

I. IDENTIFICATION DATA

Thesis title:	Just-in-time compiler and garbage collector for FML
Author's name:	Martin Taibr
Type of thesis :	master
Faculty/Institute:	Faculty of Information Technology (FIT)
Department:	Department of Theoretical Computer Science
Thesis reviewer:	Konrad Siek
Reviewer's department:	External supervisor

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
The major complicating factor comes from the need of the project to serve as a model for other students. This means the solutions implements need not be the most efficient, but should be clear.	

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 delivered implementation meets my expectations as well as the initial specification.	

Activity and independence when creating final thesis	E - sufficient.
<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 student worked independently and asked for advice as necessary, which was very good. The activity was intermittent, and the thesis took a lot longer than expected, which is less good.	

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 thesis is technically sound. The student primarily concentrated on implementing a just-in-time compiler while putting some, but less attention towards the garbage collector implementation. The student researched the necessary prerequisites in-depth and showed an acuity in designing the compiler. He explained his thought processes in the thesis in a way that I found clear and understandable.	

Formal level and language level, scope of thesis	B - very good.
<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 work is written well, correctly sourced and structured, with some avoidable grammatical and stylistic errors. The thesis has the contents and outline I expect. While the thesis frontloads a lot of introductory material, part of the raison d'être of this work is to provide a model implementation to students, and the amount of detail in the thesis means it would serve as a good accompanying handout, presenting the implemented system in full.	

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 student found his own sources in relation to the researched topics and cited them correctly. The sources typically consist of technical documentation, which is appropriate for this topic. As a small note: the student cites his own class project as part of his motivation. This is completely correct and justified, but funny.

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.

This thesis took several years of actual intermittent work and failed attempts. While I regret that it took such a long time for the student to finish, I still think he shows a lot of technical ability and potential.

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 **B - very good**.

I think the thesis is technically of good quality, and the quality of the written portion is very good. The time it took to finish the thesis is the only detracting factor from my point of view.

Date: 06.02.2024

Signature: Konrad Siek

Click here and enter the date.