FACULTY OF INFORMATION TECHNOLOGY CTU IN PRAGUE

Review report of a final thesis

Student:	Alexey Karpovskiy
Reviewer:	doc. Ing. Robert Pergl, Ph.D.
Thesis title:	CookBook - menu planning application
Branch of the study:	Software Engineering

Date: 15. 1. 2020

Evaluation criterion:	The evaluation scale: 1 to 4.
1. Fulfilment of the assignment	*1 = assignment fulfilled,* ***2 = assignment fulfilled with minor objections,*** *3 = assignment fulfilled with major objections,* *4 = assignment not fulfilled*
Criteria description: 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.	
Comments: The goals of the thesis were fulfilled with respect to the software product, however the textual part has some setbacks, as described below.	

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
2. Main written part	*65 (D)*
Criteria description: 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.	

Comments:

The scope of the work is sufficient, all parts are informationally valuable.

In the thesis structure I miss the Review chapter, although it was not explicitly requested in the assignment. However, it is a suitable part for summarizing the technologies and related solutions that are otherwise dispersed throughout the text and it is not clear at first sight the review amount of the work and author's own contribution.

I positively evaluate the setting of work goals and the description of the thesis structure.

The section "Existing Solutions" is very brief and general. I would expect an analysis of functional and non-functional requirements of the designed system with respect to these existing solutions.

The analysis and design of the architecture are elaborated carefully and contain the necessary diagrams. However, I did not find a model fulfilling the goal of "To create an approval process for the proposed menu by restaurant management".

Java is used for implementation, the selection is justified in chap. 2.1.1. It looks a bit meretricious, most of today's languages and frameworks meet these criteria. It would be needed to dig much deeper to present sensible criteria for selecting the Java. My point is that just saying "I use Java, because I like it and it can do the job" would look more sincere.

From the typographical point of view, I have not found any major offenses.

The testing section describes both unit tests and user testing. For unit tests, it would be useful to include some metrics such as their number and code coverage. The user tests are relatively concise and lack the link to the requirements, so it is not clear if they were all properly covered.

The language is gritty and contains numerous grammatical and stylistic errors, however it is sufficient for the bachelor degree.

The bibliography contains 16 on-line items, which is adequate for the topic, however some references to online sources are missing -- all URLs referenced in the text should be included in the references.

Evaluation criterion:	*The evaluation scale: 0 to 100 points (grade A to F).*
3. Non-written part, attachments	*90 (A)*

Criteria description:
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.

Comments:

I was not able to run the application on my machine due to missing dependencies (a Docker image would be nice), but the code looks well-organised, with proper naming and patterns. Installation guide, user guides and JavaDoc documentation are present and decent.

Evaluation criterion:	*The evaluation scale: 0 to 100 points (grade A to F).*
4. Evaluation of results, publication outputs and awards	*75 (C)*

Criteria description:
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.

Comments:

The author does not indicate any embedding in practice nor feedback from practice. This -- combined with the fact that the analysis of existing solutions is superficial -- makes it hard to assess the practical relevance of the thesis. In this form it may be seen as a good exercise of analysis, design and implementation of an enterprise application, which is also valuable.

Evaluation criterion:	*No evaluation scale.*
5. Questions for the defence	

Criteria description:
Formulate questions that the student should answer during the Presentation and defence of the FT in front of the SFE Committee (use a bullet list).

Questions:

1. Explain the missing approval process for the proposed menu by restaurant management.
2. How did you encode process behaviour, e.g. Figure 1.4? What would be the impact of a process change?
3. What can be reused from your code if a mobile application would be asked now?

Evaluation criterion:	*The evaluation scale: 0 to 100 points (grade A to F).*
6. The overall evaluation	*78 (C)*

Criteria description:
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.

Comments:
Generally a good software-engineering thesis with the issues mostly in textual part, as described above, however it definitely proves the necessary bachelor qualities of the student.

Signature of the reviewer: