



Grammar-based Editor With Syntax Highlighting and Code Completion

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In this master thesis, an editor should be developed which supports syntax highlighting and code completion. The editor should use a table driven parser for the code completion suggestions. To generate the input for the table driven parser, a compiler generator (*Coco/E*) must be implemented. *Coco/E* must generate a list of terminal symbols, a top down graph, and a table of semantic actions. The grammar syntax for *Coco/E* must be equivalent to the grammar syntax for *Coco/R*.

The editor must:

- 1) Support grammar descriptions in *Coco/R* syntax.
- 2) Highlight tokens, e.g., keywords, strings.
- 3) Suggest syntactic code completion.
- 4) Support semantic code completion, if the user provides the completion proposals, e.g., variables, methods, and classes.

The project must be implemented in Java, the editor should be compatible with Eclipse. The work and the code must be discussed on a regular basis with the supervisor.

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