Supervisor’s statement of a final thesis

Supervisor: Ing. Petr Máj
Student: Bc. Rasul Seidagul
Thesis title: Implementation of Object Oriented Languages
Branch / specialization: Web and Software Engineering
Created on: 25 August 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

Student fulfilled the task to create an educational object oriented language geared towards simplicity and showcasing the OO concepts and their compilation techniques.

2. Main written part 65 /100 (D)

This is the second iteration of the thesis and it has been hugely improved since version one. That said, it still lacks in both style and completeness. I have the feeling that even more time would have helped as some parts of the thesis are much better than others. In terms of completeness I would have appreciated a more thorough discussion of the OOP features and better reasoning for selection or rejection of features mostly. In terms of style, the thesis suffers from stylistic and grammatical errors on every page. And while some can be trivially fixed by a grammar checker, others would require more extensive rewrite. It should be noted though that while those errors are numerous, unlike the first iteration, they do not hamper reading and understanding the text. In most cases they just make the task of it less pleasant.

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

The code is again much better part of the thesis. The code is much clearer and the OOP features used and their actual implementation details are much more conventional this time. Since the main purpose of the tool is to be educational language, clarity and simplicity is a desired feature. Furthermore I am pleased that the features student has selected actually form a reasonably coherent language that showcases most of the basic OOP compilation techniques without making the code overly complex.
4. Evaluation of results, publication outputs and awards  80/100 (B)

The code needs a bit more work, such as better documentation and integration with existing course codebase, but none of this is hard. Afterwards it can be immediately used as a reference solution for compiling OOP languages, its intended use.

5. Activity of the student

[1] excellent activity
› [2] very good activity
[3] average activity
[4] weaker, but still sufficient activity
[5] insufficient activity

Student tried hard and was very motivated, but it terms of persistence and drive, improvements are still possible.

6. Self-reliance of the student

[1] excellent self-reliance
[2] very good self-reliance
› [3] average self-reliance

I experienced no real problems. Some hiccups happened, but they were quickly corrected.

The overall evaluation  80/100 (B)

My overall rating is B - the thesis text is not up to this mark, but in my opinion, for the purpose of this thesis the code is the actual important output and given the work Rasul put in and the huge improvement over the previous version I am convinced that B is the fair mark.
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. 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.

Activity of the student

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.

Self-reliance of the student

From your experience with the course of the work on the thesis and its outcome, assess the student’s ability to develop independent creative work.

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.