OPPONENT’S OPINION OF DIPLOMA THESIS

Student: Bc. Adam Melkus, učo 374010
Name of thesis: Cross-platform development of smartphone application with RhoMobile

Assessment of the thesis:
The diploma thesis is focused on evaluation of RhoMobile application framework based on JavaScript, HTML and Ruby. The student identified several frameworks with similar feature set and he provided short description of each one. Main part of the thesis is dedicated to detailed analysis of RhoMobile framework.

The student verified properties of RhoMobile Framework by implementing prototype of mobile terminal which is able to communicate with YSoft SafeQ server using REST API. The student explained architecture of the application prototype and documented important parts using code snippets.

Chapter 3.9 with Rhodes development activity is useful source of information about history and potential development of the framework in future. The student developed and published simple tool for evaluation of liveness of the project at Github and he processed data into the table with graph. This method could be used to evaluate trends in the development in RhoMobile.

Conclusion of the work states result clearly: RhoMobile framework is not fully suitable for multiplatform development. The framework is sufficient for developing applications only for Android and iOS. Windows Phone platform is not fully supported and there are many issues. The student identified also serious problem in JavaScript/HTML development: several problems with code could be detected only in runtime. The student does not recommend framework for development. He suggests to re-evaluate framework in future.

Student was working independently and he was actively pushing implementation of the prototype. He also published open source tool for evaluation history of GitHub project. Student demonstrated his ability to perform research, draw conclusion and transform knowledge into real application based on mockups.

Text of thesis contains some minor issues which could be captured by more intensive text revision. E.g.: using number 2 instead of word: “Application needs to support 2 platforms.” or “paying 2 developers or one developer”

Evaluation:
Thesis has all formal qualities. The text has logical structure and is easy to read. Student fulfilled definition of thesis. I recommend the work as master thesis. Final classification proposal: A.

Date: 14.6. 2016

Juraj Michálek
(thesis supervisor)