Final Year Project Report

Smart-LMS

Project Advisor: Maam Tayyaba Anjum

Submitted By:

Muhammad Imran 13005065116

Muhammad Adil 13005065185

Ata ur Rehman 13005065245

Session

2013-2017

University of Management and Technology

C-II Johar Town Lahore Pakistan

Dedication

This project and work done by our team is dedicated to Ms.Tayyaba Anjum project advisor she helped us in the entire possible manner. We appreciate the efforts of the Dean Dr. Shukat Iqbal of SST and we thanks Director Dr. Malik Tahir and Director of projects Dr. Masroor. All the respected faculty members of UMT are also appreciated for their support and believe in us.

This project is dedicated to my parents, who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my teachers, who taught me that even the largest tasks can be accomplished if it is done one step at a time.

Final Approval

Panel of Examiners

Head of Department _____

Dr. Malik Tahir

Department of Computer Science

UMT Lahore

Program Director (Final Year Projects) _____

Dr. Masroor

Department of Computer Science

UMT Lahore

Supervisor _____

Ms. Tayyaba Anjum

Department of Computer Science

UMT Lahore

Acknowledgment

I am highly indebted to the entire team of faculty of University of management and technology and specially Ms Tayyaba Anjum (our advisor), my friends and fellows for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project.

Project Title	**Smart LMS**
Objective	To get notification of website updates on an android application.
Undertaken by	Muhammad Adil Muhammad Imran Ata ur Rehman
Supervised by	Ma'am Tayyaba Anjum
Starting Date	31-7-2016
Completion Date	31-7-2017
Tools Used:	Here is the list of the tools used. 1. Web Tools a) Sublime Text b) PHPStorm c) Xampp d) Creatly e) EDraw 2. Android Tools a) Android Studio
Operating System	Window 10
Documentation	Microsoft Word 2013

Abstract

We have been facing the issues of remaining updated with the teachers, even we have enrolled in their courses. Teachers have been assigning tasks to students by using their online accounts which doesn't ensure any connectivity between students and teacher. We have brought this problem to an end where we had taken this surety to next level. Anything updated by teachers will be notified to students at the time it's updated. So many of them won't miss any update.

CONTENTS **8**

DEFINITIONS AND ACRONYMS 10
LIST OF FIGURES 11
LIST OF TABLES 12

1. INTRODUCTION **13**

1.1 MOTIVATIONS 13
1.2 PROJECT OVERVIEW 13
1.3 PROBLEM STATEMENT 13
1.4 OBJECTIVES 14

2. DOMAIN ANALYSIS ..... **14**.

2.1 CUSTOMER 15
2.2 STAKEHOLDERS 15
2.3 AFFECTED GROUPS WITH SOCIAL OR ECONOMIC IMPACT 16
2.4 DEPENDENCIES/ EXTERNAL SYSTEMS 16
2.5 REFERENCE DOCUMENTS 16
2.5.1 Related Projects *16*
2.5.2 Feature Comparison *17*

3. REQUIREMENTS ANALYSIS **18**

3.1 REQUIREMENTS 18
3.2 LIST OF ACTORS 19
3.3 LIST OF USE CASES 19
3.4 SYSTEM USE CASE DIAGRAM 20
3.5 EXTENDED USE CASES 21
3.6 USER INTERFACES (MOCK SCREENS) 44

4. DATA FLOW DIAGRAM (OPTIONAL) **48**

4.1 DATA FLOW DIAGRAM LEVEL 0 48
4.2 DATA FLOW DIAGRAM LEVEL 1 49
4.3 DATA FLOW DIAGRAM LEVEL 2 50

5. SYSTEM DESIGN **50**

5.1 SYSTEM ARCHITECTURE DIAGRAM 51
5.2 CLASS DIAGRAM 52
5.3 COLLABORATION DIAGRAMS 52
5.5 ERD 54
5.6 DATA DICTIONARY 55

6. IMPLEMENTATION DETAILS **60**

6.1 DEVELOPMENT SETUP 60
6.2 DEPLOYMENT SETUP 60
6.3 ALGORITHMS 61
6.4 CONSTRAINTS 67

6.4.1 Assumptions *67*
6.4.2 System constraints *67*
6.4.3 Restrictions *67*
6.4.4 Limitations *67*

7. TESTING **68**

7.1 EXTENDED TEST CASES 68
7.2.1 Code snippet *86*
7.3 TRACEABILITY MATRIX 88
7.3.1 RID vs UCID (requirements vs use cases) *88*
7.3.2 Prototypes (RID vs PID) *89*
7.3.3 Test Cases (RID vs TID) *89*
7.3.4 Coverage (UCID vs TID) *91*

8. RESULTS/OUTPUT/STATISTICS **93**

8.1 %COMPLETION 93
8.2 %ACCURACY 93
8.3 %CORRECTNESS 94

9. CONCLUSION **95**

10. FUTURE WORK **96**

11. BIBLIOGRAPHY **97**

12. APPENDIX **98**

12.1 GLOSSARY OF TERMS 98
12.2 PRE-REQUISITES 98

Definitions and Acronyms

Acronym	Definition
LMS	Learning Management System
CRUD	Create, Read, Update, Delete

Table 1: Table of acronyms and definitions

List of Tables

Table 1: table of acronyms and definitions.....10
Table 2: list of stakeholders.....15

1. INTRODUCTION

Smart LMS has been developed for the betterment of students and the stakeholders who are all attached to the organization. Smart LMS has been especially developed for the students and teacher for their connectivity with each other. This application provides maximum assurety of connectivity between students and teacher. This application requires theinstallation and the login of account that is register in the database of the organization and that keeps the student tracked with the upcoming post from the teachers.