Software Engineering Project

|  |  |  |
| --- | --- | --- |
| Name | Section | Picture |
| Abd AlRahman Osama | 2 |  |
| Abd AlRahman Adel | 2 |  |
| Muhammad Ramadan | 3 |  |
| Doha Muhammad | 2 |  |
| Salma Afify | 2 |  |

Table of Contents

[1. Introduction 1](#_Toc532104400)

[1.1 Objective [1 point] 1](#_Toc532104401)

[1.2 Document Conventions 1](#_Toc532104402)

[1.3 Intended Audience 1](#_Toc532104403)

[2. Requirements 2](#_Toc532104404)

[2.1 User Requirements [1 point] 2](#_Toc532104405)

[2.2 Systems Requirements [1 point] 2](#_Toc532104406)

[2.3 Functional Requirements [1 point] 2](#_Toc532104407)

[2.4 Nonfunctional Requirements [1 point] 2](#_Toc532104408)

[2.4.1 Product requirements 2](#_Toc532104409)

[2.4.2 Organisational requirements 2](#_Toc532104410)

[2.4.3 External requirements 2](#_Toc532104411)

[3. System modeling [1 point] 3](#_Toc532104412)

[3.1 Use case diagram 3](#_Toc532104413)

[3.2 Sequence diagram 3](#_Toc532104414)

[3.3 Class diagram 3](#_Toc532104415)

[4. Architectural design [2 points] 3](#_Toc532104416)

[4.1 Say Layered architecture 3](#_Toc532104417)

[4.2 Say Client-sever architecture 4](#_Toc532104418)

[5. Implementation [7 points] 4](#_Toc532104419)

[5.1 GUI of … 4](#_Toc532104420)

[5.2 Screenshot of … 4](#_Toc532104421)

[6. Testing [1 point] 4](#_Toc532104422)

[6.1 Test cases for object classes 4](#_Toc532104423)

[7. Discussion [4 points] 5](#_Toc532104424)

**List of figures**

[Figure 1: Use case diagram of .. 3](#_Toc532104467)

[Figure 2: Use case diagram of ... 3](#_Toc532104468)

[Figure 3: Use case diagram of .... 3](#_Toc532104469)

[Figure 4: Sequence diagram of ... 3](#_Toc532104470)

[Figure 5: Class diagram of ... 3](#_Toc532104471)

[Figure 6: Layered architecture of ... 3](#_Toc532104472)

[Figure 7: Client-sever architecture of ... 4](#_Toc532104473)

[Figure 8: Graphical interface of ... 4](#_Toc532104474)

[Figure 9: Screenshot of … 4](#_Toc532104475)

[Figure 10: Screenshot of ... 4](#_Toc532104476)

[Figure 11: Screenshot of ... 4](#_Toc532104477)

[Figure 12: Screenshot of ... 4](#_Toc532104478)

[Figure 13: Screenshot of ... 4](#_Toc532104479)

[Figure 14: Test cases of 4](#_Toc532104480)

# Introduction

## Objective

The purpose of this application is to help the customers about travel such as make decision, manage time and life of traveler. Make more fun activity between people and can booking using this app.

For users, it’s important to making booking easy, offers an easy way to pay, save time by an easy booking way and getting comfortable.

## Document Conventions

## verification

1. Safety
2. Security
3. Availability
4. Efficiency
5. dependability

**priority**

1. High :-(Availability -Efficiency)
2. Medium :-(Dependability)
3. Low:-(safty)

## Intended Audience

- User

- Admin

# Requirements

## User Requirements

1. User shall find an easy way to book for trip.
2. User must be able to contact with the company for any question.
3. User must be able to know the company address.
4. User must find many countries in app to choose one of them.
5. User must be able to choose the type of transport which is suitable to him.
6. User shall book the seat which he see more comfortable.
7. User shall find field which enables him to be able to choose a number of people to travel with him.
8. User must find easy way to pay for the trip.
9. User must find his information secure.
10. User must find new offers regularly.
11. User must be able to recover his money if something happened and trip is canceled.

## Systems Requirements

1. There is a way which makes user be able to contact with company with phone number, e-mail, fax number and address.
2. There are offers which user can choose it in which is suitable for him.
3. These offers will contain the place which is chosen, days of the trip, number of people, transportation type and the cost.
4. There is a special order under offers contains some countries which there are discounts on its trip.
5. After the user chooses, he makes submit to save his choice.
6. After that, a form contains order to make user enter his visa number appear with the name of "total price" to make user pay for the trip.
7. The user then chick confirm.
8. A thank message appear at the end says "thanks for trusting our company".

## Functional Requirements

1- User must register for create the account and login using username and password to use function in the application.

2- User can book a trip which is suitable to number of people which the user chooses.

3- User can book a special trip and choose the suitable transport for him from special orders.

4- User can book the seat which he \her sees more comfortable.

5- User can find updates regularly.

6- User can pay from his/her place without going to the company by writing his\her visa Number in "Enter your visa number" field.

7- User can contact easily with the company because it's phone number, fax, e-mail and address is available in three fields.

8- User can recover easily his\her money his money if any condition is happened.

9-User finds a thank message.

## Nonfunctional Requirements

1. User should be helped appropriately to fill in the mandatory fields, in case of invalid input

2. The database update process must roll back all related updates when any update fails.

3. Access permissions for the particular system information may only be changed by the system’s data administrator.

4. The front-page load time must be no more 2 seconds.

5. Must be scalable enough to support many users at a time.

6. New features deployment must not impact front page, offers pages, and check out pages availability and mustn’t take longer than one hour. The pages that may experience problems must display some type of error message.

### Product requirements

\***Availability**

The system is available for any user to book his/her trip at any time .

\***Security**

The system contributes to making user information safe .

\***Usability**

Any client can use the system after completing the login process .

* It is not allowed for any user to view other customer data .

### External requirements

* Clients .
* Offices rent and transport .
* Hotels .

# System modeling [1 point]

## Use case diagram

Figure 1: Use case diagram of ..

Figure 2: Use case diagram of...

Figure 3: Use case diagram of....

Table 1: Tabular description of…

Table 2: Tabular description of…

Table 3: Tabular description of…

## Sequence diagram

Figure 4: Sequence diagram of...

## Class diagram

Figure 5: Class diagram of...

# Architectural design [2 points]

## Say Layered architecture

( Desktop Application )

|  |
| --- |
| Login sign up checking password  email is right thank message |
| Update | insert | Delete | search (admin) |  search | insert (user ) |
| Report generation pay for the trip | return his money if there is any condition |
| Windows    Software Database |

## Say Client-server architecture

Figure 7: Client-server architecture of...

# Implementation [7 points]

## GUI of …

Figure 8: Graphical interface of...

## Screenshot of …

Figure 9: Screenshot of …

Figure 10: Screenshot of...

Figure 11: Screenshot of...

Figure 12: Screenshot of...

Figure 13: Screenshot of...

# Testing [1 point]

## Test cases for object classes

These test cases should focus on testing the functionality of all objects or all methods in your system

Figure 14: Test cases of

# Discussion [4 points]