



Supervisor's statement of a final thesis

Supervisor: Ing. Tomáš Vondra, Ph.D.
Student: Basel Samy Mohamed Kamaeldin Elshanawany
Thesis title: Metrics of software development workflow
Branch / specialization: Computer Science
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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

All major points of the assignment have been fulfilled. There are a few points where a little more effort would lead to them being fulfilled more completely, such as that the traversal of the GitHub API is flat, there is no automatic discovery of projects. There is no extrapolation of metrics, only smoothing, and the dashboard view doesn't have any statistics in it even if they're available. The cause was probably a lack of time to finish all these minor points.

2. Main written part

85 /100 (B)

The content of the thesis is well-structured and contains first the theoretical part about the agile development workflow, the design part about the Django framework, and the implementation part about collection and visualization of data.

I have no objections to the formal part except I think that a few pictures have been taken from the references but not cited in their caption.

The references contain a book about agile development and articles about the same and about web application development. I think they are adequate for the thesis.

3. Non-written part, attachments

75 /100 (C)

The program itself is written in Python in the Django framework with some unit tests attached. The asynchronous querying of the GitHub API is a nicely applied design pattern, but overall the code quality is average.

4. Evaluation of results, publication outputs and awards

80 /100 (B)

The result of the work is a demo of the functionality that the submitting company wanted. It is not directly usable, but will serve as inspiration for their future code metrics platform.

5. Activity of the student

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

The student didn't have too much time for the thesis, but in that time he worked hard on the project.

6. Self-reliance of the student

- [1] excellent self-reliance
- ▶ [2] very good self-reliance
- [3] average self-reliance
- [4] weaker, but still sufficient self-reliance
- [5] insufficient self-reliance

We have mostly consulted the meaning of the metrics and how to collect them, the rest was completely the student's work.

The overall evaluation

80 /100 (B)

I think the thesis is well done, but in a minimalistic way. It is a pity that there wasn't time to expand the program a bit with a few more views, then the evaluation would be perfect.

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.

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.