



PROJECT REPORT
SENTENCE ANALYSIS WITH ARTIFICIAL
INTELLIGENCE MACHINE LEARNING USING FINITE
STATE AUTOMATA
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12.02.0089
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INFORMATICS ENGINEERING DEPARTMENT
FACULTY OF COMPUTER SCIENCE
SOEGIJAPRANATA CATHOLIC UNIVERSITY

APPROVAL AND RATIFICATION PAGE

PROJECT REPORT

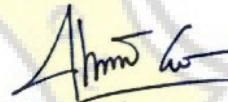
Sentence Analysis with Artificial Intelligence Machine Learning using Finite State Automata

by
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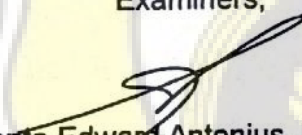
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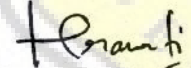
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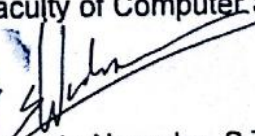
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STATEMENT OF ORIGINALITY

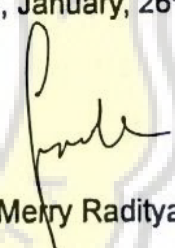
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ABSTRACT

Abstract — Preparation of sentences in Indonesian is very important. Writing errors can cause errors of meaning that might occur. It is necessary for a program that can analyze sentences Indonesian properly. One way is by using a finite state automata algorithm, which are useful to identify the class of words in a sentence.

The given inputs by user is processed through the parsing process, which breaks down the sentence into tokens array (Finite State Automata), then the program will first examine structure of the sentence (SPO) to determine the meaning of each word and check whether the discovered patterns of phrase or pattern in question in the brain file. If found, the program will return a response in accordance with the existing ones in the brain file. If not, then the program will provide a response to save in a temporary file till the program know what is the word means.

Intelligence program is determined by the existing knowledge in the brain file. The more knowledge (vocabulary of words) that exist in the brain file from user input, be cleverer this program (Learning Process).

Keywords : *finite state automata algorithm, sentence structure, word class, artificial intelligence, machine learning, sentence breaker.*

PREFACE

The project report is divided into six chapters. The first chapter contains troubleshooting basic sentence structures (SPO) using the finite state automata algorithm. Restrictions will be done and the goals to be achieved in the execution of this project. In chapter two, this project report discusses the problems that will arise, the methods and algorithms used for completing the project. Chapter three discusses the steps that should be taken to settle the topics studied. Chapter four discusses describes problems that will be resolved during the study, presented in the form of a diagram. The diagram that there is a use case diagrams and flow charts of the solution project was undertaken. In chapter five, discusses the implementation of the program and some source code is shown to clarify the chapter's intent. Conducted experiments to individual cases that may occur when the program is used. And the sixth chapter discusses the conclusion of this project and suggestions for further research.

TABLE OF CONTENTS

APPROVAL AND RATIFICATION PAGE	ii
STATEMENT OF ORIGINALITY	iii
ABSTRACT	iv
PREFACE	v
CHAPTER I INTRODUCTION	1
1.1. Background	1
1.2. Scope	1
1.3. Objective.....	2
CHAPTER II LITERATURE STUDY	3
2.1. Algorithm.....	3
2.1.1. Finite State Automata	3
CHAPTER III RESEARCH METHODOLOGY	6
3.1. Research Methodology	6
CHAPTER IV ANALYSIS AND DESIGN.....	7
4.1. Analysis	7
4.1.1. Use Case Diagram	7
4.1.2. Flow Chart	8
4.2. Design	10
4.2.1. UML Class Diagram.....	10
CHAPTER V IMPLEMENTATION AND TESTING	17
5.1. Implementation	17
5.2. Testing	22
CHAPTER VI CONCLUSION.....	25
6.1. Conclusion.....	25
6.2. Further Research.....	25
REFERENCES	

TABLE OF TABLE

Table 1: Resume Sentence Test.....	24
Table 2: Resume Test for Learning Program	25



TABLE OF FIGURE

Figure 1: Finite State Automata Diagram	5
Figure 2: Use Case Diagram.....	7
Figure 3: Flow Chart Diagram	8
Figure 4: UML Class Diagram	10
Figure 5: MainClass.java	11
Figure 6: Gui.java	11
Figure 7: Sapaan.java.....	12
Figure 8: NodeHuruf.java	12
Figure 9: LinkedListDataHuruf.java	13
Figure 10: NodeKata.java	14
Figure 11: LinkedListKata.java	15
Figure 12: LinkedListPola.java	16
Figure 13: run() Method	17
Figure 14: Display Program	18
Figure 15: Save and Scan the Subject.....	20
Figure 16: Phrase Probability.....	21
Figure 17: Homepage	22
Figure 18: Result	22