

Abstract

Natural Language Processing is an area of interdisciplinary research that enables computers to communicate with humans in the same way as humans communicate with other humans. One of the stages in Natural Language Processing is parsing. Parsing has developed rapidly covering wide, high accuracy, and efficiency in the last few periods. Many previous studies have succeeded in converting a sentence from various languages into the form of a parse tree, but only a little for Indonesian. In order to support various language processing applications and in order to enhance research in the field of Natural Language Processing, an Indonesian parser is needed and its existence needs to be developed. In this final project research, a system will be built to convert Indonesian sentences into parse tree form using the Bottom-Up Parsing method. The form of the parse tree produced by this system will be evaluated for performance testing using PARSEVAL metrics. With the total performance testing results obtained precision and recall of 40,94% and 71,59%.

Keywords: natural language processing, parsing, parse tree, bottom-up parsing, PARSEVAL.