



## Review report of a final thesis

**Student:** Daniel Hampl  
**Reviewer:** Ing. Miroslav Hrončok  
**Thesis title:** Deep Town Guild Support System  
**Branch of the study:** Web and Software Engineering

**Date:** 10. 6. 2019

<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
<b>1. Fulfilment of the assignment</b>	<i>1 = assignment fulfilled, <b>2 = assignment fulfilled with minor objections,</b> 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled</i>
<i>Criteria description:</i> 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.	
<i>Comments:</i> The general goal was achieved, however I am unsure if the conceptual-model based analysis part of the assignment was done at all. On the other hand I'm no expert in that field.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
<b>2. Main written part</b>	<i>60 (D)</i>
<i>Criteria description:</i> 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 text of the thesis is quite short. Not only in number of pages, but also on information.

The Analysis chapter entirely lacks sources. It sounds like the author is describing their own experience, however it isn't clear whether there was some actual research among other users.

The Technology chapter introduces and compares technologies without any consideration of this particular project and hence I find a bit useless. As an example, the project clearly uses relational data model, yet the Technology chapter compares NoSQL and SQL databases based on performance rather than use case; later it compares C++ Java and Python also based on performance, while the bottleneck of this app will most likely be the IO. Further technology decisions are made in the Implementation chapter, thus the information flow is harder to follow.

The Design chapter mostly just lists the design decisions without providing reasons for them.

The Implementation chapter mostly describes libraries and frameworks and reveals almost no information about the actual implementation. As an example, the reader is not informed whether the user requests for API fetches are handled asynchronously or synchronously, but instead they are informed about the choice of a HTTP library.

The testing chapter also mostly covers the technology stack rather than describing approaches used to test the software. Most importantly, it claims the web server not automatically tested at all. The user interface and the Discord bot also appears to only be human tested. In order to see what was actually tested, I've restored to examining the sources. It appears the Discord bot was actually tested with a few unit tests.

Generally, there are very little sources and most of the listed ones lack authorship information.

I found several typographical errors (mostly quotation marks), but the overall quality of the text is very good. The text is very comprehensible. Bonus points for high quality English language.

*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 have no major concerns about the code. I have minor concerns about the claimed PEP 8 (Python style guide) compliance: the code structure and method names sometimes resemble Java.

I found the sources on GitHub and the app deployed. The source is technically available, but it lacks licensing information, hence technically is not free software (this has not changed my rating in neither direction, I'm merely stating it as a fact).

The Discord bot heavily uses asyncio -- quite new and modern way of writing Python apps, which is actually awesome, but it is not mentioned in the text of the thesis. I'd appreciate if the choice of asynchronous Python was considered for the main server as well, especially since it is fetching information from a third party HTTP API.

This is the better part of the thesis. Bonus points for working with the company behind the game to obtain a reliable data source -- communication often beats technology.

*Evaluation criterion:*

*The evaluation scale: 0 to 100 points (grade A to F).*

**4. Evaluation of results, publication outputs and awards**

100 (A)

*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 application is deployed and based on the student's motivation for this thesis, it clearly solves a real problem.

*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:*

Why have you not considered some asyncio framework for the web application?

*Evaluation criterion:*

*The evaluation scale: 0 to 100 points (grade A to F).*

**6. The overall evaluation**

75 (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:*

I feel that the textual part of this thesis unfortunately devalues the high quality work done in the software development part.  
After thorough consideration, I've decided to grade this thesis with C.

Signature of the reviewer: