

DIPLOMA THESIS ASSIGNMENT

Bc. Doszhan Kambarov

Systems Engineering and Informatics
Informatics

Thesis title

Development of a mobile application for university students

Objectives of thesis

The main objective of the thesis is to analyse, design and deploy a mobile application for students of the Czech University of Life Sciences Prague.

Partial goals of the thesis are such as following:

- to make a literature overview of current mobile apps for university students and mobile development frameworks;
- to conduct user survey and develop the application prototype;
- to implement and test the mobile application and deploy it to a selected store.

Methodology

The thesis will draw on an extensive literature review and secondary information desk research. In the practical part, a survey will be conducted to collect user requirements for the proposed application. Further, the methods of analysis, synthesis and deduction will be used to compare App Store and Play Market and mobile development frameworks. The application prototype will be developed by using software engineering methods such as User Centred Design, prototyping and usability testing.

The proposed extent of the thesis

60 – 80 pages

Keywords

Mobile application, development, deployment, mobile application market, Android, iOS, Play Market, Apple Store, operating system.

Recommended information sources

- Apple Developer Documentation. In: Apple Developer [online]. One Apple Park Way, Cupertino, CA 95014, USA: Apple, 2009 [cit. 2018-09-02]. Dostupné z: <https://developer.apple.com/documentation/>
- Google Play Developer API [online]. 1600 Amphitheatre Parkway, Mountain View, California 94043, United States: Google, 2018 [cit. 2018-09-09]. Dostupné z: https://developers.google.com/android-publisher/getting_started
- HERMES, Dan. Learn Android Studio 3: efficient Android app development. 3rd edition. New York, NY: Springer Science Business Media, 2018. Wrox programmer to programmer. ISBN 978-148-4231-555.
- HERMES, Dan. Xamarin Mobile Application Development: Cross-Platform C# and Xamarin.Forms Fundamentals. 3rd edition. California: Apress, [2015]. Wrox programmer to programmer. ISBN 978-148-4202-142.
- MCWHERTER, Jeff a Scott GOWELL. Professional Mobile Application Development. 3rd edition. India: Wiley India Pvt., 2012. ISBN 9788126538249.
- MUKHERJEA, Sougata. Mobile application development, usability, and security. Hershey PA: Information Science Reference, [2017]. ISBN 978-152-2509-455.
-

Expected date of thesis defence

2020/21 SS – FEM

The Diploma Thesis Supervisor

Ing. Miloš Ulman, Ph.D.

Supervising department

Department of Information Technologies

Electronic approval: 2. 10. 2018

Ing. Jiří Vaněk, Ph.D.

Head of department

Electronic approval: 19. 10. 2018

Ing. Martin Pelikán, Ph.D.

Dean

Prague on 31. 03. 2021