Czech University of Life Sciences Prague

Faculty of Economics and Management

Department of information Engineering

Teze for Bachelor thesis

UI specification for application

Dog Shelter Libeň

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Summary:

The purpose of this bachelor thesis is to create the UI specification for an application Dog Shelter Liben. The application should support volunteers in frequent walking shelter dogs.

The first part contains a theory of creation of a user interface and a paper prototype. In this thesis are also described the principles of walking dogs in dog shelters.

The second part is the creation of the UI specification, which includes a motivation, goals and personas. Then there are discussed various proposals, which are always with a use case and a scenario. Finally, there is described the testing and the evaluation of the solution.

The third part is the final evaluation of the entire thesis.

Keywords:

Dog Shelter, UI specification, IS, Use Case, Persona, Business Goal

Objectives and methodology:

Objectives of thesis

To design UI specification for Dog Shelters Libeň:

- to define suitable Use Cases and personas
- prepare UI specification
- prepare Paper prototype
- test it at the CULS UI Lab
- to describe results and conclusions

Methodology

- Analyze current state of Dog Shelters support information systems.
- Study suitable literature and electronic resources.
- From the result of study define current state of suitable IS and their ability to support Dog Shelters Use Cases.

- Define typical Use Cases and prepare UI specification.
- Prepare paper prototype according to the UI specification and test it.
- Describe conclusions for gained results.

Theoretical part:

In the theoretical part of this thesis are described the main principles of Human-computer interaction according to Gerard Jounghyun Kim.

For this thesis is crucial to describe how to create a UI specification. Firstly, it is important to specify the motivation, why this application should be developed. Secondly, it is important to specify goals, like for whom is this application intended and what fundamental features it will contain. Thirdly, it is necessary to evaluate the personas, which will help to identify the target groups of users. After that it will be possible to do logical designs, use cases and scenarios of all pages of the application.

In the theoretical part are mentioned and described concepts of aplications, operating systems for smartphones, dog shelters, problems of volunteering and jogging application. The main idea of the thesis is that the solution for the issue of walking the shelter dogs could be solved by creating the application based on jogging applications. The explanation is that the main problem of long-term volunteering is low motivation and the main purpose of jogging applications is motivation.

In this part are also described principles of making a paper prototype. The paper prototype can be made by hand, by special program for paper prototyping or in some drawing program on a computer.

Practical part:

The practical part is focused on UI specification for application Dog Shelter Liben. UI specification includes all the procedures for creating the user interface. In this part is discussed each page of the application, its logical design, use case and scenario. According to Jacob Nielsen, the identification of design's most important usability problems, testing five users is typically enough. Rather than run a big, expensive study, it's

better use of resources to run many small tests and revise the design between each one so you can fix the usability flaws as you identify them. [15]

 A functionality of the application was tested with a paper prototype on six potential users (respondents) in CULS UI lab. The users we given a list of tasks and questions. The users reported that they easily and intuitively worked with the paper prototype. They graded the user interface as friendly.

Conclusion:

Based on the studied materials was designed UI specification for application Dog Shelter Libeň. The main goal was to create an application that offers an attractive design, is easy to operate and offers features that will attract volunteers and support their activities. Based on the theoretical part were created UI specifications. The application was submitted to qualitative testing on six respondents in CULS UI lab.

The conclusions from testing are that the application is friendly and intuitive.

The respondents mentioned the following advantages:

- The simple menu with large buttons for the most important functions.
- The small bar which can quickly switch to the main menu, map or settings.
- Intuitive control which is easy even for unexperienced users.

The respondents suggested the following changes:

- Adding a function to share walks on social networks.
- Adding a function to crop or edit photos.

The results of testing show that the goals were achieved. The application might be interesting for general public.

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