Supervisor's statement of a final thesis

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Thesis title: Performance impact of the EDNS Client Subnet Extension
Branch / specialization: Computer Systems and Virtualization 2021
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Evaluation criteria

1. Fulfillment of the assignment

▸ [1] **assignment fulfilled**
  [2] assignment fulfilled with minor objections
  [3] assignment fulfilled with major objections
  [4] assignment not fulfilled

In addition to what was required in step 3 of the assignment (a simple CLI application that stores the measurement data in CSV files), the developed application also includes a web interface for exploring the data and supports dynamic throttling so that the whole measurement can be done just by using the Globalping's free hourly request quota.

2. Main written part $\qquad$ 75 /100 (C)

Content-wise, the written part is fairly good and provides the necessary technical background, the metrics and methodology suggestions, the implementation challenges, the exact steps taken during the measurements, and the results. There are no significant factual errors. However, the text is not particularly great in terms of stylistics, and I feel it might be somewhat hard to read and understand. The sources used are properly cited.

3. Non-written part, attachments $\qquad$ 95 /100 (A)

The non-written part includes the CLI application, which exceeds the assignment requirements (see above), and all raw data, logs, and computations from the experimental part.

4. Evaluation of results, publication outputs and awards $\qquad$ 95 /100 (A)

There have been few studies on ECS in general, and those were mostly focused on its adoption or its impact on recursive resolvers. This thesis instead focuses on why ECS was

proposed in the first place - improving the performance of web services for the end users. The results help to better understand the benefits of ECS in real-world scenarios.

5. Activity of the student

    [1] excellent activity
▸ **[2] very good activity**
    [3] average activity
    [4] weaker, but still sufficient activity
    [5] insufficient activity

Fairly good activity, though maybe with slightly better time management, there would be more time to improve the written part at the end.

6. Self-reliance of the student

▸ **[1] excellent self-reliance**
    [2] very good self-reliance
    [3] average self-reliance
    [4] weaker, but still sufficient self-reliance
    [5] insufficient self-reliance

The student was able to do most of the work independently, with only brief consultations.

The overall evaluation   90 /100 (A)

Although the quality of the written part is lower than I had hoped (mostly in terms of stylistics), the student was able to design and perform the measurements, document all steps, and go beyond the assignment requirements in some aspects. As such, my overall grade is A - excellent.

Instructions

Fulfillment of the assignment

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.

Main written part

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. 52/2021, 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.

Non-written part, attachments

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.

Evaluation of results, publication outputs and awards

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.

Activity of the student

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.

Self-reliance of the student

From your experience with the course of the work on the thesis and its outcome, assess the student's ability to develop independent creative work.

The overall evaluation

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.