**FACULTY
OF INFORMATION
TECHNOLOGY
CTU IN PRAGUE**

Supervisor's statement of a final thesis

Student:	Mikuláš Formánek
Supervisor:	Ing. Jan Šedivý, CSc.
Thesis title:	Office IoT
Branch of the study:	Computer engineering

Date: 13. 6. 2018

Evaluation criterion:	The evaluation scale: 1 to 4.
1. Fulfilment of the assignment	*1 = assignment fulfilled,* ***2 = assignment fulfilled with minor objections,*** *3 = assignment fulfilled with major objections,* *4 = assignment not fulfilled*

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 Jan Formanek bachelor's thesis assignment was to design an IoT automated office application. The submitted FT meets all requested objectives. Mikulas has completed all assignments. The FT shows the solution, development and implementation steps. The application works except for some minor problems well. It has been tested on several users and fulfills all requested features.

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
2. Main written part	*85 (B)*

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 FT has 45 pages, which is adequate for this type of work. The FT correctly describes all solved problems. Some section might have deserved a deeper look. It has a logical flow and depth. The FT follows the usual formal requirements for works of this type. It uses the standard way for formatting, includes figures, tables, etc. required for the FTs. It rightfully indicates the literature sources in the list of the used literature at the end of the FT. It separates the author invented know-how from the solutions learned from the literature.

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
3. Non-written part, attachments	*90 (A)*

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 FT comes with an attached CD containing the SW. Mikulas has studied and learned the art of designing the IoT applications. He took advantage of several services on the Internet with the required functionality; speech recognition, image recognition. He has developed and implemented working application informing a user about person present in the office. He has demonstrated all required functionality, but some of the usability problems, such as latency, intelligibility, recognition, etc. remain. I believe all issues can be solved. Mikulas had to go through a relatively large area of new technologies to complete the task, including hardware. He has been working on the application systematically, step by step pushing it ahead.

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

4. Evaluation of results, publication outputs and awards	50 (E)

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:
The FT, as well as the application, which is part of the FT, have been completed. As mentioned in the previous paragraph the basic functionality has been demonstrated. The application has been tested on real users.

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:
Mikulas has been regularly visiting our lab and step by step working on the FT task. He did not hesitate to ask how to progress. He was always ready to discuss the development options. I especially value his approach to deal with HW, CPU and other components selection, placing the sensors and actuators to containers, fixing the tablet for control etc. This is a real engineering skill. We had regular meetings reviewing the progress. Mikulas is an active and independent student.

Evaluation criterion:	The evaluation scale: 0 to 100 points (grade A to F).
6. The overall evaluation	85 (B)

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:
It was great to work with Mikulas who is always smiling and always ready to help. He was actively inventing new improvements. He had to work with many technologies and had to acquire a lot of different skills. He had well-fulfilled all assignments and I am accessing his FT by grade B.

Signature of the supervisor: