

Final Year Project Report
E-Thrills (iOS Based)



PROJECT ADVISOR:

Mr. Ahtsham Ali

SUBMITTED BY:

Tayyab Afzal	13005065317
Hamza Azeem	13005065346
Muhammad Adeel	13005065324
Hafiz Muhammad Salman	13005065308

SESSION:

Year 2013-2017

School of System & Technology
University of Management and Technology
Lahore

Dedication

We devote our work to our adoring guardians and extraordinary appreciation to our aware instructors, a warm appreciation to our relatives and companions, whose inspirational statements and push for determination ring in our ears. Without their collaboration it would have not been conceivable to finish the graduation and make them feel glad. We likewise commit this paper to our companions who have upheld us all through the procedure in any capacity. We will dependably welcome all they have done and how they bolstered us.

Final Approval

Panel of Examiners

- **Head of Department**
Department of Software Engineering
UMT Lahore _____

- **Program Director (Final Year Projects)**
Department of Software Engineering
UMT Lahore _____

- **Supervisor**
Department of Software Engineering
UMT Lahore _____

- **Co-Supervisor**
Department of Software Engineering
UMT Lahore _____

Acknowledgment

To start with and the preeminent, we wish to offer our most profound thanks to our venture guide Mr. Ahtsham Ali for the persistent help in our BS contemplates and in the last year extend, for his understanding, inspiration, energy and tremendous learning. His direction helped all of us the time in the last year extend and the written work of this proposal. Without him this proposition would not have been finished. We additionally might want to thank all the regarded instructors of software engineering office for their direction inside and out they control us and make us qualified to finish this theory.

We specially like to thank Mr. Ahtasham Ali who helped us every step of the way to complete this project as an adviser and as a teacher, we would also like to thank Mr. Muhammad Nabeel, Mr. Sajid Mehmood and Mr. Abu Baker.

Project Title

E-thrills (IOS based)

Objective

To provide the users a proper guide/platform to manage there budget and time while discovering new places and to learn from others experiance.

Undertaken by

Syed Hamza Azeem 13005065346

Hafiz Muhammad Salman 13005065308

Tayyab Afzal 13005065317

Rana Muhammad Adeel 13005065324

Supervised by Sir Ahtsham Ali

Starting Date 9/10/16

Completion Date 30/7/2017

Tools Used

- MsqI Work Bench,
- Adobe Photoshop,
- Balsamiq mockups tool,
- Xcode

Operating System Windows, Mac OS and iOS

Documentation Microsoft word 2013, Gmail Drive

Plagairism Report

Abstract

The world is now turning into a global village. Now to travel from one place to another has become so much easier than it used to be. And things are still changing rapidly. Every year huge amount of changes are taking place. And everything around us is so connected that to access it is becoming easier.

We are coming up with the idea that will somehow help our user to discover changes around them in a far different way. It will work as a guide to those who are interested in discovering new places.

REVISION CHART

Version	Primary Author(s)	Description of Version	Date Completed
0.1	TBD	Initial draft created for distribution and review comments	22/11/2016
0.1.1	TBD	To give SRS a consistent look	2/12/2016
0.1.2	TBD	Update SRS to reflect suggestion from advisor	6/12/2016
0.1.3	TBD	Update section to describe new product design	20/12/2016
0.1.4	TBD	Update section to describe new product flow	30/12/2016
0.1.5	TBD	Final Inspection	20/7/2017

CONTENTS

CONTENTS.....	1
DEFINITIONS AND ACRONYMS.....	3
LIST OF FIGURES.....	4
LIST OF TABLES.....	5
1. INTRODUCTION.....	6
1.1 MOTIVATIONS.....	6
1.2 PROJECT OVERVIEW.....	6
1.3 PROBLEM STATEMENT.....	6
1.4 OBJECTIVES.....	6
2. DOMAIN ANALYSIS.....	7
2.1 CUSTOMER.....	7
2.2 STAKEHOLDERS.....	7
2.3 AFFECTED GROUPS WITH SOCIAL OR ECONOMIC IMPACT.....	7
2.4 DEPENDENCIES/ EXTERNAL SYSTEMS.....	7
2.5 REFERENCE DOCUMENTS.....	8
2.5.1 Related Projects.....	8
2.5.2 Feature Comparison.....	9
3. REQUIREMENTS ANALYSIS.....	10
3.1 REQUIREMENTS.....	10
3.2.....	11
3.2 LIST OF ACTORS.....	11
3.3 LIST OF USE CASES.....	11
3.4 SYSTEM USE CASE DIAGRAM.....	12
3.5 EXTENDED USE CASES.....	13
3.5 EXTENDED USE CASES.....	13
3.5 EXTENDED USE CASES.....	13
3.6 USER INTERFACES (MOCK SCREENS).....	20
3.6 USER INTERFACES (MOCK SCREENS).....	21
3.6 USER INTERFACES (MOCK SCREENS).....	22
4. SYSTEM DESIGN.....	23
4.1 SYSTEM ARCHITECTURE DIAGRAM.....	23
4.2 CLASS DIAGRAM.....	24
4.3 SEQUENCE DIAGRAMS.....	25
4.3 SEQUENCE DIAGRAMS.....	26
4.3 SEQUENCE DIAGRAMS.....	27
4.4 COLLABORATION DIAGRAMS.....	28
4.4 COLLABORATION DIAGRAMS.....	29
4.5 ERD.....	30
4.6 DATA DICTIONARY.....	31

5.	IMPLEMENTATION DETAILS	32
5.1	DEVELOPMENT SETUP	32
5.2	DEPLOYMENT SETUP	32
5.3	ALGORITHMS	33
5.3	ALGORITHMS	34
5.4	CONSTRAINTS	35
5.4.1	Assumptions	35
5.4.2	System constraints	35
5.4.3	Restrictions	35
5.4.4	Limitations	35
6.	TESTING	36
6.1	EXTENDED TEST CASES	36
6.1	EXTENDED TEST CASES	37
6.1	EXTENDED TEST CASES	38
6.1	EXTENDED TEST CASES	39
6.1	EXTENDED TEST CASES	40
6.1	EXTENDED TEST CASES	41
6.1	EXTENDED TEST CASES	42
6.2	DECISION TABLE	43
6.2.1	Code snippet	43
6.3	TRACEABILITY MATRIX	44
6.3.1	RID vs UCID (requirements vs use cases)	44
6.3.2	Prototypes (RID vs PID)	44
6.3.3	Test Cases (RID vs TID)	45
6.3.4	Coverage (UCID vs TID)	45
7.	RESULTS/OUTPUT/STATISTICS	46
7.1	%COMPLETION	46
7.2	%ACCURACY	46
7.3	%CORRECTNESS	46
8.	CONCLUSION	47
9.	FUTURE WORK	48
10.	BIBLIOGRAPHY	49
10.1	BOOKS	49
10.3	ARTICLES	50
10.5	OTHER REFERENCES	50
11.	APPENDIX	51
11.1	GLOSSARY OF TERMS	51
11.2	PRE-REQUISITES	51

Definitions and Acronyms

Acronym	Definition
UMT	University of Management and Technology
POS	Point of Sale

Table 1: table of acronyms and definitions

List of Figures

Figure 1: sample use case diagram with explanation.....	12
Figure 2: Mockup (Sign In).....	18
Figure 3: Budget Estimate.....	19
Figure 4: Category.....	20
Figure 5: Place.....	21
Figure 6: MAPS.....	22
Figure 7: System Architecture.....	23
Figure 8: Class Diagram.....	24
Figure 9: Sequence Diagram (Sign Up)	25
Figure 10: Sequence Diagram (Budget)	26
Figure 11: Sequence Diagram (Feedback)	27
Figure 12: Collaboration Diagram (Search Place)	28
Figure 13: Collaboration Diagram (Review)	29
Figure 14: ERD.....	30
Figure 15:Code Snippet 1.....	43
Figure 16:Code Snippet 1.....	43
Figure 17: Book 1.....	49
Figure 18: Book 2.....	49

List of Tables

Table 2: table of acronyms and definitions.....	3
Table 2: list of stakeholders.....	7
Table 3: Feature Comparison.....	9
Table 4: Requirement 1.....	10
Table 5: Requirement 2.....	10
Table 6: Requirement 3.....	10
Table 7: Functional Requirements.....	11
Table 8: Use Case (Sign Up)	13
Table 9: Use Case (Log In)	14
Table 10: Use Case (Cost Estimation)	15
Table 11: Use Case (Search Place)	16
Table 12: Use Case (Review)	17
Table 13: Data Dictionary.....	31
Table 14: Test Case (Facebook Login)	36
Table 15: Test Case (Current Location)	37
Table 16: Test Case (Layout Handling)	38
Table 17: Test Case (Data From Server)	39
Table 18: Test Case (Rating Test)	40
Table 19: Test Case (Category Test)	41
Table 20: Test Case (Category 2 Test)	42
Table 21: RID v/s UCID.....	44
Table 22: RID v/s PID.....	44
Table 23: RID v/s TID.....	45
Table 24: UCID v/s TID.....	45

1. INTRODUCTION

1.1 Motivations

The idea came to us that whenever we visit some new place we never have the correct or any estimation of budget or time that any activity would cost us to perform. So we planned to develop a platform, which will help its users to learn from other people experience.

1.2 Project Overview

The main idea of this project is to enable people to explore new places to have fun around. To do so the users will have to put their location in the IOS based application and put their budget and time for which they are willing to have fun/entertainment. Then the app will suggest all the available options under that time, budget and the category of entertainment chosen by the user. This way people will be able to explore new places to have fun in a very good way by knowing that which place is best for them according to their situation (available budget and time) so the app will help users to decide that what is the best way to have fun/entertainment in a very precise manner. Users can also suggest new places they discover and if that place gets good reviews it can be added to the app for other users as an option to visit. So this way users will discover and add places by their selves and options will keep on increasing, more options means more user's attraction.

1.3 Problem Statement

We are trying to build an application that will save time and budget of its users. We will do this with comparing the input of the user and the data set we have in our application. We are suggesting the price of any activity our users want to perform. To provide the exact price is the problem because prices are varying time to time and also one can ha multiple options in place like amusement parks. So we will output in form of range.

One other issue was that the data around us is changing rapidly and if need to be accurate our data must be update regularly but to update it manually takes time. So we are taking our data from Google places API and in this way we can update the data set whenever we want to.

1.4 Objectives

- At least we want this application to work in the diameter of Lahore city
- We want this application to flexible so that the in future we can expand it to further cities or may be a whole country.
- We want the result to be accurate and worthy for its users.
- We want it to be user friendly
- We are trying to make the application as much useful as it could be.
- We are trying to add features to like rating or commenting.