Java Interpreter in Java

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The goal of this thesis is to write an interpreter for Java using Java. All elements of the interpreter (e.g., stack, values) should be modeled in Java such that it can run on any Java virtual machine.

Specific sub-goals are:
- Applying object-oriented design techniques when modeling the interpreter.
- Identifying possibilities for gathering runtime feedback during interpreter execution.
- Implementing a subset of Java such that the interpreter can be tested on established Java benchmarks.

Explicit non-goals are:
- Completeness with respect to the Java specification.
- Performance in comparison with existing Java interpreters.

The work’s progress should be discussed with the supervisor at least every 2 weeks. Please note the guidelines of the Institute for System Software when preparing the written thesis.

Supervisor: Dipl.-Ing. Thomas Würthinger