Review report of a final thesis

Reviewer: Ing. Milan Dojčinovski, Ph.D.
Student: Bc. Dávid Žalúdek
Thesis title: ClueMaker - visual configuration
Branch / specialization: Web and Software Engineering, specialization Software Engineering
Created on: 1 June 2021

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 student fulfilled the assignment with few minor objections. In particular, it is unclear to what extent the functionalities on "finding and defining related entities" are realized.

2. Main written part 65 /100 (D)

In general, the thesis is well structured and organized into relevant chapters. Great amount of the thesis is understandable, however there are several major problems with the written part:
- The introduction does not provide clear motivation and focus of the thesis. The introduction provides minimal information on what are the goals of the thesis.
- There are unnecessary information provided, e.g. in section 1.5. - explanations on Java, Maven, netbeans, etc.
- The related work is not well explored - very few, primarily industrial tools, are discussed. There are number of open-source similar tools which are not elaborated.
- The actual contributions of the thesis are unclear, e.g. in the conclusion (page 57) it is written that the student contributed three modules, while on page 30 it is written that the student contributed five new modules.
- The application and the work behind is very related (if not the same) to the topic of "knowledge graphs", however the thesis does not well position the work in the context of "knowledge graphs".
3. Non-written part, attachments 85/100 (B)

The implementation considers relevant technologies and the developed software (i.e. extensions) is enough mature to be exploited in real-world use cases. My main concern is why Semantic Web technologies (i.e. RDF, Linked Data, etc.) have not been considered as an abstract data model.

4. Evaluation of results, publication outputs and awards 93/100 (A)

The developed software could be deployed in practice.

The overall evaluation 67/100 (D)

The students implemented several new components for an existing system and improved its usability. The student had to put more attention on the written part of the thesis. Overall, the student managed to apply in practice the knowledge acquired during the studies.

Questions for the defense

- Clearly state and explain the contributions from the work described in the thesis.
- Explain how Semantic Web technologies (e.g. RDF, Linked Data) could be utilized in the context of the system?
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 fulfillment 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. 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.

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.