



Supervisor's statement of a final thesis

Student: Martin Kupka
Supervisor: doc. Dr. André Sopczak
Thesis title: Feasibility Study of Portal to Provide Knowledge about Higgs Boson to General Public and Experts
Branch of the study: Information Systems and Management

Date: 8. 6. 2020

<i>Evaluation criterion:</i>	<i>The evaluation scale: 1 to 4.</i>
1. Fulfilment of the assignment	<u>1 = assignment fulfilled,</u> 2 = assignment fulfilled with minor objections, 3 = assignment fulfilled with major objections, 4 = assignment not fulfilled
<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 thesis is concise and defines clearly the objectives, they are in line with the assignment. All tasks of the assignment are fulfilled. The thesis addresses the tasks in sufficient depth to evaluate the correctness and the results are clearly described.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
2. Main written part	90 (A)
<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.	
<i>Comments:</i> The extent of the thesis is adequate in content and scope. All parts contribute to the overall conclusion and are necessary. The flow of the thesis is natural. The detailed structure of sections and subsections is logical and comprehensible for the reader. Typography and English language is excellent. There are no ambiguities. The reference list is quite extensive and citations are properly used and fulfill good practice.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
3. Non-written part, attachments	90 (A)
<i>Criteria description:</i> 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.	
<i>Comments:</i> Extensive SW development was not applicable in this thesis. The minor software test for scraping relevant resources as a proof-of-principle performed as expected. The student's experience with Adobe XD proved to be an asset for efficient programming. It was suitable and very adequate. Further development can be build up on this.	
<i>Evaluation criterion:</i>	<i>The evaluation scale: 0 to 100 points (grade A to F).</i>
4. Evaluation of results, publication outputs and awards	90 (A)
<i>Criteria description:</i> 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 feasibility study was done in sufficient detail that it can guide the development of the implementation. The resources of the publications and preliminary results are very well documented, The suggested realization is realistic, although the estimate of the personnel seems to be on the low side, however, the given spread by a factor 0.25-4 compensates for it. In particular the categorization development with a machine learning technique could extend the resources needed. The SWOT analysis is well done. A plus are the listed additional features. This thesis work is novel and mainly new findings.

Evaluation criterion:

The evaluation scale: 1 to 5.

5. Activity and self-reliance of the student

5a:

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

5b:

1 = excellent self-reliance,
2 = very good self-reliance,
3 = average self-reliance,
4 = weaker, but still sufficient self-reliance,
5 = insufficient self-reliance.

Criteria description:

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 (5a). Assess the student's ability to develop independent creative work (5b).

Comments:

A main characterization of the student performance is his efficiency. He completed his thesis work in a rather short time period and it is positively noted that he had good time management to had enough time towards the submission deadline for a solid finalization of the thesis work. For discussions Martin has always been on time and intermediate deadline for partial tasks Martin met very well. He understood all tasks very quickly and worked on them independently. His questions were well posed and advanced the project. He also gave a detailed presentation of his project results in a group meeting with Higgs boson experts and senior researchers. It was well received. In the course of the thesis work Martin demonstrated the ability for developing independent creative work.

Evaluation criterion:

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

6. The overall evaluation

90 (A)

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:

All parts of his tasks are well addressed and are clearly described in the thesis. His quality work strongly supports the creation of a Higgs Boson Portal. The software development proof-of-principle performed as expected. The strength of the thesis is the well-structured presentation from user interviews, advertisement possibilities, publication resource evaluations, SWOT analysis, technical realization to the application design, and additional features. A detailed Conclusion completes his thesis work. All interactions with the student were efficient and productive.

Signature of the supervisor: