

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>IoT based Smart Home</b>
<b>Author's name:</b>	<b>Guneet Singh</b>
<b>Type of thesis :</b>	master
<b>Faculty/Institute:</b>	Faculty of Electrical Engineering (FEE)
<b>Department:</b>	Dpt. of Microelectronics
<b>Thesis supervisor:</b>	prof. Ing. Miroslav Husak, CSc.
<b>Supervisor's department:</b>	Dpt. of Microelectronics

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>ordinarily challenging</b>
<i>How demanding was the assigned project?</i>	
The assignment of the diploma thesis was moderately difficult. The diploma thesis deals with the design of a system with commercial products.	

<b>Fulfilment of assignment</b>	<b>fulfilled</b>
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
The work was prepared according to the assignment and my comments	

<b>Activity and independence when creating final thesis</b>	<b>A - excellent.</b>
<i>Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.</i>	
The author of the diploma thesis worked very actively and initiately. He often visited me for consultations. we continuously discussed individual points of the assignment, methodology and procedure for solving the assignment. He was independent and creative in finding new solutions. He continuously presented me with the achieved results of the work. The performance and approach to solving the work was very good, overall, the person of the graduate can be evaluated very positively.	

<b>Technical level</b>	<b>A - excellent.</b>
<i>Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?</i>	
The work solves the design of the IoT model for Smart Home using ESP8266 and ESP32. An Ubidots platform is used for the control and monitoring, data transfer is done using the MQTT protocol. The author of the diploma thesis worked well with the assigned materials, he actively obtained new information from other sources. He responded dynamically to my ongoing comments and modifications to the tasks of the original assignment. The professional level corresponds to the requirements of the assignment. The requirements for the diploma thesis level are fully met.	

<b>Formal level and language level, scope of thesis</b>	<b>B - very good.</b>
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
Minor errors of a formal nature occur in the work, the graphic design of some figures could have been better. English is the official language of the author. Diploma thesis (in the final form, not the form stored in KOS) fulfill the requirements for qualification diploma theses in terms of formal and professional.	

**Selection of sources, citation correctness****A - excellent.**

*Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?*

The graduate worked well with literary sources, he was active in finding new sources of information. Bibliographic citations meet the standards.

**Additional commentary and evaluation (optional)**

*Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.*

Unfortunately, the diploma thesis inserted into KOS is not the final version of the thesis. The author mistakenly inserted an older version of the work, which contains some shortcomings. Shortcomings are removed in the final version, which is identical to the hardcopy of the thesis.

**III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE**

*Summarize your opinion on the thesis and explain your final grading.*

The grade that I award for the thesis is **A - excellent**.

Date: **12.6.2020**

Signature: Miroslav Husak