Supervisor’s statement of a final thesis

Supervisor: Ing. Lukáš Charvát, Ph.D.
Student: Bc. Ondřej Štauda
Thesis title: ERP System Integration Tool
Branch / specialization: Software Engineering
Created on: 2 February 2024

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

In the thesis, the student successfully addressed all assignment points, successfully meeting objectives. Since the work aligns with the standards, there are no notable deficiencies, and the complexity of the thesis was standard, I evaluate the student’s assignment as fulfilled.

2. Main written part

The extent of the thesis is adequate to its content and scope, albeit some chapters/sections, such as high-level architectural considerations, could benefit from more in-depth exploration. The thesis is well-researched as there are minimal factual errors or inaccuracies present. The logical structure and thematic flow between chapters follow the standard scheme: Introduction, State-of-the-Art, Goals, Analysis/Design, Implementation, and Testing/Usage. However, in some chapters (especially in Chapter 5 - Analysis and Design), more explanatory transitions between sections could contribute to the overall coherence of the text. The thesis is well-written from the typographic point of view, with only minor formatting and language issues, which do not hurt the overall quality of the work. The relevant sources are properly utilized, quoted, and cited, demonstrating a robust foundation for the thesis. There is a clear distinction between cited work and the student's contributions. The use of software and copyrighted works aligns with their license terms.
3. Non-written part, attachments

The output of the thesis, a Java Spring application, is designed as a REST web service. Such an architectural decision leaves enough room for eventual extensions such as the addition of data sources, connectors, or even GUI. Further, according to the thesis assignment, the student incorporated an instance of a data source (CSV file format) and a data connector (designed for NetSuite ERP). Therefore, I consider the used technology as suitable and adequate.

4. Evaluation of results, publication outputs and awards

The result of the thesis has a proven utilization in practice as the data (exported in CSV file format) from the Xero ERP system were successfully imported into another system called NetSuite. The data included the most vital records for any business, namely customers, inventory items, and transactions (invoices and/or sales orders). The only significant limitation was a lack of support for complex/nested objects as the delivered version of the application only supports one level of nesting. Thanks to the universal mapping capabilities of the implemented application, importing CSV data from other ERP systems such as Sage or QuickBooks should be a trivial task.

5. Activity of the student

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

There was room for improvement in meeting deadlines, but I appreciate that the student was proactive in seeking guidance and study materials. He also always came well-prepared for consultations. Thus, I evaluate the student’s activity as average.

6. Self-reliance of the student

[1] excellent self-reliance
[2] very good self-reliance
[3] average self-reliance

Throughout the work on the thesis and its result, the student exhibited a strong ability to independently develop creative work.

The overall evaluation

The master thesis satisfactorily fulfills the assignment, meeting all its objectives.

The overall quality of the written part is solid. It is well-researched, with minimal factual errors, and follows a logical structure.
Next, the quality of the attached implementation in the form of a Java Spring application is adequate. The incorporation of a data source and connector aligns with the assignment's requirements. Further, the resulting application can be utilized in practice. The application can successfully integrate data between two ERP systems. This practical aspect of the result contributes positively to the overall assessment.

During his work, the student demonstrated a theoretical and practical understanding of the thesis subject. Additionally, he also showed proactive engagement and exhibited a strong ability to independently develop creative work.

Overall, I assess the work by grade B.
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 fulfillment 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.