

I. IDENTIFICATION DATA

Thesis title:	Application to monitor the availability of remote servers
Author's name:	Arta Rizvanolli
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Department of Instrumentation and Control Engineering
Thesis reviewer:	Ing. Michal Kuchař
Reviewer's department:	Department of Instrumentation and Control Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment <i>How demanding was the assigned project?</i>	ordinarily challenging
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Fulfilment of assignment <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>	fulfilled with major objections
<p>Objection for second guideline "Create a framework for mathematical evaluation of the stored data – statistical analysis of the network integrity in various time windows" – It is questionable if the student's outcome is a "framework" or just a normal script, because the only thing a user can edit is a "config file", where are only few parameters to adjust. User cannot use the script as a framework in my opinion. Another objection is that user cannot completely perform the analysis in various time windows.</p> <p>Similar objection is for the third guideline "Create a simple user interface to access the data evaluation and export activity reports" – The outcome is just a script with "config file" and it is also questionable if it is an "interface".</p>	

Methodology <i>Comment on the correctness of the approach and/or the solution methods.</i>	partially applicable
<p>Student did a nice review on the internet, servers etc. However, the data analysis review was very shallow, and it should be much deeper. The practical part also acts quite sloppy. The practical part also should have a deeper review on implementation in Python language.</p>	

Technical level <i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	E - sufficient.
<p>The review in the beginning is nice, however the data analysis is very shallow. The flowcharts do not follow the standard symbols and rules.</p>	

Formal and language level, scope of thesis <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>	E - sufficient.
<p>The thesis contains few half-empty pages (e.g., 9, 20, 37...). There are many code examples in the thesis which have no label or reference (pages 17, 20, 22, 23, 24 ...) – there should be minimum of code in the text of the thesis – there should be labeled algorithms, tables or figures (if necessary). Some of the code examples should be equations in cases on pages 25 and 29. The thesis is quite superficial and should be deeper and more extensive, especially the data analysis part and implementation part.</p>	

Selection of sources, citation correctness**C - good.**

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?

Student used a correct citation norm. The selection of sources is sufficient. I would prefer more verified scientific sources in the data analysis part. Student used mainly web-pages as a source.

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.

I wanted to run the code, but it was very hard from the user point of view. There was no "readme file" or "requirements file". There was also an error in the code in the "main.py" file line number 52 – the granularity did not use the data from "config file". The code should have a better documentation.

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

According to previous objections I summarize that the thesis acts quite superficially. It needs deeper insight in data analysis and statistics and also in Python implementation. Student almost did not fulfill the assignment. Running the code was really hard, because there was no documentation like "readme file" or "requirements file". The grade that I award for the thesis is **E - sufficient**.

Questions:

On page 29 you defined a formula determining number of bins in histograms, are there any other rules for histogram "design"? Why did you choose that formula?

Date: **17.5.2022**

Signature: