

dOvs - Parsing

Group 9

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1 Introduction

This report describes our approach to develop the parser, which is the first component in the compilation process. This parser is implemented using the ML-Yacc, as it is suggested by the book and the project description.

The first three sections describe different parts of the parser development. First, important parts of the tiger grammar are introduced with respect to the ML-Yacc. Secondly, it is described how the semantics actions are used to construct the AST for the program. Then it is shown how conflicts were detected, and what was done in order to resolve them.

Following these sections an overview of the problems encountered and experience gained during the work process is provided. Finally, five tiger programs are provided as test cases for different aspects of the developed parser.

2 The tiger grammar

Listing test

3 The abstract syntax

4 Conflict management

5 Problems encountered & experience gained

6 5 tiger programs