

Review report of a final thesis

Czech Technical University in Prague

Faculty of Information Technology

Student: Stefan Ćirić
Reviewer: Ing. Radomír Polách
Thesis title: Implementation of client and server for control and interpretation of robot Karel
Branch of the study: Web and Software Engineering

Date: 9. 6. 2017

<p><i>Evaluation criterion:</i></p> <p>1. Difficulty and other comments on the assignment</p>	<p><i>The evaluation scale: 1 to 5.</i></p> <p>1 = extremely challenging assignment, 2 = rather difficult assignment, 3 = assignment of average difficulty, 4 = easier, but still sufficient assignment, 5 = insufficient assignment</p>
<p><i>Criteria description:</i> Characterize this final thesis in detail and its relationships to previous or current projects. Comment what is difficult about this thesis (in case of a more difficult thesis, you may overlook some shortcomings that you would not in case of an easy assignment, and on the contrary, with an easy assignment those shortcomings should be evaluated more strictly.)</p> <p><i>Comments:</i> The task is to implement robot Karel on ESP8266 hardware platform using Arduino IDE (C++). The implementation supports custom commands creation and needs to parse Karel language. Robot Karel can be navigated to move through the maze. The assignment is of average complexity.</p>	
<p><i>Evaluation criterion:</i></p> <p>2. Fulfilment of the assignment</p>	<p><i>The evaluation scale: 1 to 4.</i></p> <p>1 = assignment fulfilled, 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</p>
<p><i>Criteria description:</i> Assess whether the thesis meets the assignment statement. In Comments indicate parts of the assignment that have not been fulfilled, completely or partially, or extensions of the thesis beyond the original assignment. If the assignment was not completely fulfilled, try to assess the importance, impact, and possibly also the reason of the insufficiencies.</p> <p><i>Comments:</i> The assignment was fulfilled.</p>	
<p><i>Evaluation criterion:</i></p> <p>3. Size of the main written part</p>	<p><i>The evaluation scale: 1 to 4.</i></p> <p>1 = meets the criteria, 2 = meets the criteria with minor objections, 3 = meets the criteria with major objections, 4 = does not meet the criteria</p>
<p><i>Criteria description:</i> Evaluate the adequacy of the extent of the final thesis, considering its content and the size of the written part, i.e. that all parts of the thesis are rich on information and the text does not contain unnecessary parts.</p> <p><i>Comments:</i> The text documentation is quite short, but borderline sufficient.</p>	
<p><i>Evaluation criterion:</i></p> <p>4. Factual and logical level of the thesis</p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>70 (C)</p>
<p><i>Criteria description:</i> Assess whether the thesis is correct as to the facts or if there are factual errors and inaccuracies. Evaluate further the logical structure of the thesis, links among the chapters, and the comprehensibility of the text for a reader.</p> <p><i>Comments:</i> The Karel language and how to program custom commans is not that clear from the text. Web interface shows current locations of robot Karel in the maze, but it seems that the location cannot be used in a conditional statement. There are some inaccuracies in the text.</p>	
<p><i>Evaluation criterion:</i></p> <p>5. Formal level of the thesis</p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>65 (D)</p>
<p><i>Criteria description:</i> Assess the correctness of formalisms used in the thesis, the typographical and linguistic aspects, see Dean's Directive No. 14/2015, Article 3.</p> <p><i>Comments:</i> There are some formal weaknesses: overflowing abstract, overflowing text, missing commas in lists etc. Images are not properly sourced.</p>	
<p><i>Evaluation criterion:</i></p> <p>6. Bibliography</p>	<p><i>The evaluation scale: 0 to 100 points (grade A to F).</i></p> <p>85 (B)</p>
<p><i>Criteria description:</i> Evaluate the student's activity in acquisition and use of studying materials in his thesis. Characterize the choice of the sources. Discuss whether the student used all relevant sources, or whether he tried to solve problems that were already solved. Verify that all elements taken from other sources are properly differentiated from his own results and contributions. Comment if there was a possible violation of the citation ethics and if the bibliographical references are complete and in compliance with citation standards.</p>	

Comments:

Sources are relevant to character of the work, but images does not seem to be sourced properly.

Evaluation criterion:

The evaluation scale: 0 to 100 points (grade A to F).

7. Evaluation of results, publication outputs and awards

75 (C)

Criteria description:

Comment on the achieved level of major results of the thesis and indicate whether the main results of the thesis extend published state-of-the-art results and/or bring completely new findings. Assess the quality and functionality of hardware or software solutions. Alternatively, evaluate whether the software or source code that was not created by the student himself was used in accordance with the license terms and copyright. Comment on possible publication output or awards related to the thesis.

Comments:

The implementation contains only a single static maze shared with all connected users. This could have been handled better. The application could have acted as a capture portal (no need to know IP address of the server).

Evaluation criterion:

No evaluation scale.

8. Applicability of the results

Criteria description:

Indicate the potential of using the results of the thesis in practice.

Comments:

Application is usable and will be further explored.

Evaluation criterion:

No evaluation scale.

9. Questions for the defence

Criteria description:

Formulate any question(s) that the student should answer to the committee during the defence (use a bullet list).

Questions:

Is there a possibility to make conditional statements based on the current coordinates of karel?

Evaluation criterion:

The evaluation scale: 0 to 100 points (grade A to F).

10. The overall evaluation

75 (C)

Criteria description:

Summarize the parts of the thesis that had major impact on your evaluation. The overall evaluation **does not** have to be the arithmetic mean or any other formula with the values from the previous evaluation criteria 1 to 9.

Comments:

The implemenation is working, but feels very rudimentary and text documentation could have also been better. I recommend C -- good.

Signature of the reviewer: