## **ABSTRACT**

Sentiment analysis or opinion mining is the computational study of people 's opinions, sentiments, attitudes and emotions expressed in written language. Its popularity is mainly for two reasons, firstly whenever we need to make a decision we want to hear others opinion. Secondly, it presents many challenging research problems which had never been attempted before 2000.

Sentiment analysis of a feature captures the orientation of a review in this sense. But, to understand the importance of feature relevance with respect to time, sentiment analysis is extended to tend analysis. Trend Analysis is the extension of sentiment analysis which aims to capture the inclination of the features of a product in the long run.

## TABLE OF CONTENTS

1. INTRODUCTION				
	1.1 MOTIVATION	1		
	1.2 PROBLEM DEFINITION	2		
	1.3 OBJECTIVE OF PROJECT	3		
	1.4 LIMITATIONS OF PROJECT	4		
2. LI	2. LITERATURE SURVEY			
	2.1 INTRODUCTION	5		
	2.2 EXISTING SYSTEM	8		
	2.3 DISADVANTAGES OF EXISTING SYSTEM	8		
	2.4 PROPOSED SYSTEM	9		
	2.5 CONCLUSION	10		
3. AN	3. ANALYSIS			
	3.1 INTRODUCTION	11		
	3.2 SOFTWARE REQUIREMENT SPECIFICATION	12		
	3.3 ALGORITHMS	17		
	3.4 OVERVIEW OF TECHNOLOGIES USED	22		
	3.5 CONTENT DIAGRAM OF PROJECT	26		
4. DI	4. DESIGN			
	4.1 INTRODUCTION	27		
	4.2 UML DIAGRAMS	38		
	4.3 MODULE DESIGN AND ORGANIZATION	44		

5. IMPLEMENTATION AND TESTING	
5.1 INTRODUCTION	48
5.2 EXPLANATION OF KEY FUNCTIONS	48
5.3 RESULT ANALYSIS AND TEST CASES	68
6. CONCLUSION	
7. REFERENCES	78

## LIST OF FIGURES

FIG. NO.	NAME OF THE FIGURE	PG. NO.
2.1	EXISTING SYSTEM ARCHITECTURE	8
2.2	PROPOSED SYSTEM ARCHITECTURE	9
3.1	CONTENT DIAGRAM	26
4.2.1	USE CASE DIAGRAM	38
4.2.2	ACTIVITY DIAGRAM	39
4.2.3	CLASS DIAGRAM	40
4.2.4	SEQUENCE DIAGRAM	41
4.2.5	COMPONENT DIAGRAM	42
4.2.6	DEPLOYMENT DIAGRAM	43
5.2.1	XML PROCESSING	52
5.2.1.1	TEST CASES	53
5.2.2	PRE PROCESSING	54
5.2.2.1	TEST CASE	55
5.2.3	POS-TAGGING	56
5.2.3.1	TEST CASES	57
5.2.4	DISCRETIZATION	58
5.2.4.1	NOUNS	59
5.2.4.2	ADJECTIVES	59
5.2.4.3	TEST CASES	60
5.2.4.3.1	ADJECTIVES	60

5.2.4.3.2	NOUNS	61
5.2.5	FREQUENT NOUN GENERATION	62
5.2.5.1	TEST CASE	63
5.2.6	RELEVANT NOUN GENERATION	64
5.2.6.1	TEST CASE	65
5.2.6.1.1	FREQUENT SET	65
5.2.6.1.2	ACTUAL FEATURE SET	66
5.2.7	SENTIMENT WORD EXTRACTION	67
5.2.8	TREND ANALYSIS	68
5.3.1	XML PROCESSING	70
5.3.2	PRE-PROCEESING	71
5.3.3	POS TAGGING	72
5.3.4	DISCRETIZATION	73
5.3.4.1	NOUNS	73
5.3.4.2	ADJECTIVES	74
5.3.5	FREQUENT NOUN GENERATION	75
5.3.6	RELEVANT NOUN GENERATION	76
5.3.7	SENTIMENT WORD EXTRACTION	77