

I. IDENTIFICATION DATA

Thesis title:	Security System Using ESP32
Author's name:	Ashish GARG
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Dpt. of Microelectronics
Thesis supervisor:	prof. Ing. Miroslav Husak, CSc.
Supervisor's department:	Dpt. of Microelectronics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<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 model of the house security.	

Fulfilment of assignment	fulfilled
<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 diploma thesis was prepared according to the assignment and my additional specification	

Activity and independence when creating final thesis	A - excellent.
<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 approached the solution of the thesis very actively and proactively. He often visited me for consultations, we often corresponded by email. We continuously discussed the individual points of the assignment, methodology, procedure and possible methods of solution. The author was looking for new solutions, he was independent and creative. He presented the results of the work continuously. The activities and approach to solving the work were very good, overall the person of the graduate can be evaluated very positively.	

Technical level	A - excellent.
<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 system design of the home electronic security using main controller ESP32 with different sensors connected. MQTT protocol, Ubidots IoT platform for data visualization, and for control of system both from web and smartphone are used. IFTTT online service is used for notification and data storage on Google sheets.	

Formal level and language level, scope of thesis	A - excellent.
<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>	
The diploma thesis is formally prepared very nicely. The thesis is organized in a logical structure. English is the official language of the author. Negligible graphic errors do not reduce the professional level of work. The number of errors is minimal. Diploma thesis fulfill the requirements for qualification diploma theses in terms of formal and professional view.	

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 autor 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.

The work is moderately difficult, the author intensively worked on the elaboration of the work immediately after the assignment. I evaluate the author's approach, activity and initiative excellently.

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: **14.6.2020**

Signature: Miroslav Husak