



Review report of a final thesis

Reviewer: Ing. Milan Dojčinovski, Ph.D.
Student: Bc. Otakar Vinklář
Thesis title: Server-side application for CAPTCHA system
Branch / specialization: Web Engineering
Created on: 30 May 2022

Evaluation criteria

1. Fulfillment of the assignment

- ▶ [1] assignment fulfilled
- [2] assignment fulfilled with minor objections
- [3] assignment fulfilled with major objections
- [4] assignment not fulfilled

The thesis objectives are clearly defined and the assignment has been completely fulfilled.

2. Main written part 90 /100 (A)

The thesis is well written. It is easy to read and follow. The student follows the standard citation practices. There are, however, few parts that could be improved.

- 1) The testing section is minimal and lacks details.
- 2) The description of the REST API resources are confusing (see pages 43-44), e.g. for the `"/api/datamanagement/objects/url"` resource the `"url"` part is unclear.

3. Non-written part, attachments 85 /100 (B)

The system is well developed and the technologies appropriately selected. Unfortunately, the testing of the system could be more extensive.

4. Evaluation of results, publication outputs and awards 94 /100 (A)

The student developed fully functional software which can be deployed in practice. It is however unclear how well the system can scale.

The overall evaluation

88 /100 (B)

The student has successfully managed to develop a fully functional system. The design and implementation parts are well defined, however, the testing could be improved. Nevertheless, the identified issues have no significant impact on the final quality of the thesis.

Considering my comments above, I recommend grade B.

Questions for the defense

- 1) Provide more information on the coverage of the unit tests and the integration tests.
- 2) Discuss the performance of the system if the system is used by 1.000, 10.000, 100.000, or more users.

Instructions

Fulfillment of the assignment

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.

Main written part

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. 52/2021, 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.

Non-written part, attachments

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.

Evaluation of results, publication outputs and awards

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.

The overall evaluation

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.