



Review report of a final thesis

Reviewer: doc. Ing. Karel Richta, CSc.
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Thesis title: GraphQL Architecture – a case study
Branch / specialization: Software Engineering
Created on: 12 June 2023

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

In the assignment there is a requirement to compare GraphQL technology with older approaches. Since the GraphQL environment is not commonly used, it required quite a lot of work from the student. The result should be illustrated on a simple application and based on this comparison of this environment with other approaches. Assignment is completed.

2. Main written part 80/100 (B)

The most important part of the thesis is chapter 5. The author here describes important concepts appropriately. The second part of this chapter is the example based on the data provided to the author by the supervisor of the thesis. Data structures here are quite simple.

3. Non-written part, attachments 80/100 (B)

The code is well structured and the entire repository is well documented. I really appreciate that the author of the single service designed and implemented it in the form of separate docker containers.

4. Evaluation of results, publication outputs and awards 80/100 (B)

The result of the work represents a comprehensive solution from the use of GraphQL Federation technology, although it is not a very extensive problem, it is sufficient for the purpose.

The overall evaluation

80 /100 (B)

The thesis meets the assignment and, except for minor reservations, it can be recommended for defense.

Questions for the defense

Would you recommend this technology for development, or what type of applications would this technology be suitable for?

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.