Erlang Metrics Extractor. Final Report

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Goal of the project

The main goal of the project is to gather metrics from the source code of programs written in Erlang. In order to do that, materials on software metrics should be studied as well as skills of working with JavaCC should be acquired.

Goal of the current stage

During this stage, grammar should be fully working and finalized, some additional metrics are extracted, and the system being set up easily.

What is done:Deliverable 1

A definition of a subset of Erlang grammar was found[1]. Also official non-standard grammar from Erlang/OTP sources was available.It is given in format which is used in `yecc`, a LALR-1 parser generator for Erlang[2]. An unofficial Erlang grammar adaptation in ANTLR v4 is also available on the web[3]. Transition into JavaCC grammar format was processed. Also, materials about metrics have been studied.

What is done: Deliverable 2

Transitioning into JavaCC grammar format was finished, as well as some metrics extractors. Blob file was prepared to extract some metrics from a .erl files in a specified folder into `metrics.csv` file.

What is done: Deliverable 3

Some changes to grammar were made, additional metrics were added

Results

The following metrics are available for Erlang sources:
- Lines of code
- Number of metrics
- Number of modules
- Number of imports
- Number of exports

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[1] [Definition of the Erlang Grammar](#)
[2] [yecc](#)
[3] [Unofficial ANTLR v4 grammar](#)

Launching the application

To be able to start this application, you must have Java installed.

To run the extractor, type `java -jar extractor.jar <FOLDER_NAME>`

The project includes `erlang` folder with .erl sources. Metrics are available in `metrics.csv` file.