Tomas Bata University in Zlín
Faculty of Applied Informatics

OPPONENT´S EVALUATION OF THE BACHELOR´S THESIS

Student: **Fatah, Ahin Omer** **Opponent:** **Radek Silhavy**

Study program: **Software Engineering**
Study course/Specialization:
Academic year: **2022/2023**

Bachelor's Thesis topic: **DESIGN A MODEL OF APPLICATION FOR BLOOD BANK MANAGEMENT SYSTEM**

Evaluation of the thesis:

This thesis aims to discuss the design of an analytical model and prototype for a web-based blood bank management application. However, several significant issues need to be addressed.

Firstly, the abstract in both Czech and English is of unsatisfactory quality. Not only is the structure incorrect, but the overall quality of the abstract is poor. It requires significant improvement.

In the theoretical part of the thesis, the author describes basic concepts of the World Wide Web, the Internet, websites, and the HTTP protocol. However, the level of explanation falls below the expected standard for a bachelor's thesis. Therefore, it cannot be considered satisfactory.

Chapter 4, which focuses on website categorisation, is unclear and contains only a few lines of text. It is unclear why this chapter was included.

The sections that discuss HTML, CSS, JavaScript, and Bootstrap suffer from the same issue. They lack specific examples or illustrations of their usage, making them generic and uninformative.

The next part of the thesis deals with the analysis. However, it only includes an HTML sample from a website discussing parts of the future blood bank management system. The sample lacks any rendering or visual representation of how the specific parts of the application will look.

In the UML chapter, the Class model has limited usability and contains only basic, unclear, and poorly defined classes.

The requirements models in Chapter 11.2 provide only an overview of the requirements without further analysis or discussion.

The sequence diagram suffers from similar issues. It fails to illustrate object cooperation adequately, and it is unclear which use case is being described.

The use case model in Figure 15 is acceptable but still unclear. For instance, the "Update blood" use case lacks clarity and has no accompanying scenarios, making it impossible to evaluate the model effectively.

Lastly, Section 12 presents website mockups, which appear to be prototype without a factual HTML background. Evaluating these mockups in connection to the use cases is challenging, especially since the use cases are not adequately presented.

Overall, the thesis requires substantial updates both in terms of content and language usage. The English level and writing style need evaluation and improvement. In its current state, the thesis cannot be successfully defended.

Questions:

1. Considering its brevity and lack of explanation, can you explain the rationale behind including the chapter on website categorisation? How does it contribute to the overall objectives of the thesis?
2. Regarding the use of UML class diagrams, could you elaborate on the limitations of the current class model and discuss how it could be improved to provide a more comprehensive representation of the blood bank management system? Are there any specific classes that should be included or further defined?
3. In evaluating the web application prototype, how do you propose addressing the absence of accompanying use case scenarios?

Overall evaluation of the thesis:
The Opponent shall grant a mark according to the ECTS classification scale:
A – Excellent, B – Very Good, C – Good, D – Satisfactory, E – Sufficient, F – Insufficient
An “F” grade also means "I do not recommend the thesis for defence."

I do not recommend this thesis to be defended and suggest the following evaluation:

F - Insufficient

In the case of an evaluation grade of “F – Insufficient”, please supply the main shortages and reasons for this assessment.

Date: 1. 6. 2023 Thesis Opponent's Signature: