



Supervisor's statement of a final thesis

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Thesis title: XpenseTracker Client - client part for personal finance manager
Branch / specialization: Web and Software Engineering
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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**

Unfortunately, the assignment was not fulfilled.

Only the web application was created, even though mobile clients for Android and iOS devices was expected. The web app is even not optimized for mobile view so it really cannot be used on a mobile device.

Regarding the functionality of the web app, several of the required functionality was not implemented - no supports for recurring and future transactions, no reports and charts.

2. Main written part

40/100 (F)

The text of the thesis is not good.

The introduction to the topic is very shallow without explanation of the context and needs of the target users.

The analysis contains very short and shallow description of the current solution. However, there is not enough details about existing functions and those which are missing. Also, there is no concrete reference to the original application, their authors, no citation. The analysis of other existing solutions is also very shallow, no explicit overview of supported and not supported functionalities, no overview, no comparison. At least, the overview of requirements for the new version of the application is acceptable, even not very good.

In the design chapter, the focus is put on description of selected languages and libraries. The description is relatively detailed, but even like that it is difficult to grasp the principles. Also, no connection to the actual planned application is used, the description is completely independent. No information about the planned architecture of the solution is given.

In the UI design part, the individual planned pages are described in plain text without any

visualization, models or wireframes. The designs are not based on any kind of UI design best practices or theory. It is simply based on the opinion of the author.

Chapter 4 describes the realization of certain parts of the web application. However, the text is difficult to understand as no global view is given, no diagrams to visualize the solution and its structure. Moreover, no information about testing the implemented solution is provided.

Formally, the text is also not good. The English is weak, many of the sentences use very unnatural composition (probably caused by the author not being a native English speaker). The thesis uses one-side printing, which leaves blank pages between some chapters. Also, the extent of the text is at the bottom limit. Additionally, the work with sources is very bad: there are almost no citations in the first half of the thesis (!! even though there is a lot of information summarized. All the sources are just references to home pages of various technologies and libraries. Also, the bibliography is located after the attachments.

I believe a lot of improvements to the text might be done without much effort. Unfortunately, I was not able to see any preliminary version of the text to put attention to the problems.

3. Non-written part, attachments 60/100 (D)

The only attachment of the thesis is the code of the web application. The code is not documented and its quality is questionable as it contains no tests. However, the application works in the extent of implemented functionalities.

4. Evaluation of results, publication outputs and awards 50/100 (E)

The results of the thesis is a prototype version of the web application for tracking personal finances. This application misses several of the crucial functions to be competitive to existing applications, mainly recurring transactions, templates, future transactions and advanced reports, statistics and charts. Also, no mobile application is implemented.

The reason for this weak result is a sequence of bad decisions about the technologies and components used for realization. The student decided to start from scratch with different technologies than the original implementation from the SP project. Also, he had to refactor and rewrite big parts of the implementation. Also, the limitations of the existing server application and its API made it more difficult to realize. However, On the other hand, some of more advances functionalities were implemented. For instance, the transactions can be divided to subtransactions which is a feature missing in most existing applications.

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 students attended meetings irregularly so the progress could be seen, but soon it was obvious the goal will not be achieved. More activity would be needed.

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

The students worked individually. The consultations were used to present the progress and get feedback to the expected functionality. The technical solution was driven by the student.

The overall evaluation

48 /100 (F)

The goal of the thesis was not met. A big part of the assignment is simply not fulfilled. The text of the thesis is very bad, missing a lot of important information. I have to say that the thesis in this state should not be accepted. If not all functions are realized, at least the text should be of higher quality to explain the solution, the UI based on verified and proven techniques and methods, the formal level appropriate.

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.