

TABLE OF CONTENTS

Title	Page No.
DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
LIST OF ABBREVIATION	iv
CHAPTER 1	1 – 3
INTRODUCTION	
1.1 Introduction	1
1.2 Motivation and Problem Stateme	1
1.3 Project Scope	1
1.4 Project Objective	2
1.5 Impact, Significant and Contribution	2
1.6 Background Analysis	2
CHAPTER 2	4 – 7
LITERATURE REVIEW	
2.1 Introduction	4
2.1.1 Natural Language Processing	4
2.1.2 Natural Language Toolkit (NLTK)	4
2.1.3 Stop Words	5
2.1.4 NLTK Stop Words	6
2.1.5 Lemmatization	6
2.1.6 Scikit-learn	6
2.2 Methodology	7
CHAPTER 3	8 – 13
SYSTEM IMPLEMENT PROCESS	
3.1 Process	8
3.2 Tools	8

3.3	Data Acquisition.....	9
3.4	Data Labeling.....	10
3.5	Implementation Issues and Challenges	10
3.6	Timeline	12
3.7	Requirement Specification	12
CHAPTER 4		14 – 21
SYSTEM IMPLEMENTATION		
4.1	System Implementation	14
4.1.1	Data Acquisition.....	14
4.1.2	Data Analyzing	15
4.1.3	Natural language Processing (StopWords).....	16
4.1.4	Data Cleaning.....	16
4.1.4.1	Removing unwanted characters.....	17
4.1.4.2	Tokenization.....	17
4.1.4.3	De-capitalization.....	17
4.1.4.4	Removing punctuation, numbers.....	17
4.1.4.5	Removing Stopwords.....	18
4.1.4.6	De-tokenization.....	18
4.1.5	Lemmatization	18
4.1.6	Vectorization	18
4.1.7	Sentiment Analysis	20
4.1.7.1	Observation.....	21
4.1.8	Sarcasm Detection.....	21
CHAPTER 5		22
RESULT ANALYSIS		
5.1	Result Analysis.....	22
CHAPTER 6		23
CONCLUSION AND FUTURE ENHANCEMENT		
6.1	Conclusion	23
6.2	Future Enhancement.....	23
REFERENCES		24

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page No.</u>
Table 3.4	Gantt chart of system Implementation	12

LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page No.</u>
Fig.3.1	Process of system Implementation	8
Fig. 4.1.1(a)	Sentiment Analysis Dataset	14
Fig. 4.1.1(b)	Sentiment Analysis Dataset	15
Fig. 4.1.2	Description of Sentiment Analysis Dataset	16
Fig. 4.1.5	After Data Cleaning and Lemmatization	19
Fig. 4.1.7(a)	Process	20
Fig. 4.1.7(b)	Accuracy Result of Sentiment Analysis Model	21
Fig. 4.1.8	Accuracy Result of Sarcasm Detection Model	21