring the system remains a valuable asset for the industry.

## **Chapter 5: Conclusion and Recommendation**

In the dynamic Indian hospitality industry, the PHP-based Hotel and Tourism Management system stands out as a reliable and user-friendly solution. The comprehensive analysis of its several components, which includes the user interface, the Manager Panel, and the datasets that lay behind it, demonstrates both the areas in which it works well and those in which it may be improved. The system is in a position to successfully compete in an industry that is constantly changing in order to serve the ever-evolving expectations of customers. This might be attributed to the system's adaptability, flexibility, and devotion to user engagement.

The user-centric design, which is represented by features such as the Dashboard, Booking Options, and Room Details sections, illustrates that the system is devoted to giving visitors an experience that is both seamless and delightful. This is what the user-centric design is all about. The pleasant user journey that is brought to by the clarity in navigation, in combination with the fact that the interfaces are easy to understand, contributes to an overall improvement in the amount of enjoyment that individuals who interact with the platform feel.

The Manager Panel, which serves as the primary hub for the management of lodging businesses, provides administrators with access to a wide range of tools across the system. Streamlining some of the most critical aspects of hotel operations is the responsibility of the Manager Panel. This includes the monitoring of key indicators on the Dashboard as well as the effective management of reservations and room data. Through the incorporation of datasets, extra assistance is provided for the creation and maintenance of the system. As a result, the integrity and security of the components that are of essential importance are preserved.

It is vital to acknowledge the challenges that are linked with discrepancies in the accuracy of the data despite the fact that the system has a great deal of benefits to provide. Nevertheless, in spite of the fact that the Manager Panel is an essential resource for decision-making, efforts should be made to address any abnormalities in the data in order to maintain a credible foundation for strategic planning throughout the process. Continuous attention and frequent

system updates are two aspects that might potentially assist in lessening the risk of such troubles occurring. Other considerations include regular maintenance and maintenance.

## **Recommendation**

**Enhancing Data Accuracy:** Carry out data audits on a regular basis in order to locate and correct any errors that may be present in the datasets. Automated validation tests should be implemented in order to guarantee consistency and dependability in data-entering efforts. The relevance of providing administrators with training that emphasises the need for correct data entry should be.

**Integrating Artificial Intelligence (AI):** To better understand booking patterns and occupancy projections, it is essential to investigate the possibility of integrating artificial intelligence technology. Chabot's powered by artificial intelligence should be used to improve customer service and respond to consumer inquiries in real-time. For personalising user experiences based on past data, machine learning techniques should be used.

**Improving Data Security Measures:** Increasing the strength of data encryption algorithms will result in an overall improvement in the security of user information. Update and fix security vulnerabilities on a regular basis in order to reduce the likelihood of possible threats. In order to detect and mitigate any possible dangers to the system, it is essential to conduct security audits on a regular basis.

**Scalability Improvements:** Make a plan for scalability by optimising the design of the system so that it can support an increasing number of users. Take into consideration cloud-based solutions in order to achieve scalability and flexibility in the distribution of resources. Regularly evaluate the performance of the system and make any required improvements to ensure that it is operating at its full potential.

**Continuous Development and User Feedback:** set up a feedback loop with users in order to collect information about their experiences and expectations using this information. In order to continuously develop the platform, it is essential to prioritise new upgrades based on input from users. It is essential to use an agile development methodology in order to quickly respond to developing technical breakthroughs and growing market trends.

**Community and Industry Collaboration:** Encourage cooperation with all players in the business, such as hotels, tourist boards, and travel agents. For the purpose of keeping up with



developing tendencies and difficulties, it is essential to take part in industry forums and conferences. Engage with the user community by means of forums or surveys in order to get an understanding of the ever-changing tastes and requirements.

**Education and Training Programs:** It is essential to provide hotel managers with training programmes that will allow them to make the most of the capabilities offered by the system. In order to enable continuing education on system changes and best practices, they should provide them with resources and documentation. Establish partnerships with educational establishments in order to include the system in the curriculum of hospitality management programmes.

**Sustainability Initiatives:** Include elements that enable hotels to demonstrate their commitment to sustainability and their responsibility to environmentally friendly practices. Through advertising initiatives, visitors should be encouraged to make ecologically friendly decisions and should be rewarded for doing so. In order to develop sustainable tourism, it is essential to investigate the possibility of forming collaborations with eco-friendly service providers and suppliers.

## Reference list

A Marin-Pantelescu, (2019). Role of Tour Operators and Travel Agencies in Promoting Sustainable Tourism. *Amfiteatru Economic*, [online] 21(52), pp.654–669. Available at: <https://www.cceol.com/search/article-detail?id=789316>.

Achmad, W. and Yulianah, Y. (2022). Corporate Social Responsibility of the Hospitality Industry in Realizing Sustainable Tourism Development. *Enrichment : Journal of*

*Management*, [online] 12(2), pp.1610–1616. Available at:  
<https://enrichment.iocspublisher.org/index.php/enrichment/article/view/447>.

Afnarius, S., Akbar, F. and Yuliani, F. (2020). Developing Web-Based and Mobile-Based GIS for Places of Worship Information to Support Halal Tourism: A Case Study in Bukittinggi, Indonesia. *ISPRS International Journal of Geo-Information*, [online] 9(1), p.52. Available at: <https://www.mdpi.com/2220-9964/9/1/52>.

Ahsan, M. and Sarafath, Kazi Zafarullah (2022a). Hotel Management System. *133.167.11*. [online] Available at: <http://103.133.167.11:8080/handle/123456789/3836>.

Ahsan, M. and Sarafath, Kazi Zafarullah (2022b). Hotel Management System. *133.167.11*. [online] Available at: <http://103.133.167.11:8080/handle/123456789/3836>.

Akter, S., Alam, M.O., Rani, K., Islam, M.A. and Hasneen, T. (2022a). *A Comprehensive Study on Hotel Management System (HMS)*. [online] 202.74.246.118. Available at: <http://202.74.246.118/handle/123456789/292>.

Akter, S., Alam, M.O., Rani, K., Islam, M.A. and Hasneen, T. (2022b). *A Comprehensive Study on Hotel Management System (HMS)*. [online] 202.74.246.118. Available at: <http://202.74.246.118/handle/123456789/292>.

Ali Qalati, S., Li, W., Ahmed, N., Ali Mirani, M. and Khan, A. (2021). Examining the Factors Affecting SME Performance: The Mediating Role of Social Media Adoption. *Sustainability*, [online] 13(1), p.75. Available at: <https://www.mdpi.com/2071-1050/13/1/75/htm>.

Aluri, A., Price, B.S. and McIntyre, N.H. (2019). Using Machine Learning To Cocreate Value Through Dynamic Customer Engagement In A Brand Loyalty Program. *Journal of Hospitality & Tourism Research*, [online] 43(1), pp.78–100. Available at: <https://journals.sagepub.com/doi/abs/10.1177/1096348017753521>.

Amini, M., Rahmani, A., Abedi, M., Hosseini, M., Amini, M., Amini, M. and Research Group, M. (2021). *MAHAMGOSTAR.COM AS A CASE STUDY FOR ADOPTION OF LARAVEL FRAMEWORK AS THE BEST PROGRAMMING TOOLS FOR PHP BASED WEB*

*DEVELOPMENT FOR SMALL AND MEDIUM ENTERPRISES*. [online] papers.ssrn.com. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3857736](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3857736).

Anabila, P., Ameyibor, L.E.K., Allan, M.M. and Alomenu, C. (2021). Service Quality and Customer Loyalty in Ghana's Hotel Industry: The Mediation Effects of Satisfaction and Delight. *Journal of Quality Assurance in Hospitality & Tourism*, [online] pp.1–24. Available at: <https://www.tandfonline.com/doi/abs/10.1080/1528008X.2021.1913691>.

Andersson, H. (2022). *A Comparison of the Performance of an Android Application Developed in Native and Cross-Platform : Using the Native Android SDK and Flutter*. [online] [www.diva-portal.org](http://www.diva-portal.org). Available at: <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1666657>.

Angraini, L.M., Larsari, V.N., Muhammad, I. and Kania, N. (2023a). Generalizations and analogical reasoning of junior high school viewed from Bruner's learning theory. *Infinity Journal*, [online] 12(2), pp.291–306. Available at: <http://www.e-journal.stkipsiliwangi.ac.id/index.php/infinity/article/view/3888> .

Angraini, L.M., Larsari, V.N., Muhammad, I. and Kania, N. (2023b). Generalizations and analogical reasoning of junior high school viewed from Bruner's learning theory. *Infinity Journal*, [online] 12(2), pp.291–306. Available at: <http://www.e-journal.stkipsiliwangi.ac.id/index.php/infinity/article/view/3888> .

Antonio, N., de Almeida, A. and Nunes, L. (2019). An Automated Machine Learning Based Decision Support System to Predict Hotel Booking Cancellations. *Data Science Journal*, [online] 18. Available at: <https://account.datascience.codata.org/index.php/up-j-dsj/article/view/dsj-2019-032>.

Arner, D.W., Animashaun, S., Charamba, K. and Cai, Y. (2022). *MSME Access to Finance: The Role of Digital Payments*. [online] papers.ssrn.com. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4138785](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4138785).

Aroral, H. (2021). Waterfall Process Operations in the Fast-paced World: Project Management Exploratory Analysis. *International Journal of Applied Business and*

*Management Studies*, [online] 6(1), pp.91–99. Available at: [http://www.ijabms.com/wp-content/uploads/2021/05/05\\_ARORAL\\_PB.pdf](http://www.ijabms.com/wp-content/uploads/2021/05/05_ARORAL_PB.pdf).

Asenahabi, B. (2019). Basics of research design: A guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5), pp.76–89.

Azad M. Madni (n.d.). Available at: [https://www.researchgate.net/figure/a-Traditional-systems-engineering-b-model-based-systems-engineering\\_fig1\\_331236880](https://www.researchgate.net/figure/a-Traditional-systems-engineering-b-model-based-systems-engineering_fig1_331236880).

Balasubramanian, S., Sethi, J.S., Ajayan, S. and Paris, C.M. (2022). An enabling Framework for Blockchain in Tourism. *Information Technology & Tourism*, [online] 24(2), pp.165–179. Available at: <https://link.springer.com/article/10.1007/s40558-022-00229-6>.

Bergen, N. and Labonté, R. (2020). ‘Everything Is perfect, and We Have No problems’: Detecting and Limiting Social Desirability Bias in Qualitative Research. *Qualitative Health Research*, 30(5), pp.783–792.

Berndt, L. (2022). *DURBAN UNIVERSITY OF TECHNOLOGY E-PROCUREMENT FOR DESTINATION MANAGEMENT COMPANIES WITHIN THE TOURISM INDUSTRY IN SOUTH AFRICA: DIGITAL ERA TRENDS, CHALLENGES AND RESPONSES*. [online] Available at: [https://openscholar.dut.ac.za/bitstream/10321/4237/3/Berndt\\_L\\_2022\\_Redacted.pdf](https://openscholar.dut.ac.za/bitstream/10321/4237/3/Berndt_L_2022_Redacted.pdf).

Betzler, D., Loots, E., Prokůpek, M., Marques, L. and Grafenauer, P. (2020). COVID-19 and the arts and cultural sectors: investigating countries’ contextual factors and early policy measures. *International Journal of Cultural Policy*, [online] pp.1–19. Available at: <https://www.tandfonline.com/doi/abs/10.1080/10286632.2020.1842383>.

Bharadwaj, N. and Shipley, G.M. (2020). Salesperson communication effectiveness in a digital sales interaction. *Industrial Marketing Management*, [online] 90, pp.106–112. Available at: <https://www.sciencedirect.com/science/article/pii/S0019850120301607>.

Bhutta, M.N.M., Bhattia, S., Alojail, M.A., Nisar, K., Cao, Y., Chaudhry, S.A. and Sun, Z. (2022). Towards Secure IoT-Based Payments by Extension of Payment Card Industry Data Security Standard (PCI DSS). *Wireless Communications and Mobile Computing*, [online] 2022, pp.1–10. Available at: <https://www.hindawi.com/journals/wcmc/2022/9942270/>.

Bleiker, J., Morgan-Trimmer, S., Knapp, K. and Hopkins, S. (2019). Navigating the maze: Qualitative research methodologies and their philosophical foundations. *Radiography*, [online] 25(2), pp.S4–S8. Available at:

<https://www.sciencedirect.com/science/article/abs/pii/S1078817419300902>.

Bueno, I., Carrasco, R.A., Porcel, C., Kou, G. and Herrera-Viedma, E. (2021). A linguistic multi-criteria decision making methodology for the evaluation of tourist services considering customer opinion value. *Applied Soft Computing*, [online] 101, p.107045. Available at:

<https://www.sciencedirect.com/science/article/pii/S1568494620309832>.

Cheshire, D. (2019). *Building Revolutions: Applying the Circular Economy to the Built Environment*. [online] *Google Books*. Routledge. Available at:

<https://books.google.com/books?hl=en&lr=&id=KMqnDwAAQBAJ&oi=fnd&pg=PT6&dq=The+image+above+appears+to+be+from+a+Features+and+facilities+management+system> .

Chong, H.-Y. and Diamantopoulos, A. (2020). Integrating advanced technologies to uphold security of payment: Data flow diagram. *Automation in Construction*, [online] 114, p.103158.

Available at: <https://www.sciencedirect.com/science/article/pii/S0926580519313573>.

Clariz, P., Barzaga, A., German, J., Binoya, G., Dominique, S., Bucao, C., Cyrine, S., Ibe, R., Cullen, D. and Yap, G. (2020). *eReserba Cardinal: An Integrated Room Reservation System for Higher Education Institutions*. [online] Available at:

<http://www.ieomsociety.org/ieom2020/papers/362.pdf>.

Coelho, B.M. (2022). *Can customer relationship management help maximizing revenue management? internship at ap hotels & resorts*. [online] *sapientia.ualg.pt*. Available at:

<https://sapientia.ualg.pt/handle/10400.1/18949>.

Dash, S.B. and Sharma, P. (2021). Reviving Indian Tourism amid the Covid-19 pandemic: Challenges and workable solutions. *Journal of Destination Marketing & Management*, [online] 22, p.100648. Available at:

<https://www.sciencedirect.com/science/article/pii/S2212571X21000962>.

Delgado-Segura, S., Pérez-Solà, C., Navarro-Arribas, G. and Herrera-Joancomartí, J. (2017). A fair protocol for data trading based on Bitcoin transactions. *Future Generation Computer Systems*. [online] Available at: <https://eprint.iacr.org/2017/1018.pdf> .

Devadoss, A.K.V., Subramanian, M., Balas, V.E., Turjman, F.A. and Malaichamy, R. (2023). *Proceedings of the 6th International Conference on Intelligent Computing (ICIC-6 2023)*. [online] *Google Books*. Springer Nature. Available at: <https://books.google.com/books?hl=en&lr=&id=NRjdEAAQBAJ&oi=fnd&pg=PA119&dq=The+integration+of+booking+engines+enables+guests+to+make+reservations+directly+via+the+hotel%27s+website> .

Drivas, I., Kouis, D., Kyriaki-Manessi, D. and Giannakopoulos, G. (2021). Content Management Systems Performance and Compliance Assessment Based on a Data-Driven Search Engine Optimization Methodology. *Information*, [online] 12(7), p.259. Available at: <https://www.mdpi.com/2078-2489/12/7/259>.

Elenyu, S., Akello, D. and Nabbuto, G. (2022). *An online user registration system for YMCA comprehensive institute library, Buwambo campus*. [online] *dissertations.mak.ac.ug*. Available at: <http://dissertations.mak.ac.ug/handle/20.500.12281/15563> .

Faid, A., Sadik, M. and Sabir, E. (2021). An Agile AI and IoT-Augmented Smart Farming: A Cost-Effective Cognitive Weather Station. *Agriculture*, [online] 12(1), p.35. Available at: <https://www.mdpi.com/2077-0472/12/1/35?src=1266484> .

Fiorina, C., Shriwise, P., Dufresne, A., Ragusa, J., Ivanov, K., Valentine, T., Lindley, B., Kelm, S., Shwageraus, E., Monti, S., Batra, C., Pautz, A., Lorenzi, S., Rubiolo, P., Clifford, I. and Dechenaux, B. (2021). AN INITIATIVE FOR THE DEVELOPMENT AND APPLICATION OF OPEN-SOURCE MULTI-PHYSICS SIMULATION IN SUPPORT OF R&D AND E&T IN NUCLEAR SCIENCE AND TECHNOLOGY. *EPJ Web of Conferences*, [online] 247, p.02040. Available at: [https://www.epj-conferences.org/articles/epjconf/abs/2021/01/epjconf\\_physor2020\\_02040/epjconf\\_physor2020\\_02040.html](https://www.epj-conferences.org/articles/epjconf/abs/2021/01/epjconf_physor2020_02040/epjconf_physor2020_02040.html) .

Foris, D., Matei, C.-A. and Foris, T. (2021). Exploring Solutions and the Role of GDS Technology in Crossing the Current Pandemic Context in Tourism. *European Journal of*

*Tourism, Hospitality and Recreation*, [online] 11(1), pp.91–101. Available at:  
<https://sciendo.com/article/10.2478/ejthr-2021-0009>.

freeproject (2017). *Hotel Room Booking System Dataflow Diagram*. [online] FreeProjectz. Available at: <https://www.freeprojectz.com/dfd/hotel-room-booking-system-dataflow-diagram>.

Garcés Velástegui, P. (2019). Form follows function in evidence-based public policy: the pragmatic alternative to the positivist orthodoxy. *Revista Iberoamericana de Estudios de Desarrollo= Iberoamerican Journal of Development Studies*, [online] 8(2), pp.44–68. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=7121072> .

George, G. (2020). Design and development of the website of a conference and the accompanying mobile applications utilizing crossplatform tools. *Ihu.edu.gr*. [online] Available at: <https://repository.ihu.edu.gr/xmlui/handle/11544/29495> .

Grossman, M. and Gerrand, V. (2021). Terrorism Confidential: Ethics, Primary Data and the Construction of ‘Necessary Fictions’. *Terrorism and Political Violence*, [online] 33(2), pp.242–256. Available at:  
<https://www.tandfonline.com/doi/abs/10.1080/09546553.2021.1880192>.

Hayashi, P., Abib, G., Hoppen, N. and Wolff, L.D.G. (2021). Processual Validity in Qualitative Research in Healthcare. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 58, p.004695802110607. doi:<https://doi.org/10.1177/00469580211060750>.

Haydam, N. and Steenkamp, P. (2020). *European Integration -Realities and Perspectives*. [online] *Proceedings*, p.304. Available at: <https://www.dp.univ-danubius.ro/index.php/EIRP/article/download/38/37>.

HotelRez (n.d.). Available at:  
[https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.hotelrez.net%2Ffive-ways-to-improve-your-hotels-operational-efficiency%2F&psig=AOvVaw3jdMn-J1RwooG7SIH1WBMW&ust=1686036232383000&source=images&cd=vfe&ved=2ahUKEwi-lfnGzKv\\_AhX3ObcAHYq8AMsQr4kDegUIARC-AQ](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.hotelrez.net%2Ffive-ways-to-improve-your-hotels-operational-efficiency%2F&psig=AOvVaw3jdMn-J1RwooG7SIH1WBMW&ust=1686036232383000&source=images&cd=vfe&ved=2ahUKEwi-lfnGzKv_AhX3ObcAHYq8AMsQr4kDegUIARC-AQ).

Hussain, S., Ahmad Shah, F. and Kareem, S. (2020). Expectations of Indian guests from hotel preparedness in COVID-19 / Sarah Hussain, Firdous Ahmad Shah and Saima Kareem. *Journal of Tourism, Hospitality and Culinary Arts*, [online] 12(3), pp.31–51. Available at: <https://ir.uitm.edu.my/id/eprint/67399/>.

IBEF (2023). *Redirect Notice*. [online] Google.com. Available at: [https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.ibef.org%2Findustry%2Ftourism-hospitality-india&psig=A0vVaw1ldZ5GSexpkC7QKDRyjpvu&ust=1686039830937000&source=images&cd=vfe&ved=0CBMQjhqxqFwoTCODA5v\\_Zq\\_8CFQAAAAAdAAAAABAI](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.ibef.org%2Findustry%2Ftourism-hospitality-india&psig=A0vVaw1ldZ5GSexpkC7QKDRyjpvu&ust=1686039830937000&source=images&cd=vfe&ved=0CBMQjhqxqFwoTCODA5v_Zq_8CFQAAAAAdAAAAABAI) .

Ikram, M. and Kenayathulla, H.B. (2022). Out of Touch: Comparing and Contrasting Positivism and Interpretivism in Social Science. *Asian Journal of Research in Education and Social Sciences*, [online] 4(2), pp.39–49. Available at: <https://myjms.mohe.gov.my/index.php/ajress/article/view/17935>.

Ipsen, C., van Veldhoven, M., Kirchner, K. and Hansen, J.P. (2021). Six Key Advantages and Disadvantages of Working from Home in Europe during COVID-19. *International Journal of Environmental Research and Public Health*, [online] 18(4), pp.1–17. Available at: <https://www.mdpi.com/1660-4601/18/4/1826>.

Irwin, D.A. (2019). *Does Trade Reform Promote Economic Growth? A Review of Recent Evidence*. [online] [www.nber.org](http://www.nber.org). Available at: <https://www.nber.org/papers/w25927>.

Jatav, S. (2023). *Current Trends in Sustainable Tourism in the Indian Context*. [online] Handbook of Research on Sustainable Tourism and Hotel Operations in Global Hypercompetition. Available at: <https://www.igi-global.com/chapter/current-trends-in-sustainable-tourism-in-the-indian-context/313287>.

Kapil, S., Kanwal, N. and Kapil (2021). BLOCKCHAIN IN HOSPITALITY AND TOURISM INDUSTRY WAY FORWARD. *International Journal of Business and Economics*, [online] 6(2), pp.289–298. Available at: <https://ijbe.ielas.org/index.php/ijbe/article/download/265/103>.



Kasauli, R., Knauss, E., Horkoff, J., Liebel, G. and de Oliveira Neto, F.G. (2020). Requirements engineering challenges and practices in large-scale agile system development. *Journal of Systems and Software*, [online] 172, p.110851. Available at: <https://www.sciencedirect.com/science/article/pii/S0164121220302417>.

Kerzner, H. (2022). *Project Management Metrics, KPIs, and Dashboards: A Guide to Measuring and Monitoring Project Performance*. [online] *Google Books*. John Wiley & Sons. Available at: <https://books.google.com/books?hl=en&lr=&id=XDiMEAAQBAJ&oi=fnd&pg=PA1&dq=Key+metrics+and+categories+are+shown+on+the+Dashboard>.

Keshta, I. and Odeh, A. (2021). Security and privacy of electronic health records: Concerns and challenges. *Egyptian Informatics Journal*, [online] 22(2), pp.177–183. Available at: <https://www.sciencedirect.com/science/article/pii/S1110866520301365>.

Khan, A.H. (2023). *Fund Raising web Application using digital payment methods*. [online] [www.theseus.fi](http://www.theseus.fi). Available at: <https://www.theseus.fi/handle/10024/795677>.

Khan, Md.S.M., Kashem, S. and Khan, M.M. (2021). Development of a Comparison Based Hotel and Resort Booking System in Bangladesh. *Journal of Software Engineering and Applications*, [online] 14(05), pp.133–149. Available at: <https://www.scirp.org/journal/paperinformation.aspx?paperid=109084>.

Khan, N., Hassan, A.U., Fahad, S. and Naushad, M. (2020). *Factors Affecting Tourism Industry and Its Impacts on Global Economy of the World*. [online] [papers.ssrn.com](http://papers.ssrn.com). Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3585511](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3585511).

Khanna, P., Ganguly, S., Mukherjee, M. and Mukherjee, S. (2020). *Hospitality and Tourism Industry Post Pandemic Challenges and Opportunities Edited by*. [online] Available at: [https://www.wahtrip.com/uploads/broucher/\\_pic\\_Hospitality-and-Tourism-Industry-Post-Pandemic-Challenges-and-Opportunities.pdf#page=27](https://www.wahtrip.com/uploads/broucher/_pic_Hospitality-and-Tourism-Industry-Post-Pandemic-Challenges-and-Opportunities.pdf#page=27).

Khatib, M.E., Mulla, A.A. and Ketbi, W.A. (2022). The Role of Blockchain in E-Governance and Decision-Making in Project and Program Management. *Advances in Internet of Things*,

[online] 12(3), pp.88–109. Available at:

<https://www.scirp.org/journal/paperinformation.aspx?paperid=118717>.

Khyat, J., Yadav, S. and Johri, B. (2020). *Contribution of Tourism & Hospitality Sector in Development of Indian Economy*. [online] Available at:

[https://junikhayatjournal.com/no\\_16\\_july\\_20/19.pdf](https://junikhayatjournal.com/no_16_july_20/19.pdf) .

Koh, W.S. and Hassim, Y.M.M. (2021). Hotel Reservation Management System. *Applied Information Technology And Computer Science*, [online] 2(2), pp.973–992. Available at:

<https://publisher.uthm.edu.my/periodicals/index.php/aitcs/article/view/5047>.

KUMAR, P. (2022). SUPPLY CHAIN MANAGEMENT AND ENABLING

HYPERLOCAL DELIVERY AT E-PHARMACY. *Dtu.ac.in*. [online] Available at:

<http://dSPACE.dtu.ac.in:8080/jspui/handle/repository/19537> .

Kuo, H.-C., Chen, J., Mohan, S. and Xu, T. (2020). Set the Configuration for the Heart of the OS. *Proceedings of the ACM on Measurement and Analysis of Computing Systems*, [online] 4(1), pp.1–27. Available at: <https://dl.acm.org/doi/abs/10.1145/3379469>.

Le, T.H., Arcodia, C., Novais, M.A. and Kralj, A. (2020). Proposing a systematic approach for integrating traditional research methods into machine learning in text analytics in tourism and hospitality. *Current Issues in Tourism*, [online] pp.1–16. Available at:

<https://www.tandfonline.com/doi/abs/10.1080/13683500.2020.1829568>.

Limon, M.R. (2021). Food safety practices of food handlers at home engaged in online food businesses during COVID-19 Pandemic in the Philippines. *Current Research in Food Science*, [online] 4. Available at:

<https://www.sciencedirect.com/science/article/pii/S2665927121000022>.

Lobo Jeong (2020). *Understanding the Online Travel Agency Business: Partners, Building Blocks, How to Grow*. [online] AltexSoft. Available at:

<https://www.altexsoft.com/blog/online-travel-agency-business/>.

M Alenezi (2019). *Software Engineering Process and Methodology in Blockchain-Oriented Software Development: A Systematic Study* | IEEE Conference Publication | IEEE Xplore.

[online] [ieeexplore.ieee.org](https://ieeexplore.ieee.org). Available at:  
<https://ieeexplore.ieee.org/abstract/document/9806817/> .

Macenski, S., Foote, T., Gerkey, B., Lalancette, C. and Woodall, W. (2022). Robot Operating System 2: Design, architecture, and uses in the wild. *Science Robotics*, [online] 7(66). Available at: <https://www.science.org/doi/abs/10.1126/scirobotics.abm6074>.

Manhas, P. and Nair, B.B. (2020). Strategic Role of Religious Tourism in Recuperating the Indian Tourism Sector Post-COVID-19. *International Journal of Religious Tourism and Pilgrimage*, [online] 8(7). Available at: <https://arrow.tudublin.ie/ijrtp/vol8/iss7/6/>.

Menon, S., Bhatt, S. and Sharma, S. (2021). A study on envisioning Indian tourism – Through cultural tourism and sustainable digitalization. *Cogent Social Sciences*, [online] 7(1), p.1903149. Available at:  
<https://www.tandfonline.com/doi/abs/10.1080/23311886.2021.1903149>.

Mohammed Abdulrahman, L., R. M. Zeebaree, S. and Omar, N. (2022). State of Art Survey for Designing and Implementing Regional Tourism Web based Systems. *Academic Journal of Nawroz University*, [online] 11(3), pp.100–112. Available at:  
<https://journals.nawroz.edu.krd/index.php/ajnu/article/view/1425>.

Mohammed, I., Guillet, B.D. and Law, R. (2019). Last-minute hotel-booking and frequency of dynamic price adjustments of hotel rooms in a cosmopolitan tourism city. *Journal of Hospitality and Tourism Management*, [online] 41, pp.12–18. Available at:  
<https://www.sciencedirect.com/science/article/pii/S144767701930083X> .

mohmed sami (2023). *Redirect Notice*. [online] Google.com. Available at:  
[https://www.google.com/url?sa=i&url=https%3A%2F%2Fmelsatar.blog%2F2012%2F03%2F15%2Fsoftware-development-life-cycle-models-and-methodologies%2F&psig=AOvVaw0n7p4YZCcbw2z4gf6\\_7wAZ&ust=1701326253389000&source=images&cd=vfe&opi=89978449&ved=2ahUKEwjqp46pzOiCAxUVS2wGHbdjD\\_YQr4kDegQIARBu](https://www.google.com/url?sa=i&url=https%3A%2F%2Fmelsatar.blog%2F2012%2F03%2F15%2Fsoftware-development-life-cycle-models-and-methodologies%2F&psig=AOvVaw0n7p4YZCcbw2z4gf6_7wAZ&ust=1701326253389000&source=images&cd=vfe&opi=89978449&ved=2ahUKEwjqp46pzOiCAxUVS2wGHbdjD_YQr4kDegQIARBu) .

Mondol, E.P. (2021). The Impact of Block Chain and Smart Inventory System on Supply Chain Performance at Retail Industry. *International Journal of Computations, Information*

and Manufacturing (IJCIM), [online] 1(1). Available at:  
<https://journals.gaftim.com/index.php/ijcim/article/view/30>.

Monzo, C., Cobo, G., Morán, J.A., Santamaría, E. and García-Solórzano, D. (2021). Remote Laboratory for Online Engineering Education: The RLAB-UOC-FPGA Case Study. *Electronics*, [online] 10(9), p.1072. Available at: <https://www.mdpi.com/2079-9292/10/9/1072>.

Munawar, H.S., Qayyum, S., Ullah, F. and Sepasgozar, S. (2020). Big Data and Its Applications in Smart Real Estate and the Disaster Management Life Cycle: A Systematic Analysis. *Big Data and Cognitive Computing*, [online] 4(2), p.4. Available at: <https://www.mdpi.com/2504-2289/4/2/4>.

Mwita, K. (2022). Strengths and weaknesses of qualitative research in social science studies. *International Journal of Research in Business and Social Science (2147- 4478)*, [online] 11(6), pp.618–625. Available at: [https://www.researchgate.net/publication/363520457\\_Strengths\\_and\\_weaknesses\\_of\\_qualitative\\_research\\_in\\_social\\_science\\_studies](https://www.researchgate.net/publication/363520457_Strengths_and_weaknesses_of_qualitative_research_in_social_science_studies).

namita (2023a). *Redirect Notice*. [online] Google.com. Available at: [https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.freeprojectz.com%2Fdfd%2Fcustomer-relationship-management-system-dataflow-diagram&psig=AOvVaw3pKtMnMwCQ4ZHkY4tTraKl&ust=1686043446153000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCNDNmNfnq\\_8CFQAAAAAdAAAAABAD](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.freeprojectz.com%2Fdfd%2Fcustomer-relationship-management-system-dataflow-diagram&psig=AOvVaw3pKtMnMwCQ4ZHkY4tTraKl&ust=1686043446153000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCNDNmNfnq_8CFQAAAAAdAAAAABAD) .

namita (2023b). *Redirect Notice*. [online] Google.com. Available at: [https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.freeprojectz.com%2Fdfd%2Fcontent-management-system-dataflow-diagram&psig=AOvVaw1Eg-XkFTjuZnMzyuCFoSx&ust=1686043892335000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCMiCsM3pq\\_8CFQAAAAAdAAAAABAD](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.freeprojectz.com%2Fdfd%2Fcontent-management-system-dataflow-diagram&psig=AOvVaw1Eg-XkFTjuZnMzyuCFoSx&ust=1686043892335000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCMiCsM3pq_8CFQAAAAAdAAAAABAD) .

Nguyen, N.T., Yadav, M., Pande, S., Bhanot, A. and Hasan, M.F. (2021). Impact of diversity management on organizational performance in hotel organizations: a conceptual framework. *International Journal of System Assurance Engineering and Management*. [online] Available at: <https://link.springer.com/article/10.1007/s13198-021-01358-7>.

Nilsson, A. (2022). *Performance and feature support of Progressive Web Applications : A performance and available feature comparison between Progressive Web Applications, React Native applications and native iOS applications*. [online] [www.diva-portal.org](http://www.diva-portal.org). Available at: <https://www.diva-portal.org/smash/record.jsf?pid=diva2:1653815> [Accessed 29 Nov. 2023].

Oreoluwa, I. (2022a). DESIGN AND IMPLEMENTATION OF A COMPLAINT MANAGEMENT SYSTEM. *ir.mtu.edu.ng*. [online] Available at: <http://ir.mtu.edu.ng/xmlui/handle/123456789/1124> .

Oreoluwa, I. (2022b). DESIGN AND IMPLEMENTATION OF A COMPLAINT MANAGEMENT SYSTEM. *ir.mtu.edu.ng*. [online] Available at: <http://ir.mtu.edu.ng/xmlui/handle/123456789/1124> .

ÖZKUL, E. and Kumlu, S.T. (2019). Augmented Reality Applications in Tourism. *International Journal of Contemporary Tourism Research*, [online] 3(2), pp.107–122. Available at: <https://dergipark.org.tr/en/pub/ijctr/issue/51052/625192>.

Patil, P., Tamilmani, K., Rana, N.P. and Raghavan, V. (2020). Understanding consumer adoption of mobile payment in India: Extending Meta-UTAUT model with personal innovativeness, anxiety, trust, and grievance redressal. *International Journal of Information Management*, [online] 54, p.102144. Available at: <https://www.sciencedirect.com/science/article/pii/S0268401220302115>.

Petricek, M., Chalupa, S. and Melas, D. (2021). Model of Price Optimization as a Part of Hotel Revenue Management—Stochastic Approach. *Mathematics*, [online] 9(13), p.1552. Available at: <https://www.mdpi.com/2227-7390/9/13/1552>.

Ponnusamy, S. and Eswararaj, D. (2023). Navigating the Modernization of Legacy Applications and Data: Effective Strategies and Best Practices. *Asian Journal of Research in Computer Science*, [online] 16(4), pp.239–256. Available at: <http://archive.sdpublishers.com/id/eprint/2053/>.

Purbo, O.W. (2021). A Systematic Analysis: Website Development using Codeigniter and Laravel Framework. *Enrichment : Journal of Management*, [online] 12(1), pp.1008–1014.

Available at:

<https://www.enrichment.iocspublisher.org/index.php/enrichment/article/view/346>.

Raj, R., Singh, A., Kumar, V. and Verma, P. (2023). Analyzing the potential benefits and use cases of ChatGPT as a tool for improving the efficiency and effectiveness of business operations. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, [online] 3(3), p.100140. Available at:

<https://www.sciencedirect.com/science/article/pii/S2772485923000571>.

Rajapaksha, R.P.U.L. (2021). *Online Tour Package Reservation System*. [online] dl.ucsc.cmb.ac.lk. Available at: <https://dl.ucsc.cmb.ac.lk/jspui/handle/123456789/4355>.

Ram, M., Osorio-Aravena, J.C., Aghahosseini, A., Bogdanov, D. and Breyer, C. (2022). Job creation during a climate compliant global energy transition across the power, heat, transport, and desalination sectors by 2050. *Energy*, [online] 238, p.121690. Available at:

<https://www.sciencedirect.com/science/article/pii/S0360544221019381>.

Rana, G. and Kumar, A. (2019). *A Review of Economic Impacts of Tourism Industry on Growth of Indian Economy*. [online] Social Science Research Network. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3434669](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3434669).

Ruggiano, N. and Perry, T.E. (2019). Conducting Secondary Analysis of Qualitative data: Should we, Can we, and how? *Qualitative Social Work*, [online] 18(1), pp.81–97. Available at: <https://journals.sagepub.com/doi/10.1177/1473325017700701>.

S, S., V, M. and V, L. (2023). Overview: PHP and MySQL Features for Creating Modern Web Projects. *openarchive.nure.ua*. [online] Available at: <https://openarchive.nure.ua/handle/document/21601>.

sales and service management (2016). *Redirect Notice*. [online] Google.com. Available at: [https://www.google.com/url?sa=i&url=http%3A%2F%2Ftheservicemanagement.blogspot.com%2F2016%2F09%2Fresearch-onion.html&psig=AOvVaw115qZKOGQPIYxaZ8bAa0WN&ust=1686731997776000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCIjTdfsv\\_8CFQAAAAAdAAAAABAD](https://www.google.com/url?sa=i&url=http%3A%2F%2Ftheservicemanagement.blogspot.com%2F2016%2F09%2Fresearch-onion.html&psig=AOvVaw115qZKOGQPIYxaZ8bAa0WN&ust=1686731997776000&source=images&cd=vfe&ved=0CBMQjhXqFwoTCIjTdfsv_8CFQAAAAAdAAAAABAD).

Sangmanee, W. and Suwanwerakamtorn, R. (2023). Integrated Framework for Virtual Tours and 3D Visualization of Cultural Tourism in Pattani, Thailand Based on WebGIS Platform. *International Journal of Geoinformatics*, [online] 19(9). Available at: <https://journals.sfu.ca/ijg/index.php/journal/article/view/2835> .

Sasikumar Nair, S., Mazurek-Kusiak, A.K., Trafialek, J. and Kolanowski, W. (2023). Assessing Food Safety Compliance in a Small-Scale Indian Food Manufacturer: Before and after Certification of the Food Safety Management System and Foreign Supplier Verification Program. *Applied Sciences*, [online] 13(22), p.12190. Available at: <https://www.mdpi.com/2076-3417/13/22/12190>.

Shekhar, S. and Valeri, M. (2022). Evolving Themes in Dark Tourism Research. *Tourism*, [online] 70(4), pp.624–641. Available at: <https://hrcak.srce.hr/clanak/415235>.

Shrivastava, P. and Rathore, A. (2020). *A Study on Consumer Awareness and Challenges associated with Dynamic Pricing in Tourism Industry with Special Reference to Rajasthan Ph.D. Program (Part-Time) in Management Under Supervision of*. [online] Available at: [https://shodhgangotri.inflibnet.ac.in/bitstream/20.500.14146/13818/1/synopsis\\_pragya%20shrivastava.pdf](https://shodhgangotri.inflibnet.ac.in/bitstream/20.500.14146/13818/1/synopsis_pragya%20shrivastava.pdf) .

Sota, S., Chaudhry, H. and Srivastava, M.K. (2019). Customer relationship management research in hospitality industry: a review and classification. *Journal of Hospitality Marketing & Management*, [online] 29(1), pp.1–26. Available at: <https://www.tandfonline.com/doi/abs/10.1080/19368623.2019.1595255>.

Suparini, N.W., Adnyani, N.L.P.S. and Armawan, I.K. (2020). *The Identification of Procedure and Language Expression used by Receptionists at Mara River Safari Lodge when handling Check-In*. [online] [repo.undiksha.ac.id](https://repo.undiksha.ac.id). Available at: <https://repo.undiksha.ac.id/3602/> .

Surekha, D.M., U, D.U. and Dhinakaran, D.D.P. (2022). A STUDY ON UTILIZATION AND CONVENIENT OF CREDIT CARD. *Journal of Positive School Psychology*, [online] pp.5635–5645. Available at: <https://www.journalppw.com/index.php/jpsp/article/view/4335>.

Taherdoost, H. (2021). Data Collection Methods and Tools for Research; A Step-by-Step Guide to Choose Data Collection Technique for Academic and Business Research Projects. *International Journal of Academic Research in Management (IJARM)*, [online] 10(1), p.10. Available at: <https://hal.science/hal-03741847/>.

Takunya, K. (2022). *Online hotel reservation system* : [online] ir.busitema.ac.ug. Available at: <https://ir.busitema.ac.ug/handle/20.500.12283/1499>.

Tepe, Y. (2022a). Decentralisation of Hotel and Tourism Industry: Effects of Blockchain Technology in Hotel Booking Systems. *openrepository.aut.ac.nz*. [online] Available at: <https://openrepository.aut.ac.nz/handle/10292/15705>.

Tepe, Y. (2022b). Decentralisation of Hotel and Tourism Industry: Effects of Blockchain Technology in Hotel Booking Systems. *openrepository.aut.ac.nz*. [online] Available at: <https://openrepository.aut.ac.nz/handle/10292/15705>.

vectors (2020). Available at:

<https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.vecteezy.com%2Fvector-art%2F7403737-the-waterfall-model-infographic-vector-is-used-in-software-engineering-or-software-development-processes-the-illustration-has-6-steps-like-agile-methodology-or-design-thinking-for-application-system&psig=AOvVaw0->

[VOPntIEGhCJ3s4iHV4X0&ust=1686812745780000&source=images&cd=vfe&ved=0CBMQjhxqFwoTCLCJqauZwv8CFQAAAAAdAAAAABAI](https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.vecteezy.com%2Fvector-art%2F7403737-the-waterfall-model-infographic-vector-is-used-in-software-engineering-or-software-development-processes-the-illustration-has-6-steps-like-agile-methodology-or-design-thinking-for-application-system&psig=AOvVaw0-VOPntIEGhCJ3s4iHV4X0&ust=1686812745780000&source=images&cd=vfe&ved=0CBMQjhxqFwoTCLCJqauZwv8CFQAAAAAdAAAAABAI).



# Appendix

## booking\_details

←T→	sr_no	booking_id	room_name	price	total_pay	room_no	user_name	phonenum	address
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	14	14	Luxury Room	600	2400	44	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15	15	Luxury Room	600	1200	NULL	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	16	16	Luxury Room	600	1200	1	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	17	17	Simple Room	300	900	20A	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	18	18	Luxury Room	600	1200	NULL	amey	1234	asd
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	19	19	Simple Room	300	300	NULL	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	20	20	Simple Room	300	600	NULL	neal	123	ad
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	21	21	Simple Room	300	600	NULL	dhraval dineshbhai patel	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	22	278	Simple Room	300	600	NULL	dhraval dineshbhai patel	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	23	279	Luxury Room	1500	1500	NULL	dhraval dineshbhai patel	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	24	281	Luxury Room	1500	3000	NULL	dhraval dineshbhai patel	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	25	283	Luxury Room	1500	4500	NULL	dhraval dineshbhai patel	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...

## booking\_order

booking_id	user_id	room_id	check_in	check_out	arrival	refund	booking_status	order_id	trans_id	trans_amt	trans_status	trans_resp_ms
1	2	3	2023-12-15	2023-12-17	0	NULL	pending	ORD_21055700	NULL	5000	TXN_SUCCESS	NULL
2	2	3	2023-07-20	2023-07-22	1	NULL	booked	ORD_24215693	20220720111212800110168128204225279	600	TXN_SUCCESS	Txn Success
3	2	3	2023-07-20	2023-07-26	0	1	cancelled	ORD_26312547	20220720111212800110168165603901976	1800	TXN_SUCCESS	Txn Success
4	2	6	2023-07-20	2023-07-25	0	NULL	payment failed	ORD_28394638	20220720111212800110168372503893816	4500	TXN_FAILURE	Your payment has been declined by your bank. Please
5	2	6	2023-07-20	2023-07-21	0	1	cancelled	ORD_22877860	20220720111212800110168627705312020	900	TXN_SUCCESS	Txn Success
6	2	6	2023-07-20	2023-07-28	1	NULL	booked	ORD_28689687	20220720111212800110168303704048087	7200	TXN_SUCCESS	Txn Success
7	2	6	2023-07-29	2023-07-30	0	NULL	pending	ORD_24272313	NULL	0	pending	NULL
8	2	3	2023-08-14	2023-08-16	0	1	cancelled	ORD_22541670	20220814111212800110168092803967754	600	TXN_SUCCESS	Txn Success
9	2	5	2023-08-15	2023-08-20	1	NULL	booked	ORD_25267746	20220815111212800110168656003990120	3000	TXN_SUCCESS	Txn Success
10	2	5	2023-08-18	2023-08-21	1	NULL	booked	ORD_27668816	20220815111212800110168905703947446	1800	TXN_SUCCESS	Txn Success

trans_resp_msg	rate_review	datetime
NULL	NULL	2023-01-10 00:00:00
Txn Success	NULL	2023-07-20 00:00:00
Txn Success	NULL	2023-07-20 00:00:00
Your payment has been declined by your bank. Pleas...	NULL	2023-07-20 00:00:00
Txn Success	NULL	2023-07-20 00:00:00
Txn Success	1	2023-07-20 00:00:00
NULL	NULL	2023-07-29 00:00:00
Txn Success	NULL	2023-08-14 00:00:00
Txn Success	1	2023-08-15 00:00:00
Txn Success	1	2023-08-15 00:00:00
Txn Success	1	2023-08-20 00:00:00
Txn Success	1	2023-08-20 00:00:00
Txn Success	1	2023-08-20 00:00:00

admin\_cred

← T →				sr_no	admin_name	admin_pass
<input type="checkbox"/>	Edit	Copy	Delete	1	amey	12345
<input type="checkbox"/>	Edit	Copy	Delete	2	neal	12345

## carousel

<input type="checkbox"/>				sr_no	image
<input type="checkbox"/>	Edit	Copy	Delete	4	IMG_62045.png
<input type="checkbox"/>	Edit	Copy	Delete	5	IMG_93127.png
<input type="checkbox"/>	Edit	Copy	Delete	6	IMG_99736.png
<input type="checkbox"/>	Edit	Copy	Delete	8	IMG_40905.png
<input type="checkbox"/>	Edit	Copy	Delete	9	IMG_55677.png

## contact\_details

<input type="checkbox"/>				sr_no	address	gmap	pn1	pn2	email	fb	insta
<input type="checkbox"/>	Edit	Copy	Delete	1	VJTI, Matunga, Mumbai, Maharashtra	<a href="https://goo.gl/maps/p9s1LYMHvWww7pZ8">https://goo.gl/maps/p9s1LYMHvWww7pZ8</a>	918529636985	91111222333558	amey.neal@gmail.com	<a href="https://www.facebook.com/">https://www.facebook.com/</a>	<a href="https://www.facebook.com/">https://www.facebook.com/</a>

## facilities

<input type="checkbox"/>				id	icon	name	description
<input type="checkbox"/>	Edit	Copy	Delete	13	IMG_43553.svg	Wifi	Lorem ipsum dolor sit amet consectetur adipisicing...
<input type="checkbox"/>	Edit	Copy	Delete	14	IMG_49949.svg	Air conditioner	Lorem ipsum dolor sit amet consectetur adipisicing...
<input type="checkbox"/>	Edit	Copy	Delete	15	IMG_41622.svg	Television	Lorem ipsum dolor sit amet consectetur adipisicing...
<input type="checkbox"/>	Edit	Copy	Delete	17	IMG_47816.svg	Spa	Lorem ipsum dolor sit amet consectetur adipisicing...
<input type="checkbox"/>	Edit	Copy	Delete	18	IMG_96423.svg	Room Heater	Lorem ipsum dolor sit amet consectetur adipisicing...
<input type="checkbox"/>	Edit	Copy	Delete	19	IMG_27079.svg	Geyser	Lorem ipsum dolor sit amet consectetur adipisicing...

Check all   *With selected:*   Edit   Copy   Delete   Export

## features

					id	name	
<input type="checkbox"/>		Edit		Copy		Delete	13 bedroom
<input type="checkbox"/>		Edit		Copy		Delete	14 balcony
<input type="checkbox"/>		Edit		Copy		Delete	15 kitchen
<input type="checkbox"/>		Edit		Copy		Delete	17 sofa

### rating\_review

						sr_no	booking_id	room_id	user_id	rating	review	seen	datetime
<input type="checkbox"/>		Edit		Copy		Delete	1	6	4	2	3 1asdlkfj Lorem ipsum dolor sit amet, consectetur a...	0	2023-11-15 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	2	9	4	2	3 2asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	3	10	4	2	3 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	4	11	4	2	2 1asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	5	35	4	2	3 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	6	36	3	2	3 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	7	37	4	2	3 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	8	42	4	2	3 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	9	68	3	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	10	69	4	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	11	75	3	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-02-08 21:48:52
<input type="checkbox"/>		Edit		Copy		Delete	12	77	3	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-01 12:30:00
<input type="checkbox"/>		Edit		Copy		Delete	13	101	3	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-02 15:45:00
<input type="checkbox"/>		Edit		Copy		Delete	14	102	4	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-03 18:20:00
<input type="checkbox"/>		Edit		Copy		Delete	15	104	3	2	2 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-04 10:10:00
<input type="checkbox"/>		Edit		Copy		Delete	16	110	3	2	4 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-05 08:30:00
<input type="checkbox"/>		Edit		Copy		Delete	17	138	3	2	4 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-06 14:15:00
<input type="checkbox"/>		Edit		Copy		Delete	18	139	3	2	4 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-07 17:45:00
<input checked="" type="checkbox"/>		Edit		Copy		Delete	19	140	3	2	4 3asdlkfj Lorem ipsum dolor sit amet, consectetur a...	1	2023-06-08 09:25:00

### rooms

						id	name	area	price	quantity	adult	children	description	status	removed
<input type="checkbox"/>		Edit		Copy		Delete	1	simple room	159	58	56	12	2 asdf asd	1	1
<input type="checkbox"/>		Edit		Copy		Delete	2	simple room 2	785	159	85	452	10 adfasdfa sd	1	1
<input type="checkbox"/>		Edit		Copy		Delete	3	Simple Room	250	500	10	5	3 Lorem ipsum dolor sit amet, consectetur adipiscin...	1	0
<input type="checkbox"/>		Edit		Copy		Delete	4	Deluxe Room	300	1000	10	3	2 Lorem ipsum dolor sit amet, consectetur adipiscin...	1	0
<input type="checkbox"/>		Edit		Copy		Delete	5	Luxury Room	600	1500	2	8	6 Lorem ipsum dolor sit amet, consectetur adipiscin...	1	0
<input type="checkbox"/>		Edit		Copy		Delete	6	Supreme deluxe room	500	2000	12	9	10 Lorem ipsum dolor sit amet, consectetur adipiscin...	1	0

room\_facilities

				sr_no	room_id	facilities_id
<input type="checkbox"/>	 Edit	 Copy	 Delete	29	4	14
<input type="checkbox"/>	 Edit	 Copy	 Delete	30	4	18
<input type="checkbox"/>	 Edit	 Copy	 Delete	31	4	19
<input type="checkbox"/>	 Edit	 Copy	 Delete	35	6	13
<input type="checkbox"/>	 Edit	 Copy	 Delete	36	6	14
<input type="checkbox"/>	 Edit	 Copy	 Delete	37	6	18
<input type="checkbox"/>	 Edit	 Copy	 Delete	38	6	19
<input type="checkbox"/>	 Edit	 Copy	 Delete	39	5	13
<input type="checkbox"/>	 Edit	 Copy	 Delete	40	5	14
<input type="checkbox"/>	 Edit	 Copy	 Delete	41	5	18
<input type="checkbox"/>	 Edit	 Copy	 Delete	42	3	14
<input type="checkbox"/>	 Edit	 Copy	 Delete	43	3	15
<input type="checkbox"/>	 Edit	 Copy	 Delete	44	3	18
<input type="checkbox"/>	 Edit	 Copy	 Delete	45	3	19

room\_features



←T→				sr_no	room_id	features_id
<input type="checkbox"/>	Edit	Copy	Delete	16	4	13
<input type="checkbox"/>	Edit	Copy	Delete	17	4	14
<input type="checkbox"/>	Edit	Copy	Delete	18	4	15
<input type="checkbox"/>	Edit	Copy	Delete	22	6	13
<input type="checkbox"/>	Edit	Copy	Delete	23	6	14
<input type="checkbox"/>	Edit	Copy	Delete	24	6	15
<input type="checkbox"/>	Edit	Copy	Delete	25	5	13
<input type="checkbox"/>	Edit	Copy	Delete	26	5	14
<input type="checkbox"/>	Edit	Copy	Delete	27	5	15
<input type="checkbox"/>	Edit	Copy	Delete	28	3	13
<input type="checkbox"/>	Edit	Copy	Delete	29	3	14
<input type="checkbox"/>	Edit	Copy	Delete	30	3	17

#### room\_images

←T→				sr_no	room_id	image	thumb
<input type="checkbox"/>	Edit	Copy	Delete	15	3	IMG_39782.png	0
<input type="checkbox"/>	Edit	Copy	Delete	16	3	IMG_65019.png	1
<input type="checkbox"/>	Edit	Copy	Delete	17	4	IMG_44867.png	0
<input type="checkbox"/>	Edit	Copy	Delete	18	4	IMG_78809.png	1
<input type="checkbox"/>	Edit	Copy	Delete	19	4	IMG_11892.png	0
<input type="checkbox"/>	Edit	Copy	Delete	21	5	IMG_17474.png	0
<input type="checkbox"/>	Edit	Copy	Delete	22	5	IMG_42663.png	1
<input type="checkbox"/>	Edit	Copy	Delete	23	5	IMG_70583.png	0
<input type="checkbox"/>	Edit	Copy	Delete	24	6	IMG_67761.png	0
<input type="checkbox"/>	Edit	Copy	Delete	25	6	IMG_69824.png	1

#### settings

Extra options

		sr_no	site_title	site_about	shutdown
<input type="checkbox"/>	Edit  Copy  Delete	1	Get Hotels	asdklfj Lorem ipsum dolor sit amet, consectetur ad...	0

### team\_details

		sr_no	name	picture
<input type="checkbox"/>	Edit  Copy  Delete	16	Diponkar	IMG_38410.jpg
<input type="checkbox"/>	Edit  Copy  Delete	17	Dhruval	IMG_69823.jpg

### user\_cred

id	name	email	address	phonenum	pincode	dob	profile	password	is_verified	token
2	neal	neal@gmail.com	ad	123	123324	2022-06-12	3135715.png	\$2y\$10\$2isUjalwxb/UuaR7abvUNOs/VKmwY848VPsNnswF4bl...	1	NULL
5	amey	helubeti@finews.biz	asd	1234	123	2022-12-13	IMG_84786.jpeg	\$2y\$10\$NtKNL5Ogn.m3NVVu/DKlevNhms7thrZP.qTnPpqqon...	1	24ffd287a...
6	amey	xelh35531@lubde.com	asd	1123	123	2022-12-13	3135716.png	\$2y\$10\$aoCaCM6Ji3VuZIO0YFI.Y.O4vv2cqJr0HIT2oVH5sy3...	1	ef6dc7ba...
7	harry	harryd123@gmail.com	asd	12345	123	2022-12-13	IMG_33353.jpeg	\$2y\$10\$kiw8LOLFk9e/l4u5i3vO0.GkMpBKAbEzguOqtp1HD0m...	0	5c9f04397...
8	a	cejka9124@paxven.com	a	12	1	2022-12-13	IMG_62937.jpeg	\$2y\$10\$0kAvtcnPie9S0W2DGjxaBul8rvrC5Zq7BVUyNmST14J...	0	250dd456...
14	dhrupal dineshbhai patel	dhrupalpatel556@gmail.com	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ...	12313213	382345	2023-10-30	IMG_77627.jpeg	\$2y\$10\$MggLGJD/n8bVHXwcBOd4EOFYkbZtxErrPbLTHBJkyGC...	1	7e87d66a...

is_verified	token	t_expire	status	datetime
1	NULL	NULL	1	2022-06-12 16:05:59
1	24ffd287a4c2eda5f2b424be2824f997	NULL	1	2022-12-13 02:37:19
1	ef6dc7ba39cf4bf844244d3ef927a3e7	NULL	1	2022-12-13 02:40:42
0	5c9f04397ff3e693f7cbfcca1044483	NULL	1	2022-12-13 02:42:37
0	250dd45640f7d810313b27e758a267af	NULL	1	2022-12-13 02:55:39
...	1 7e87d66ae7e1696ec562378844ad06aa	NULL	1	2023-11-15 13:00:43

user\_queries

	sr_no	name	email	subject	message	datetime	seen
<input type="checkbox"/> Edit Copy Delete	11	Amey	amey@gmail.com	This is one subject	orem ipsum dolor sit amet, consectetur adipiscing...	2022-03-11 00:00:00	1
<input type="checkbox"/> Edit Copy Delete	13	neal	n@gmail.com	4a2qez	watT	2022-12-13 10:10:48	1

**Admin Panel**
LOG OUT

**Dashboard**

Bookings

- New Bookings
- Refund Bookings
- Booking Records

Users

- User Queries
- Ratings & Reviews
- Rooms
- Features & Facilities
- Carousel
- Settings

### DASHBOARD

New Bookings

0

Refund Bookings

0

User Queries

0

Rating & Review

1

**Booking Analytics** Past 30 Days ▾

Total Bookings

0

₹null

Active Bookings

0

₹null

Cancelled Bookings

0

₹null

**Booking Analytics Quarterly**

1<sup>st</sup> Quarter

43

2<sup>nd</sup> Quarter

91

3<sup>rd</sup> Quarter

108

**User Reviews Analytics Quarterly**

1<sup>st</sup> Quarter

2.6000

2<sup>nd</sup> Quarter

2.6667

3<sup>rd</sup> Quarter

4.4906

**User, Queries, Reviews Analytics** Past 30 Days ▾

New Registration

1

Queries

0

Reviews

1

**Users**

Total

6

Active

6

Inactive

0

Unverified

2



Dashboard

Bookings

- New Bookings
- Refund Bookings
- Booking Records
- Users
- User Queries
- Ratings & Reviews
- Rooms
- Features & Facilities
- Carousel
- Settings

#	Name	Email	Phone no.	Location	DOB	Verified	Status	Date
1	neal	neal@gmail.com	123	asd   123324	2022-06-12	<span style="color: green;">✔</span>	active	12-20
2	<span style="color: red; font-weight: bold;">SANITY</span> amey	helubeti@finews.biz	1234	asd   123	2022-12-13	<span style="color: green;">✔</span>	active	13-20
3	amey	xelih35531@lubde.com	1123	asd   123	2022-12-13	<span style="color: green;">✔</span>	active	13-20
4	harry	harrydl23@gmail.com	12345	asd   123	2022-12-13	<span style="color: orange;">✘</span>	active	13-20
5	<span style="color: red; font-weight: bold;">SANITY</span> a	cejika9124@paxven.com	12	a   1	2022-12-13	<span style="color: orange;">✘</span>	active	13-20
6	dhruval dineshbhai patel	dhruvalpatel556@gmail.com	12313213	B/2,BHAGIRATH INTER CITY NR.SWEETHOME PASHWANATH, ds   382345	2023-10-30	<span style="color: green;">✔</span>	active	15-20

## USER QUERIES

✔ Mark all read
🗑 Delete all

#	Name	Email	Subject	Message	Date	Action
1	neal	n@gmail.com	4a2qez	watT	13-12-2022	<span style="background-color: #dc3545; color: white; border-radius: 50%; padding: 2px 5px;">Delete</span>
2	Amey	amey@gmail.com	This is one subject	orem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates im	11-03-2022	<span style="background-color: #dc3545; color: white; border-radius: 50%; padding: 2px 5px;">Delete</span>













## RATINGS & REVIEWS

✔ Mark all read
🗑 Delete all

#	Room Name	User Name	Rating	Review	Date	Action
1	Luxury Room	neal	4	3asdtkfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero	25-09-2023	<span style="background-color: #dc3545; color: white; border-radius: 50%; padding: 2px 5px;">Delete</span>
2	Luxury Room	neal	4	3asdtkfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero	25-09-2023	<span style="background-color: #dc3545; color: white; border-radius: 50%; padding: 2px 5px;">Delete</span>
3	Deluxe Room	neal	4	3asdtkfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis	25-09-2023	<span style="background-color: #dc3545; color: white; border-radius: 50%; padding: 2px 5px;">Delete</span>

## ROOMS





 Add

#	Name	Area	Guests	Price	Quantity	Status	Action
1	Simple Room	250 sq. ft.	Adult: 5 Children: 3	₹500	10	active	  
2	Deluxe Room	300 sq. ft.	Adult: 3 Children: 2	₹1000	10	active	  
3	Luxury Room	600 sq. ft.	Adult: 8 Children: 6	₹1500	2	active	  
4	Supreme deluxe room	500 sq. ft.	Adult: 9 Children: 10	₹2000	12	active	  

## FEATURES & FACILITIES


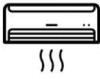



### Features

 Add

#	Name	Action
1	bedroom	 Delete
2	balcony	 Delete
3	kitchen	 Delete
4	sofa	 Delete

## Facilities

 Add

#	Icon	Name	Description	Action
1		Wifi	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.	 Delete
2		Air conditioner	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.	 Delete
3		Television	Lorem ipsum dolor sit amet consectetur adipiscing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.	 Delete

## CAROUSEL

### Images

 Add



## SETTINGS

### General Settings

[Edit](#)

#### Site Title

Get Hotels

#### About us

asdlkfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero culpa error officiiis totam?

### Shutdown Website

No customers will be allowed to book hotel room, when shutdown mode is turned on.

### Contacts Settings

[Edit](#)

#### Address

VJTI, Matunga, Mumbai, Maharashtra

#### Google Map

<https://goo.gl/maps/p9sILYMHvWiww7pZ8>

#### Phone Numbers

#### Social Links

<https://www.facebook.com/>

<https://www.facebook.com/>

<https://www.facebook.com/>

#### iFrame

### Contacts Settings

[Edit](#)

#### Address

VJTI, Matunga, Mumbai, Maharashtra

#### Google Map

<https://goo.gl/maps/p9sILYMHvWiww7pZ8>

#### Phone Numbers

918529636985

91111222333558

#### E-mail

amey.neal@gmail.com

#### Social Links

<https://www.facebook.com/>

<https://www.facebook.com/>

<https://www.facebook.com/>

#### iFrame



### Management Team

[Add](#)



Check Booking Availability

Check-in: dd-mm-yyyy | Check-out: dd-mm-yyyy | Adult: 1 | Children: 1 |

OUR ROOMS



Supreme deluxe room  
₹2000 per night

Features  
bedroom balcony kitchen

Facilities  
Wifi Air conditioner Room Heater Geyser

Guests  
9 Adults 10 Children

Rating  
★★★★★



Luxury Room  
₹1500 per night

Features  
bedroom balcony kitchen

Facilities  
Wifi Air conditioner Room Heater

Guests  
8 Adults 6 Children

Rating  
★★★★★



Deluxe Room  
₹1000 per night

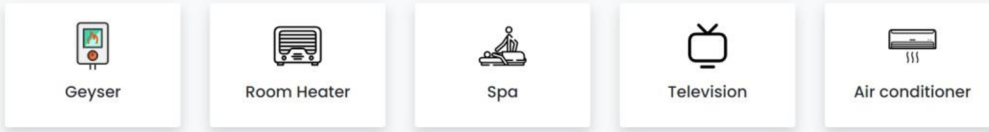
Features  
bedroom balcony kitchen

Facilities  
Air conditioner Room Heater Geyser

Guests  
3 Adults 2 Children

Rating  
★★★

## OUR FACILITIES



[More Facilities >>>](#)

## TESTIMONIALS

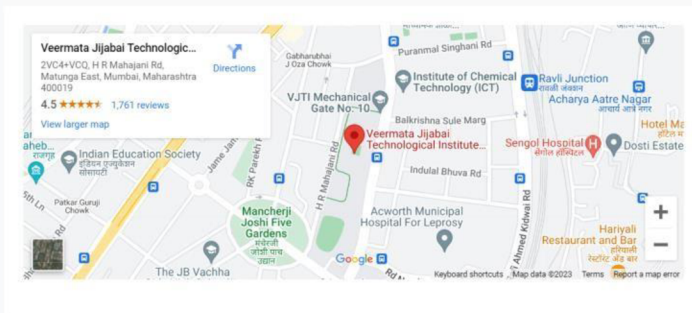


## TESTIMONIALS



[Know More >>>](#)

## REACH US



**Call us**  
+918529636985  
+9111222333558

**Follow us**  
[Twitter](#)  
[Facebook](#)  
[Instagram](#)

### Get Hotels

3asdikfj Lorem ipsum dolor sit amet, consectetur

### Links

[Home](#)

### Follow us

[Twitter](#)

## Get Hotels

asdlkfj Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quos voluptate vero sed tempore illo atque beatae asperiores, adipisci dicta quia nisi voluptates impedit perspiciatis, nobis libero culpa error officii totam?

### Links

[Home](#)  
[Rooms](#)  
[Facilities](#)  
[Contact us](#)  
[About](#)

### Follow us

[Twitter](#)  
[Facebook](#)  
[Instagram](#)

## Get Hotels

[Home](#) [Rooms](#) [Facilities](#) [Contact us](#) [About](#)

 dhruval dineshbhai patel

## OUR ROOMS

### FILTERS

#### CHECK AVAILABILITY

Check-in

dd-mm-yyyy

Check-out

dd-mm-yyyy

#### FACILITIES

- Wifi
- Air conditioner
- Television
- Spa



### Simple Room

#### Features

bedroom balcony sofa

₹500 per night

#### Facilities

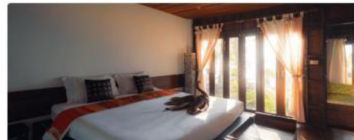
Air conditioner Television Room Heater Geyser

#### Guests

5 Adults 3 Children

[Book Now](#)

[More details](#)



### Deluxe Room

#### Features

bedroom balcony kitchen

₹1000 per night

#### Facilities

Air conditioner Room Heater Geyser

[Book Now](#)

[More details](#)



### Luxury Room

#### Features

bedroom balcony kitchen

₹1500 per night

#### Facilities

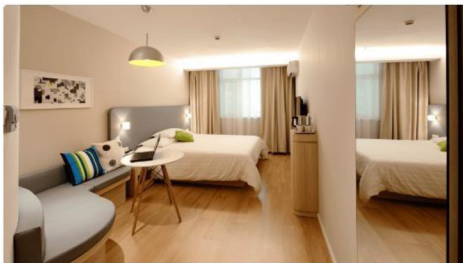
Wifi Air conditioner Room Heater

#### Guests

8 Adults 6 Children

[Book Now](#)

[More details](#)



### Supreme deluxe room

#### Features

bedroom balcony kitchen

₹2000 per night

#### Facilities

Wifi Air conditioner Room Heater Geyser

#### Guests

9 Adults 10 Children

[Book Now](#)

[More details](#)



## OUR FACILITIES

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur consequuntur et similique asperiores.

### Wifi

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

### Air conditioner

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

### Television

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

### Spa

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

### Room Heater

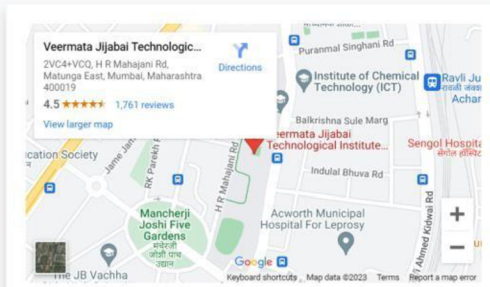
Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

### Geyser

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur.

## CONTACT US

Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur consequuntur et similique asperiores.



### Address

2VC4+VCQ, H R Mahajani Rd, Matunga East, Mumbai, Maharashtra 400019

### Send a message

Name

Email

Subject

Message

## ABOUT US


Lorem ipsum dolor sit amet consectetur adipisicing elit. Temporibus incidunt odio quos dolore commodi repudiandae tenetur consequuntur et similique asperiores.

### Lorem ipsum dolor sit


Lorem ipsum dolor sit amet consectetur adipisicing elit. Omnis minima sapiente aliquam sed officia nostrum fuga? Lorem ipsum dolor sit amet consectetur adipisicing elit. Omnis minima sapiente aliquam sed officia nostrum fuga?









100+ ROOMS



200+ CUSTOMERS



150+ REVIEWS



200+ STAFFS

Manager Panel
LOG OUT

- Dashboard
- User Queries
- Update Rooms detail
- Features & Facilities
- Carousel
- Settings

### DASHBOARD

New Bookings

0

Refund Bookings

0

User Queries

0

Rating & Review

1

Booking Analytics Quarterly

1<sup>st</sup> Quarter

0

₹null

2<sup>nd</sup> Quarter

91

₹51500

3<sup>rd</sup> Quarter

108

₹164000

User Reviews Analytics Quarterly

1<sup>st</sup> Quarter

2.6000

2<sup>nd</sup> Quarter





2.6667

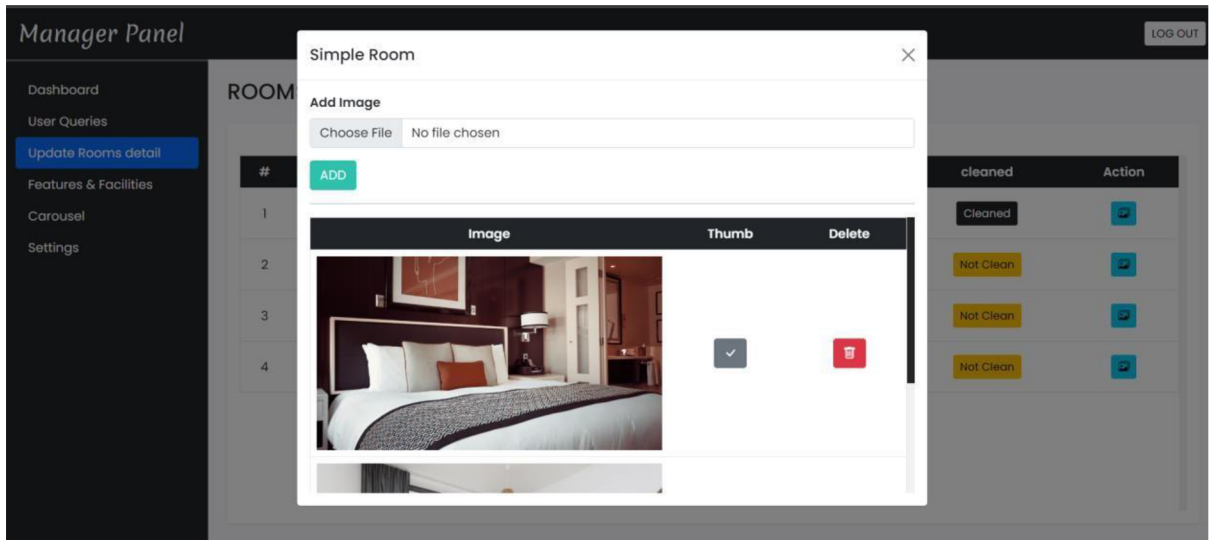
3<sup>rd</sup> Quarter

4.4906

- Dashboard
- User Queries
- Update Rooms detail
- Features & Facilities
- Carousel
- Settings

### ROOMS Cleaning

#	Name	Area	Guests	cleaned	Action
1	Simple Room	250 sq. ft.	Adult: 5 Children: 3	Cleaned	
2	Deluxe Room	300 sq. ft.	Adult: 3 Children: 2	Not Clean	
3	Luxury Room	600 sq. ft.	Adult: 8 Children: 6	Not Clean	
4	Supreme deluxe room	500 sq. ft.	Adult: 9 Children: 10	Not Clean	



Showing rows 0 - 1 (2 total, Query took 0.0007 seconds.)

```
SELECT * FROM `admin_cred`
```

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	sr_no	admin_name	admin_pass	role
<input type="checkbox"/>	1		2345	1
<input type="checkbox"/>	2	neal	12345	2

With selected: Edit Copy Delete Export

Showing rows 0 - 1 (2 total, Query took 0.0005 seconds.)

```
SELECT * FROM `admin_role`
```

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	id	name
<input type="checkbox"/>	1	admin
<input type="checkbox"/>	2	manager



Diponkar sinha  
<diponkar.sinha@gmail.com>

blog

---

Jims motel Data For Thesis

4 messages

---

Diponkar sinha blog <diponkar.sinha@gmail.com> Tue 28. 11. at 11:38 AM

To: <monoj.mk@jimsmotel.in>

Hi, Monoj

Greetings, I hope all is well with you.

As we agreed in the conversation, please submit the data again. I lost the data you shared with me two months ago. Regards for your cooperation.

Kr. Diponkar

---

MONOJ SINGHA <monoj.mk@jimsmotel.in> Tue 28. 11. at 11:41 AM

To: Diponkar sinha blog <diponkar.sinha@gmail.com>

Hello Diponkar,

Greetings for the evening, PFA of the data.

Many thanks, [Quoted text hidden]

rating\_review (1).csv, booking\_order.csv

---

Diponkar sinha blog <diponkar.sinha@gmail.com> Tue 28. 11. at 11:45 AM

To: MONOJ SINGHA <monoj.mk@jimsmotel.in>

Hi, Monoj

I appreciate your cooperation.

Since this is my final year project, your review would be helpful. We had the opportunity to work with your hotel and completed a little project to improve the system. Are there any issues or is everything functioning smoothly?

Kr. Diponkar

[Quoted text hidden]

---

MONOJ SINGHA <monoj.mk@jimsmotel.in> Tue 28. 11. at 12:24 PM

To: Diponkar sinha blog <diponkar.sinha@gmail.com>

Hi Diponkar,

We are grateful that you provided us with the system, as your work has produced positive outcomes and assisted our growth. I hope your final exam and thesis go well.

Many Thanks ,

Monoj

[Quoted text hidden]