#### **ACKNOWLEDGEMENT**

First and foremost, I thank **GOD ALMIGHTY** for his divine grace and blessing in making all this possible. I had received valuable guidance and help from many people among which some requires special mention.

I am extremely grateful to the **MANAGEMENT** for providing adequate infrastructural amenities to work in, without which this work would not have been feasible.

I would like to express our heartfelt thankfulness with utmost esteem and gratitude to the Principal, **Prof. Dr. L. PADMA SURESH** for this opportune help and permitting me to utilize the facilities for the successful completion of our project and preparation of this report.

I am privileged to place on record our profound sense of gratitude and appreciation to Head of Department, Department of Computer Science & Engineering, for his generous guidance, help and constructive suggestions.

I am heartedly announcing my ardent and earnest thankfulness to our Project coordinator Mrs. Kavitha V K, for her tutelage and inspiration was the leading factor in transforming in efforts to fruition. Her practical and perspective visualization have shown light on the trail to triumph.

Our honest gratefulness goes to my project guide, **Ms. Rose Mary Thomas** for her precious support offered during the course of development of this Project.

It's my delight to disseminate my heartfelt thanks to the faculty members of Department of Computer Science and Engineering for their insightful comments and constructive suggestions to perk up the quality of my work. I bow down with indebtedness and a great deal of exhilaration the vital role of technical personnel who have prearranged all necessary paraphernalia for the victorious development of our project. Finally, yet importantly, I shall put into words courtesy and admiration to my friends and relatives for their stimulating suggestions and encouragement.

**Helan Mariyam Aipe** 

#### **ABSTRACT**

As more and more sectors of life have become impacted by computers. The major areas include medical, industrial, research especially in educational institutions have followed this trend as well. The ultimate aim was to provide a suitable system as well as easy to follow guidelines on how to propel the lectures from the conventional dull chalk and talk environment to the realm of all interactive computer assisted Web based electronic classroom. Through the years several types of virtual classrooms have developed and, in our practice, we defined two main types of them. The most frequently used on-line classroom denomination refers to user connection and interaction achieved via computerized networks-provided synchronized communication. Other important features include an attempt to model the traditional class room via the central role of the instructor and interaction options available to students. The second type of virtual classrooms focuses on content provision while placing a lesser emphasis on student interaction. In this case students can follow the instructor presentation or any other auxiliary material both in a synchronous and asynchronous manner. This website allows full student interaction and use of multimedia in the lecture. Comparing the existing websites, this project relies more emphasis on voice supporting. The virtual classroom is interesting place for lecturers and students to join and become the most important feature of E-Learning web sites that makes a complete E-Learning system. This project presents the results of the "Virtual Classroom" project, LEARNWORDS for enhancing student-teacher communication.

# TABLE OF CONTENTS

SL NO	TITLE	PAGE NO
	ACKNOWLEDGEMENT	I
	ABSTRACT	П
	TABLE OF CONTENT	III
	LIST OF FIGURES	VI
	LIST OF ABBREVIATIONS	VII
	LIST OF TABLES	VIII
1.	INTRODUCTION	1
2.	LITERATURE SURVEY	4
3.	PROBLEM IDENTIFICATION	9
4.	PROPOSED SYSTEM	10
	4.1 Existing System	
	4.2 Proposed System	
	4.3 Project Plan	
	4.4 Feasibility study	
5.	REQUIREMENT SPECIFICATION	15
	5.1 Performance requirement	
	5.2 Safety & security requirement	
	5.3 Software quality attribute	
	5.4 External Interface requirement	

6.	SYSTEM DESIGN	16
	6.1 Data Flow	
	6.2 Use Case Diagram	
	6.3 Class Diagram	
	6.4 Interaction Diagram	
	6.5 Sequence diagram	
	6.6 Database Design	
7.	IMPLEMENTATION	21
	7.1 System Implementation	
	7.2 Modular Design	
	7.3 Working	
8.	TESTING	26
	8.1 Levels Of Testing	
	8.2 Testing Analysis	
	8.3 Traceability matrix	
9.	RESULT ANALYSIS	29
10.	CONCLUSION	30
	REFERENCES	31
	APPENDIX A: SRS	33
	APPENDIX B: SDD	38

## LIST OF FIGURES

FIGURE NO.	FIGURE NAME	PAGE NUMBER
Fig 1	USE CASE DIAGRAM	21
Fig 2	CLASS DIAGRAM	22
Fig 3	ADD COURSE/ATTATCHMENT	29
Fig 4	LOGIN PAGE	16
Fig 5	STUDENT PAGE	27
Fig 6	TEACHER PAGE	28
Fig 7	INTERACTION DIAGRAM	22
Fig 8	SEQUENCE DIAGRAM	23
Fig 12	PROJECT PLAN	12
Fig 11	TRACEABILITY	
Fig 9	DATA FLOW DIAGRAM	23

## LIST OF ABBREVIATIONS

vir → virtual

edu →education

SRS → System Requirement Specification

FTP → File Transfer Protocol

HTTP → Hyper Text Markup Language

## LIST OF TABLES

TABLE NO	NAME	PAGE NUMBER
1	USER_TABLE	20
2	ATTATCHMENTLIST_TABLE	20
3	USER_LOGIN	20
4	COURSE_TABLE	21
5	QUESTION_TABLE	21
6	TESTCASE ANALYSIS	26