

# **MALAY GRAMMAR CHECKER SYSTEM**

by

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## ABSTRACT

The ultimate goal of this project is to develop a Malay Language Grammar Checker. A grammar checker system is actually part of natural language processing, a branch of artificial intelligence. A good grammar checker serves many useful purposes for different people at different places. I can justify this by looking at the importance of existing grammar checkers. Almost every article, book, web site, or even material printed in black and white uses a grammar checker to verify the grammatical aspect of the sentences used.

The fact that a grammar checker relieves many people from time taxing conventional checking by reading is of no doubt. The Malay Language Grammar Checker could prove useful in big organizations as well as for home use for writing formal letters, contracts, invitation or other materials using the national language, Bahasa Malaysia. The development of this project does not require many resources. The main requirements are the programmers and the software use to develop this project, which is Visual Prolog.

The primary feature of this project is to be able to verify the grammar of Malay sentences and also able to locate the errors if any. In addition, it will also check to see whether the words used exist in the dictionary. These features will of course ease the user's concern of making grammatical mistakes. As a part of this independence study, a prototype will be developed prior to building a more extensive grammar checker

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## CHAPTER 1

### INTRODUCTION

Since there are many countries in this world, so do the languages used. Sometimes we need a system to assist us in order to do the grammar checking for these languages especially for those languages that rarely been used by us. There is a lots of grammar checker system exist but hardly ever heard about Malay Grammar Checker. For this project, a prototype will be build for the Malay Language Grammar Checker using Visual Prolog. In order to build the prototype, first, I will carry out a literature review on grammar checkers in general. During this review, existing grammar checkers are evaluated to gather some information apart from identifying their weaknesses. Other than that, a study on available parsing strategies will also be carried out to analyze their advantages and disadvantages so that the prototype could be implemented using the most suitable strategy. Besides that, attention will also be given to the Malay Language grammar. Although I could analyze many existing grammar checkers but the languages for which they are meant for are very different from Malay Language. Malay Language has its own distinctive grammar rules and not to mention a rich vocabulary too. The term Bahasa Malaysia and Malay Language are used interchangeably in this report.