Supervisor's statement of a final thesis

**Student:** Atsamaz Akopyan  
**Supervisor:** Ing. Andrey Reutov  
**Thesis title:** Testing environment for probe server  
**Branch of the study:** Software Engineering

**Date:** 15. 1. 2020

<table>
<thead>
<tr>
<th>Evaluation criterion</th>
<th>The evaluation scale: 1 to 4.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fulfilment of the assignment</td>
<td>1 = assignment fulfilled, 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</td>
</tr>
</tbody>
</table>

**Criteria description:** 
Assess whether the submitted FT defines the objectives sufficiently and in line with the assignment; whether the objectives are formulated correctly and fulfilled sufficiently. In the comment, specify the points of the assignment that have not been met, assess the severity, impact, and, if appropriate, also the cause of the deficiencies. If the assignment differs substantially from the standards for the FT or if the student has developed the FT beyond the assignment, describe the way it got reflected on the quality of the assignment’s fulfilment and the way it affected your final evaluation.

**Comments:** 
Assigned work for automation testing was fulfilled and all objectives were successfully achieved. The thesis is good organized with clear structure and fully filled.

<table>
<thead>
<tr>
<th>Evaluation criterion</th>
<th>The evaluation scale: 0 to 100 points (grade A to F).</th>
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<tbody>
<tr>
<td>2. Main written part</td>
<td>90 (A)</td>
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**Criteria description:** 
Evaluate whether the extent of the FT is adequate to its content and scope: are all the parts of the FT contentful and necessary? Next, consider whether the submitted FT is actually correct – are there factual errors or inaccuracies? Evaluate the logical structure of the FT, the thematic flow between chapters and whether the text is comprehensible to the reader. Assess whether the formal notations in the FT are used correctly. Assess the typographic and language aspects of the FT, follow the Dean’s Directive No. 26/2017, Art. 3. Evaluate whether the relevant sources are properly used, quoted and cited. Verify that all quotes are properly distinguished from the results achieved in the FT, thus, that the citation ethics has not been violated and that the citations are complete and in accordance with citation practices and standards. Finally, evaluate whether the software and other copyrighted works have been used in accordance with their license terms.

**Comments:** 
The contribution of the thesis address to very important problem of the server performance monitoring and automation testing. Atsamaz very well describe his task and propose design functionality for future software application. The thesis is well organized and structured, in general writing is of very good quality. Student provide also program specification and user manual which is important in software development.

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<td>3. Non-written part, attachments</td>
<td>90 (A)</td>
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</table>

**Criteria description:** 
Depending on the nature of the FT, comment on the non-written part of the thesis. For example: SW work – the overall quality of the program. Is the technology used (from the development to deployment) suitable and adequate? HW – functional sample. Evaluate the technology and tools used. Research and experimental work – repeatability of the experiment.

**Comments:** 
For this thesis project Atsamaz had to use a multitude of new tools: GitLab, Git, Putty, WinSCP, WireShark and Scapy. During this project he learned how to monitor performance in Linux platform also get knowledge about telecom protocols and layers. Automatic performance test application was written in good manner with Anritsu code style and it could be easily understood by other developers.

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<td>4. Evaluation of results, publication outputs and awards</td>
<td>100 (A)</td>
</tr>
</tbody>
</table>

**Criteria description:** 
Depending on the nature of the thesis, estimate whether the thesis results could be deployed in practice; alternatively, evaluate whether the results of the FT extend the already published/known results or whether they bring in completely new findings.
In result of this thesis student implement application for server performance monitoring and automation testing. It will help to speedup performance tests and understand more clearly bottlenecks. This software will be used as test tool for Anritsu MasterClaw probe servers.

<table>
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<tr>
<th>Evaluation criterion:</th>
<th>The evaluation scale: 1 to 5.</th>
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| 5. Activity and self-reliance of the student | 5a: 
1 = excellent activity, 
2 = very good activity, 
3 = average activity, 
4 = weaker, but still sufficient activity, 
5 = insufficient activity |
|                        | 5b: 
1 = excellent self-reliance, 
2 = very good self-reliance, 
3 = average self-reliance, 
4 = weaker, but still sufficient self-reliance, 
5 = insufficient self-reliance. |

**Criteria description:**
From your experience with the course of the work on the thesis and its outcome, review the student’s activity while working on the thesis, his/her punctuality when meeting the deadlines and whether he/she consulted you as he/she went along and also, whether he/she was well prepared for these consultations (5a). Assess the student’s ability to develop independent creative work (5b).

**Comments:**
During this work Atsamath finished all his tasks in time. He worked with passion and was interesting in new methods, tools and technologies. He is a good team member and able to work independently.

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<td>6. The overall evaluation</td>
<td>95 (A)</td>
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**Criteria description:**
Summarize which of the aspects of the FT affected your grading process the most. The overall grade does not need to be an arithmetic mean (or other value) calculated from the evaluation in the previous criteria. Generally, a well-fulfilled assignment is assessed by grade A.

**Comments:**
My final evaluation of the thesis is an A - excellent.