Supervisor's statement of a final thesis

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Supervisor: Ing. Tomáš Čejka
Thesis title: Unified configuration interface for NEMEA collectors
Branch of the study: Web and Software Engineering

Date: 4. 6. 2018

Evaluation criterion: The evaluation scale: 1 to 4.

1. Fulfilment of the assignment

Criteria description:
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.

Comments:
The aim of this diploma thesis was to improve the existing configuration and management module Supervisor of the open source system NEMEA. A new version of Supervisor module has been designed and implemented. Supervisor uses the Sysrepo storage instead of former XML files, and the configuration data model is described in the YANG language. There is also a simple prototype of web graphical user interface to communicate with supervisor instead of command line interface that was used previously.

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

2. Main written part

Criteria description:
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 length of the diploma thesis meets requirements. The document contains all necessary parts. Some parts, especially the implementation related ones, could have been described in more detail. The text of the diploma thesis is well-written and clear to understand. The structure of the text is logical without crucial mistakes. The quality of typography and language is high.

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

3. Non-written part, attachments

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:
The results of this thesis are source codes of the NEMEA Supervisor and graphical user interface. Source codes are documented, however, there is no up-to-date information about license. Some files should contain a proper identification of the author. There is a minor issue regarding the CD contained in the submitted thesis: it includes files that are not result of this thesis and should be omitted.

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

4. Evaluation of results, publication outputs and awards

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:
85 (B)
The results of this diploma thesis can be used as an alternative to the former version of NEMEA Supervisor. Even though the graphical user interface (GUI) was a low priority requested feature, it requires some additional work before it can be used by users. However, the new version of Supervisor is usable separately without GUI. Additionally, the implemented backend that provides REST API is prepared.

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:**  
The student did not need too much consultation time. He was well-prepared for all arranged meetings. Due to a later start of the implementation, the work was delayed and the student did not have time to improve the GUI.

6. **The overall evaluation**

70 (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:**  
The submitted diploma thesis fulfills requirements of the topic. However, some parts of the text could have been described in more detail, and the GUI needs some additional improvements.

Signature of the supervisor: