BACHELOR'S THESIS REVIEW

Author: Dominika Palivcová

Thesis Title: **Surveillance center UI for in-hospital navigation system**

Thesis Supervisor: Ing. Miroslav Macík Ph.D.

Thesis Opponent: Ing. Ivo Malý Ph.D.

Assignment

The aim of the bachelor's thesis was to develop part of electronic navigation system focused on interior surveillance. This assignment relates to research project [1] focused on indoor navigation of visually impaired and seniors. Student should have: analyzed the current version of navigation system and UIP [2] (User Interface Platform - our proprietary technology for UI development and delivery); performed user research focused on hospital employees and surveillance center operators; using UCD methodology designed and implemented UI prototypes for surveillance center; evaluated the proposed solution with at least six participants.

Manuscript

The written part of the thesis is written in good English, it has good formal structure and clearly describes the development of the Surveillance Center UI prototype. In most aspects, it exceeds requirements typical for bachelor theses. There are only a few minor concerns, e.g. although the extent of analysis of the related work is sufficient for a bachelor thesis it is rather short and it lacks references to scientific papers.

Implementation

The Hi-Fi Prototype of the Surveillance Center has been implemented using the UIP technology as assigned. On the one hand, it contributed to the advancement of this technology and simplified system integration. On the other hand, using this technology was demanding as UIP is still in development (no community support, incomplete documentation).

Mrs. Palivcová managed to develop a very sophisticated prototype that used UIP on its limits. During the development, she dealt with various problems to resolve. The resealing implementation will be integrated into next version of the navigation system.

Questions

1.   For high fidelity evaluation, there were five male participants and only one female. What is the reason?

Conclusion

By her thesis, Mrs. Palivcová proved that she is capable of performing independent engineering work on complex assignments. The assignment of the thesis was rather demanding, yet it was addressed fully on a professional level.   The thesis was written in English and, it preserves high formal quality standards. The extent of the thesis exceeds the requirements. It has 58 pages + another 44 pages of appendices. A research paper based on the thesis will be submitted to an international conference.

I assess the thesis with mark A (excellent).

In Prague, June 9th 2017

Ing. Miroslav Macík Ph.D.

References

[1] Macik, Miroslav, et al. "Smartphoneless context-aware indoor navigation." Cognitive Infocommunications (CogInfoCom), 2016 7th IEEE International Conference on. IEEE, 2016.

[2] Macik, Miroslav, Tomas Cerny, and Pavel Slavik. "Context-sensitive, cross-platform user interface generation." Journal on Multimodal User Interfaces 8.2 (2014): 217-229.