THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**DHT implementation in Java**
Author's name:	**Bc. Vojtěch Kuzdas**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Computer Science
Thesis reviewer:	Ing. Jan Fesl, Ph.D.
Reviewer's department:	Faculty of Information Technology, Department of Computer Systems.

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**challenging**

How demanding was the assigned project?

The thesis contains nontrivial problematics in the sense of the solved topic and implementation as well.

Fulfilment of assignment	**fulfilled**

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.

All required goals present in the thesis assignment were fulfilled.

Methodology	**correct**

Comment on the correctness of the approach and/or the solution methods.

The thesis's methodology is correct, the thesis looks like a homogenous unit. All chapters are organized in a logical order. The violation of this is the description of the DHT library. I do not understand well why the author did not start with a general approach containing all considered criteria followed by the implementation of specific DHT concepts in Part II. I'm missing a bit general detailed description of the library parts and their cooperation.

Technical level	**Choose an item.**

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?

The implementation code in Java code is at a very good level, fully acceptable for a master thesis. The thesis is well readable and understandable.

Formal and language level, scope of thesis	**A - excellent.**

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?

The formal language quality is at the good level, the level of English is fully sufficient for a master thesis.

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 thesis contains a sufficient count of resources, the student's primary information sources were the scientific papers. Based on my best knowledge, there exists no similar solution with a similar functionality (implemented in Java) currently. It is necessary to mean that there exist tens of solutions (https://github.com/topics/dht?l=java) but each of them contains an implementation of a specific DHT technology and not a general concept. From this perspective, the author created an innovative nontrivial solution usable by other people dealing with DHT-oriented problematics.

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 overall quality of the thesis is at a very good level and demonstrates that the author can create a complex nontrivial solution usable in the distributed environment. The one violation is the ordering of chapters in the Part II.

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. Pose questions that should be answered during the presentation and defense of the student's work.

I do recommend the thesis for acceptance.

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

Date: **11.6.2024**   Signature: Ing. Jan Fesl, Ph.D.

Question 1: Please, explain the chapter ordering of part II, why you started with the implementation and not with a general approach, requirements and proposal.