



# Supervisor's statement of a final thesis

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**Student:** Hlib Yaroyi  
**Thesis title:** Information System for Draw Competitions  
**Branch / specialization:** Web and Software Engineering  
**Created on:** 5 June 2022

## 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

The bachelor thesis fulfills the objectives of the assignment. Student analysed the domain and briefly the existing solutions. Then he designed and implemented his own solution with microservices architecture that provides API based on the set requirements. The solution was then tested and briefly evaluated.

### 2. Main written part 65 /100 (D)

The written part of the thesis contains relevant information but some parts are very brief (mainly Analysis and Evaluation). There are no significant grammatical or typographic errors (a few minor like incorrect capitalization, e.g. "docker hub", or missing spaces or commas). Sometimes there are big spaces between paragraphs, probably caused by the placement of figures and LaTeX template. Information from other sources as well as mentioned tools are cited according to requirements (mainly online sources but that is reasonable based on the thesis topic).

### 3. Non-written part, attachments 95 /100 (A)

The implementation of microservices is the main non-written part of the thesis. It is quite complex in terms of used microservices architecture, student appropriately re-used some components of the architecture (e.g. Eureka for service discovery or Spring Config Server). The used technologies are suitable and adequate (except the selection of Java 12 as indicated in the README, it is no longer supported non-LTS version). Although it may seem that microservices are too complex for something like a drawing application, their advantages can be highly beneficial for potential further development (separation of

concerns) and also for wide use (scalability). The entire project is well structured, code is quite clear to me, and also the Swagger API documentation is very useful. I would also welcome the README file to contain a bit more detailed descriptions of how to work with the project. In terms of the API, I suggest changing some of the POST calls to DELETE and GET while passing the token via HTTP headers and not directly in the body... basically, the API of the drawings-manager service could be improve based on best practices in REST APIs.

#### **4. Evaluation of results, publication outputs and awards** 95 /100 (A)

Despite the existing solutions and the need for further work (also based on my previous comments) on its own solution, it has the potential to become an open-source API supporting other various solutions (web apps, mobile apps, widgets, etc.). It nicely demonstrates the development of microservices.

#### **5. Activity of the student**

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

#### **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 overall evaluation** 90 /100 (A)

Although the written part of the thesis should describe the solution and motivation in higher detail and there are possibilities to improve further the implementation, the overall result is above my expectation.

## **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.