

Review report of a final thesis

Reviewer: Ing. Marek Suchánek

Student: Amir Qamili

Thesis title: XpenseTracker Client – client part for personal finance

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Branch / specialization: Software Engineering **Created on**: 2 February 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

Overall, I find the assignment fulfilled by the submitted thesis. In my opinion, the assignment is more difficult than average as it requires both mobile and web application.

2. Main written part

65/100 (D)

The content of this thesis is meeting the expectations, its parts describe and follow the development process set based on the assignment. Unfortunately, I found several issues in terms of typography & grammar and also some possible improvements in the content: missing space before reference symbols and its placement in the text, frequent issues with capitalization and related inconsistencies (typically in names such as TypeScript, YouTube, GitLab, StackOverflow etc.), sometimes not precise expressions / vague statements, repeating information (e.g. 1.1 vs 2.1), missing summary for existing solutions (lessons learned, there is table 2.1 but not referred in the text), bad breaks (e.g. paragraph in 2.4 is split across pages when there are 2 figures and a table in between), requirements could be more precise (e.g. missing information about recurring/future transactions which is explicit from the assignment and is also implemented), nonfunctional requirements are not well explained and justified, and several typos (e.g. figure 3.7 caption). I also did not like use of reference to figures in titles (e.g. page 19). The thesis uses 34 sources relevant to the topic. Sometimes reference is missing although it is well known thing (e.g. MVC in 3.3.1).

3. Non-written part, attachments

90/100 (A)

The non-written part consists of the sources codes and related content of the web and Android client applications. I have no objections with respect to the selected technologies. The projects and source codes are well structured except some "unused" parts of code. However, I would expect reuse of some parts between the two applications to promote maintainability and DRYness. The Android application has somewhat limited features when compared to the web app but I take that as a possible design decision. Unfortunately, the applications were probably tested only manually (which is useful for UI/UX testing but automated tests could be there as well).

4. Evaluation of results, publication outputs and awards

85/100 (B)

The resulting application can be used and further enhanced in practice but also serve as example project of mobile & web client application.

The overall evaluation

80/100 (B)

I grade this thesis as very good mainly because it was about implementation of two client applications and student had to deal with different approaches and technologies. Unfortunately, several parts of the thesis (of both written and non-written) could be improved, e.g. the reuse in the source codes, testing, or typos in the text.

Questions for the defense

- How did you select the criteria in Table 2.1 and how did you reflect them in the requirements?
- What is the (single) most crucial advantage and disadvantage of having separate mobile and web client application and why? How did you address this disadvantage?

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.