Assignment of master's thesis

Title:	Ahead-of-time compiler for the microC langauge
Student:	Bc. Václav Král
Supervisor:	doc. Ing. Filip Křikava, Ph.D.
Study program:	Informatics
Branch / specialization:	System Programming
Department:	Department of Theoretical Computer Science
Validity:	until the end of summer semester 2022/2023

Instructions

The goal of this thesis is to develop an ahead-of-time compiler for the microC language that is used in the program analysis course (NI-APR). The aim is to have a compiler into which we can plug the results of the various static analysis that we cover in the first half of the course. The implementation should be easy to follow - clarity is preferred over conciseness so that it can be used as educational material. It should be written in Scala and compatible with the rest of the microC code base (interpreter and analysis). The code should be well tested and documented so the students can follow the code.