CHAPTER 4

Result and Discussion

4.1 System Design

The system to be developed in the study will be the web-based online movie booking system

For Ahmadies Cinema or any other Cinema in Kabul, Afghanistan, the system will assist the ongoing Cinema system. In the following section, the system design for the proposed system will be outlined.

4.1.1 System Design Objectives

1. The web-based Movie booking system aims to assist the customer and staff to carry out the cinema procedures, such as customer registering, managing show times and movies, selecting your favorite seat number.

2. The web-based Movie booking system enables the registered Customers to view the contents of any movie show at any time and may book any movie ticket as needed. The program automatically calculates the subtotal and grand total. When a visitor decides to finally book the ticket, the order information including the buyer's name, address and billing instruction is stored in the database securely and payment has been made.

3. The web-based movie booking system can process ticket booking information without customer physically appearing at the cinema, customer can book via a phone and laptop with active internet. Admin can see the booking and registered users

4.1.2 Proposed system overview

The proposed web-based movie booking system will contain the client-server concept. The web server serve the files that form web pages to users, in response to their requests, which are forwarded by their computers HTTP clients. The firewall acts as a barrier controlling between incoming and outgoing network traffic from the web server client.

The movie booking server creates a controlled environment which allows quick incorporation of internet security technologies as they evolve. Which the application will be installed and run on PHP and MYSQL servers and can be access by the user or client through a web browser, via internet or intranet connection.
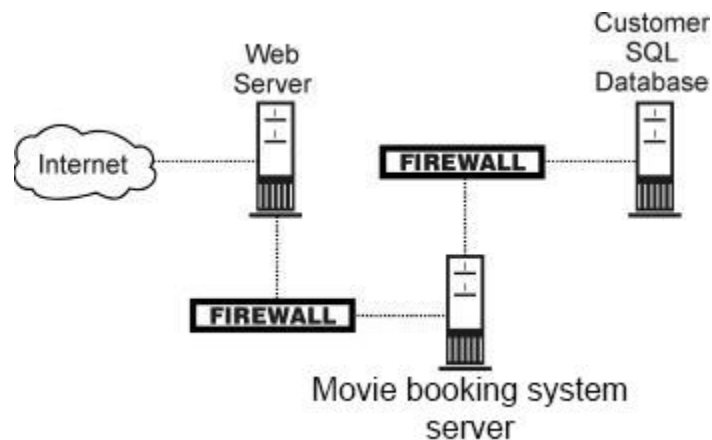

Figure 4. 1 Client – Server and Architecture

4.1.3 Proposed Design Procedure

In this study, the design for the proposed system will be represented using use case diagrams, activity diagrams, sequence diagrams, class diagrams, collaboration diagram, component diagrams and deployment.

4.1.3.1 Use Case Diagram

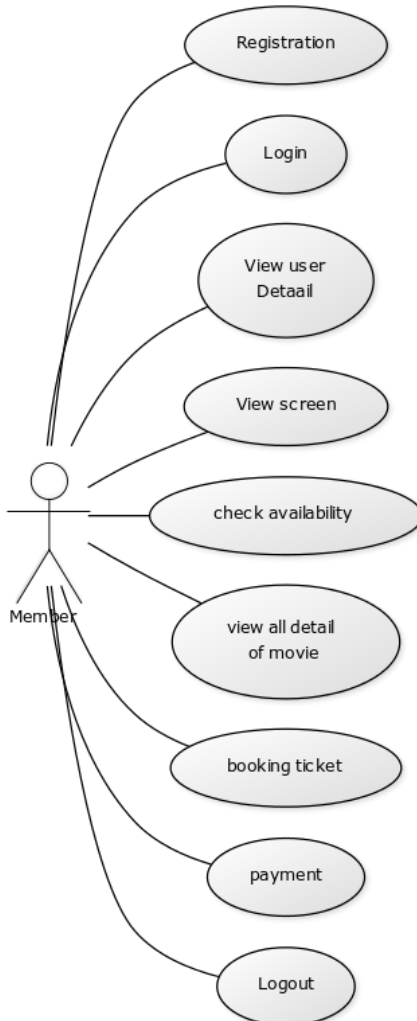The following is the use case diagram or the web-based movie booking system

Figure 4. 2 Use Case Diagram for web-based movie booking system

4.3.1.2 Use Case Scenario

The following are the use case scenarios which will analyze each of the processes represented in the use case diagram above.

1. Registration Use Case Scenario.

The use case scenario for registration is as follows;
1.   Name of Use Case: Registration

2.   Main actor: Customer

3.   Purpose: to get access to book movies and other options

Table 4. 1 Use case scenario for registration

Customer	System
1. Click on register	
	2. Display the registration form
3. Filling the form, First name, Last name, gender, date of birth, address, city, district, phoneno, email, password and confirm password, and click register	
	4. Will show a message that registration successfully done
5. Click on login icon	
	6. Display the login page
7. Use email as a ID and entering password	Note: if customer put wrong information system will display msg
	8. Will direct the customer to customer dashboard page, where customer can book tickets

2. Booking ticket Use Case Scenario.

The use case scenario for booking is as follows;
1.   Name of Use Case: booking ticket

2.   Main actor: Customer

3.   Purpose: to book their favorite movie

Table 4. 2 Use case scenario for booking

Customer	System
Login to the system	
	Direct to customer dashboard page
Selecting Theatre, movie and show time	
	Will display different theatre with deferent movies and deferent timing
Selecting date and seat number, number of tickets and type of tickets	
	Will display number of seat for customer to choose and will show type of tickets,
Clicking on Next page	
	Will direct customer to next page which customer can select their favorite seat

After clicking next customer will be in step 3	.
	On this step system will show booking detail and user details and also total amount to pay
Now customer will accept the agree the term and conditions and click should pay now	
	System will display that your payment has been successful

1. **Activity Diagram for Registration.**

   The activity diagram for registration is as follows;

Customer	System
Clicking on registration	Display registration form
Filling registration form	Registered in System
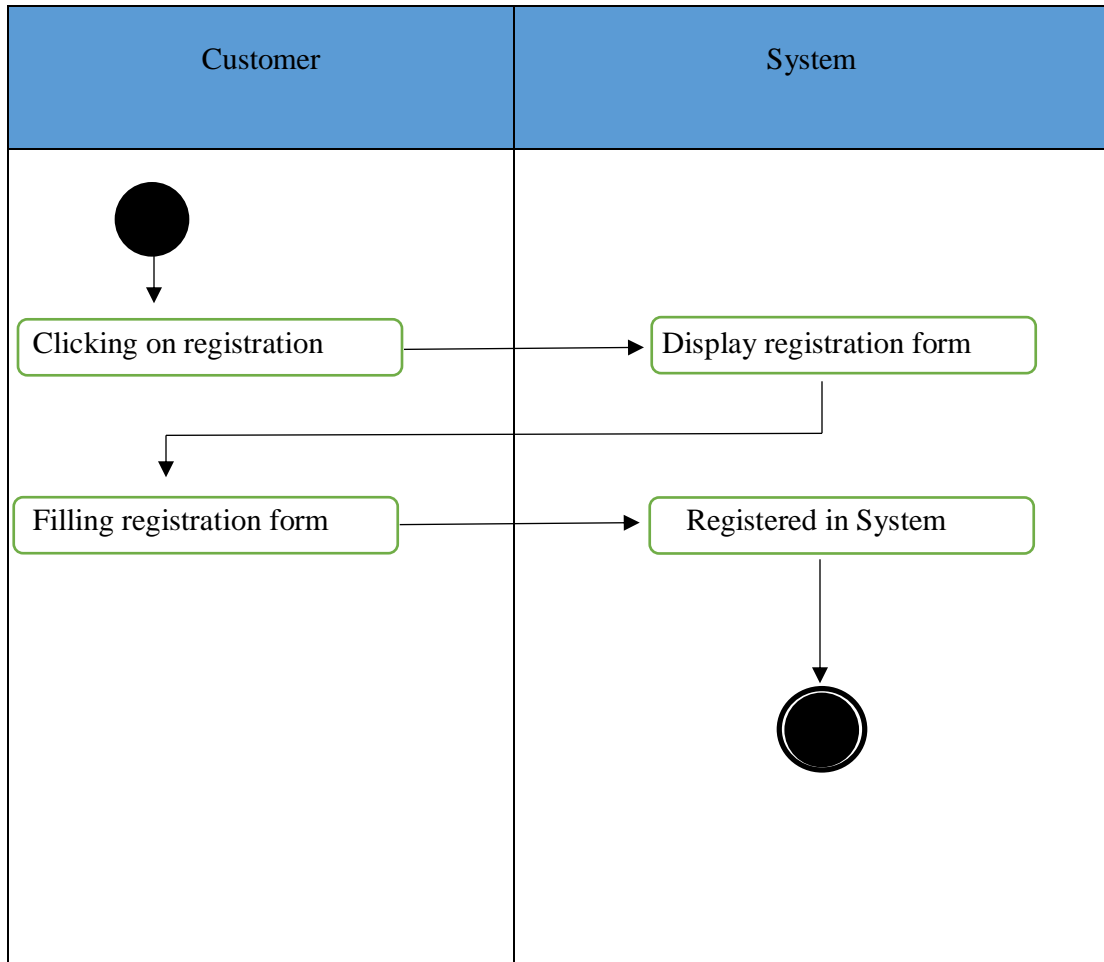
Figure 4. 3 Activity diagram for registration

4.1.3.3 Activity Diagram

Following are the activity diagrams for the movie booking web-based system which will show the detail flow of data and processes involve in the various sections of the system.
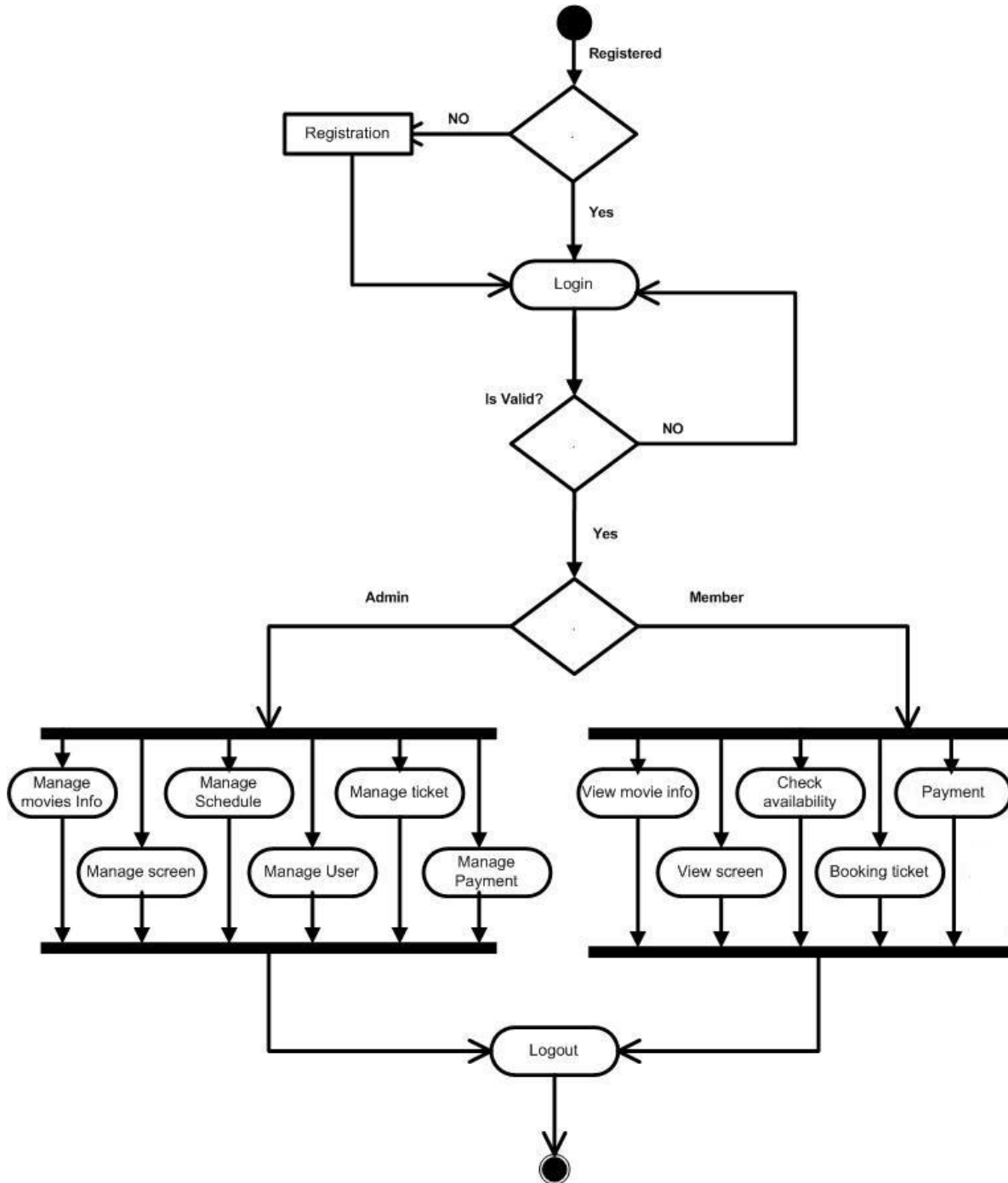
Figure 4. 4 Activity diagram

4.1.3.4 Sequence Diagram

Following are the sequence diagram for the online movie booking system
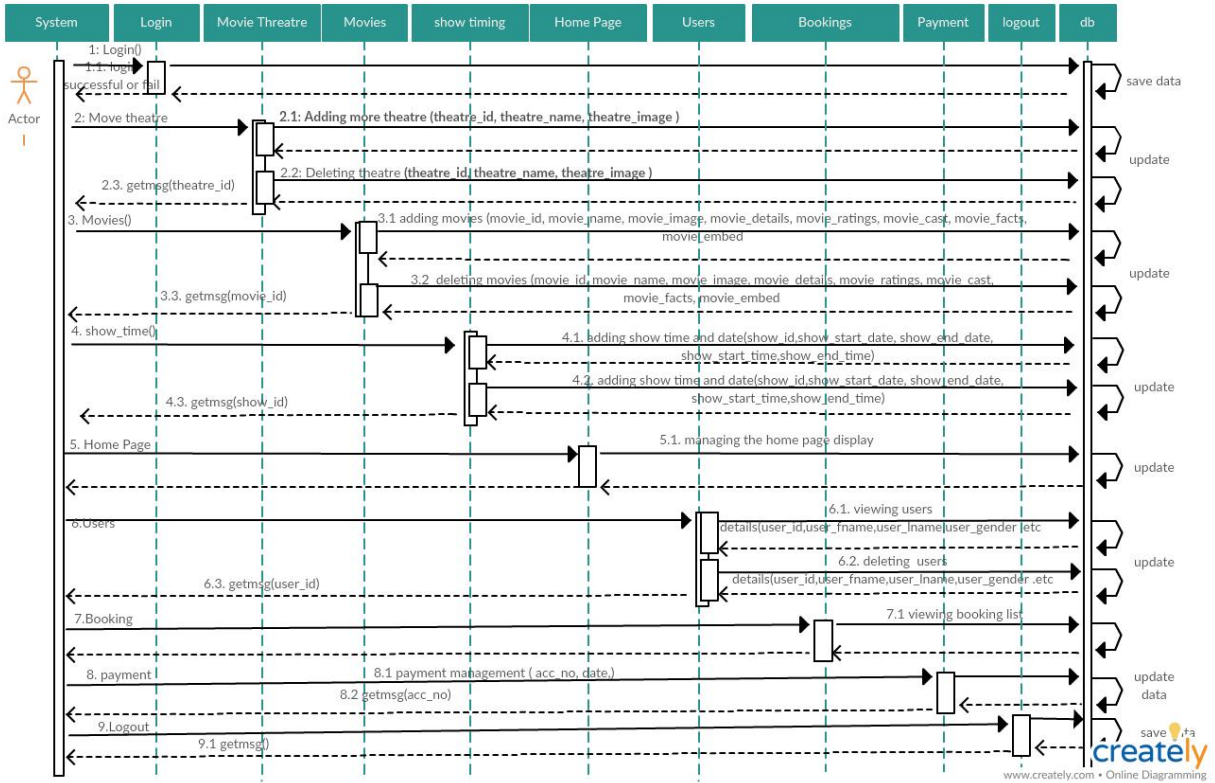
Figure 4. 5 Sequence diagram

4.1.3.5 Deployment Diagram
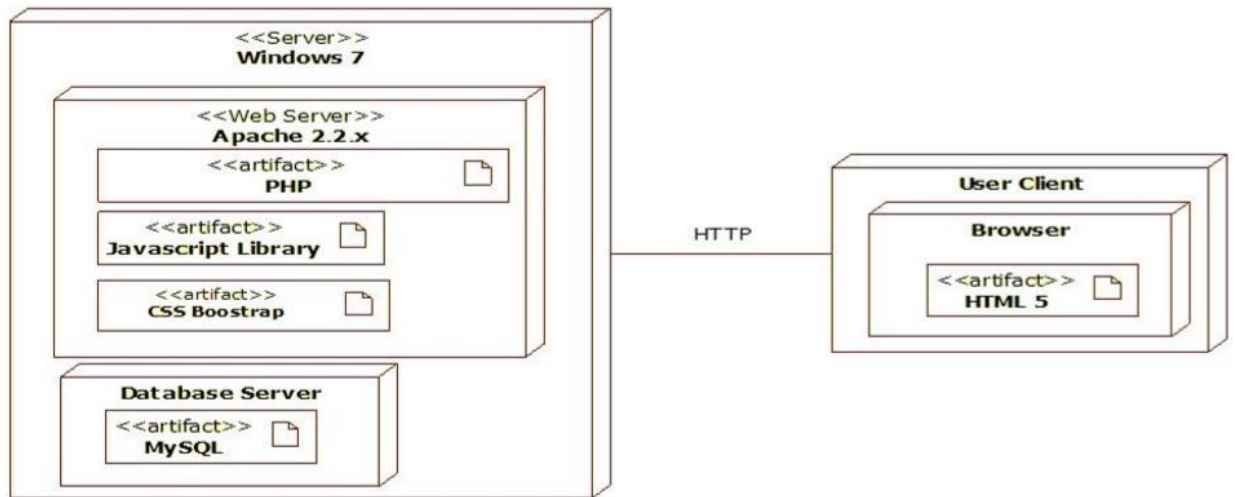
Figure 4. 6 Deployment diagram for online movie booking system

1.2.Implementation

The proposed web-based academic information system will be developed using PHP programing language and its database will developed using MySQL.

System implementation involves allowing the end users to use the system to see if it serves its main purpose. By system implementation, the end users can test the system and then provide feedback so that the system developers can improve the system

1.2.1 Implementation Limits

The limits on the implementation of web-based banking system for Movie booking are as follows:

1. Access to the implementation of the system is limited to 2 types of users, which include the admin, and customer.

2. Implementation of this system is specifically only for customers of online movie booking.

1.2.2 Software Implementation

The proposed system can be implemented on PCs running Windows, Mac, Ubuntu, and Linux operating systems, which are connected to the Internet. The software requirements for running the proposed system are as follows:

Implementation of PC software:

1. Windows XP / 7 / Windows 8 operating system.

2. XAMPP 1.8.1 as a host server and for local database storage.

3. Adobe Dreamweaver CS3, Sublime Text, or notepad for coding the PHP program.

4. Mozilla Firefox 11 as a browser for running the system

1.2.3 Hardware Implantation

The hardware requirements for running the proposed system are as follows:

Hardware implementation:

        1. Processor: Intel (R) 2:10 GHz Core2Duo

        2. Memory: 1024MB RAM

        3. Hard drive: 250GB Seagate

        4. VGA: Intel (R) HD Graphics

        5. Monitor: 15 "Advance

4.2.4 Database Implementation (syntax SQL)

This section shows the database implementation of the proposed system. The table structures for

the database design are as follows:

1. "admin"

```
CREATE TABLE IF NOT EXISTS `admin` (

'id' int(11) NOT NULL AUTO_INCREMENT,

'User_name' varchar(100) NOT NULL,

'password' varchar(255) NOT NULL

)
```

2. "Booking"

```
CREATE TABLE IF NOT EXISTS `booking` (

'booking_id' int(11) NOT NULL,

"show_id" int(11) NOT NULL,

'seat' text NOT NULL,

'show_date' date NOT NULL,

'user_id' int(11) NOT NULL,

'status' char(20) NOT NULL,

'category' varchar(200) NOT NULL,

'time' datetime NOT NULL,

)
```

3. **"Movies"**

```
CREATE TABLE IF NOT EXISTS `movies` (

'movie_id' int(11) NOT NULL AUTO_INCREMENT,

'movie_name' varchar(100) NOT NULL,

'movie_image' varchar(100) NOT NULL,

'movie_details' text NOT NULL,

'movie_ratings' int(11) NOT NULL,

'movie_cast' text NOT NULL,

'movie_facts' text NOT NULL,

'status" int(11) NOT NULL,

)
```

4. "shows"

```
CREATE TABLE IF NOT EXISTS `shows` (

'show_id' int(11)

'show_start_date' date

'show_end_date' date

'show_start_time' time

'show_end_time' time

'theatre_id' int(11)

'movie_id' int(11)

'gold_full' int(11)

)
```

5. "Theatre"

```
CREATE TABLE IF NOT EXISTS `theatre` (

'theatre_id' int(11) NOT NULL AUTO_INCREMENT,

'theatre_name' varchar(100) NOT NULL,

'theatre_image' varchar(100) NOT NULL,

)
```

6. **"users"**
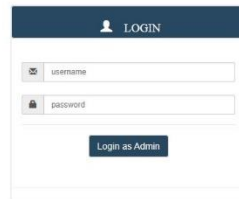
```
CREATE TABLE IF NOT EXISTS `users` (

'user_id' int(11) NOT NULL AUTO_INCREMENT,

'user_fname' varchar(100) NOT NULL,

'user_lname' varchar(100) NOT NULL,

'user_gender' char(10) NOT NULL,

'user_dob' date NOT NULL,

'user_address' varchar(200) NOT NULL,

'user_city' char(100) NOT NULL,

'user_district' char(100) NOT NULL,

'user_mobile' bigint(20) NOT NULL,

'user_contact' bigint(20) NOT NULL,

'user_password' text NOT NULL,

'user_email' varchar(100) NOT NULL,

"status' char(20) NOT NULL,

)
```

4.3 Interface Implementation

This section shows the interface implementation of the online movie booking system. The proposed system consists of 2 user ends, the admin, and the customer, where access to various system components is limited to the various user levels.

a. Login

Before the admin can access the admin dashboard, he must fill in his user details and

log into the system.

Figure 4. 7 Admin login page.

b. Admin dashboard

The admin dashboard display movie theatre, movies, show timing, bookings and admin can add,

edit and delete.
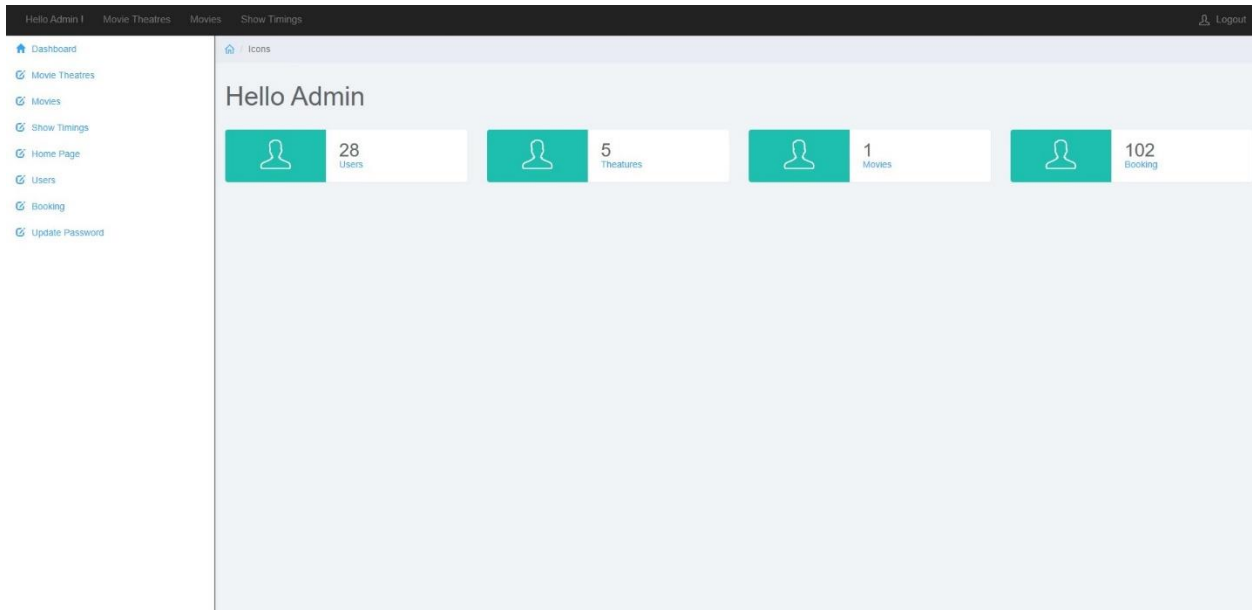
Figure 4. 8 Admin dashboard

c. Adding Movie theatres in admin dashbaord

In this page admin can add, edit or delete theatres
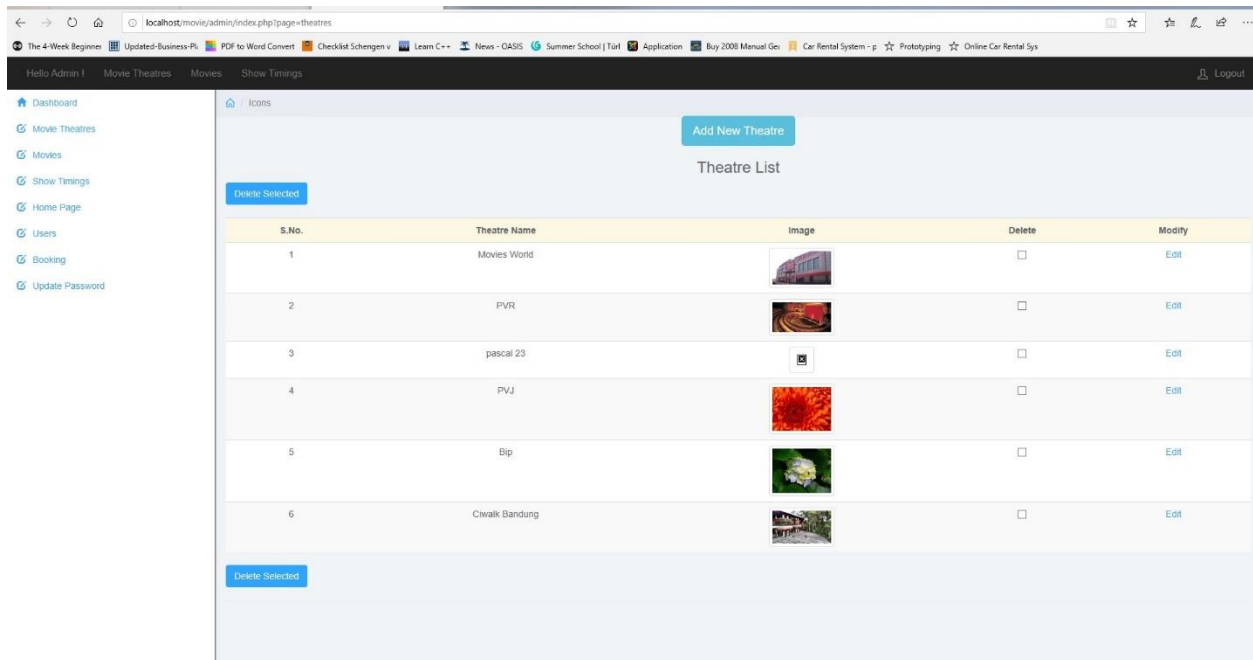
Figure 4. 9 Movie theatres dashboard

d. Adding New movies and editing old movie in admin dashboard

Admin can add new movies, movie detail, poster and ratings
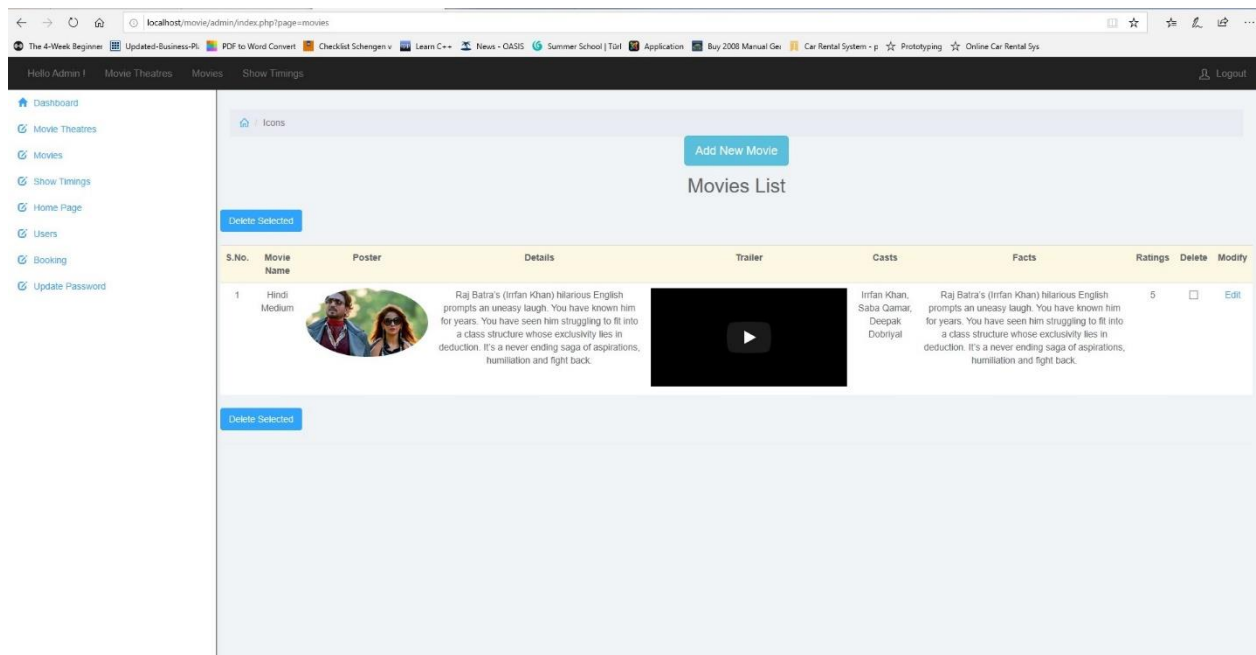
Figure 4. 10 Adding movie in admin dashboard

e. **Show timing in admin dashboard**

In here admin can add new timing for movie, edit old timing, choose show start

and end date and also can set the time and price for movies
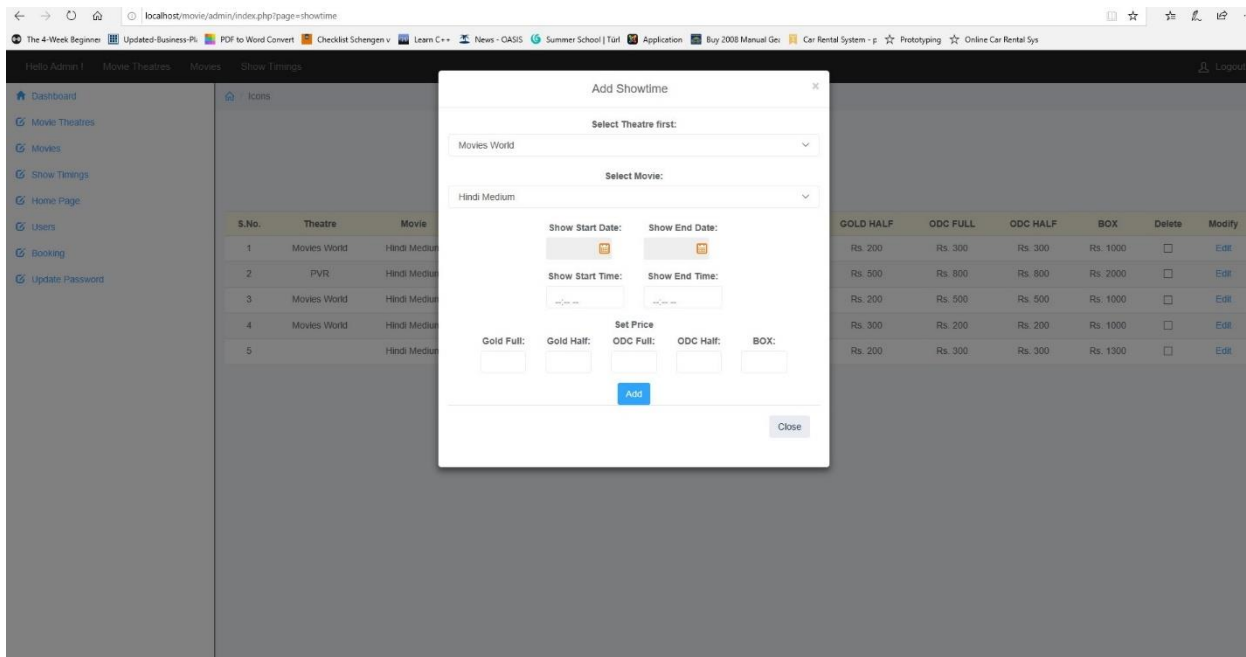
Figure 4. 11 Show timing in admin dashboard

f. Users in admin dashboard

Admin can see the registered users detail in here

Figure 4. 12 Users detail in admin dashboard

g. Booking in admin dashboard

In here admin can see bookings detail and status

Figure 4. 13 Bookings in admin dashboard

h. Update passwords in admin dashboard

In here admin can update password
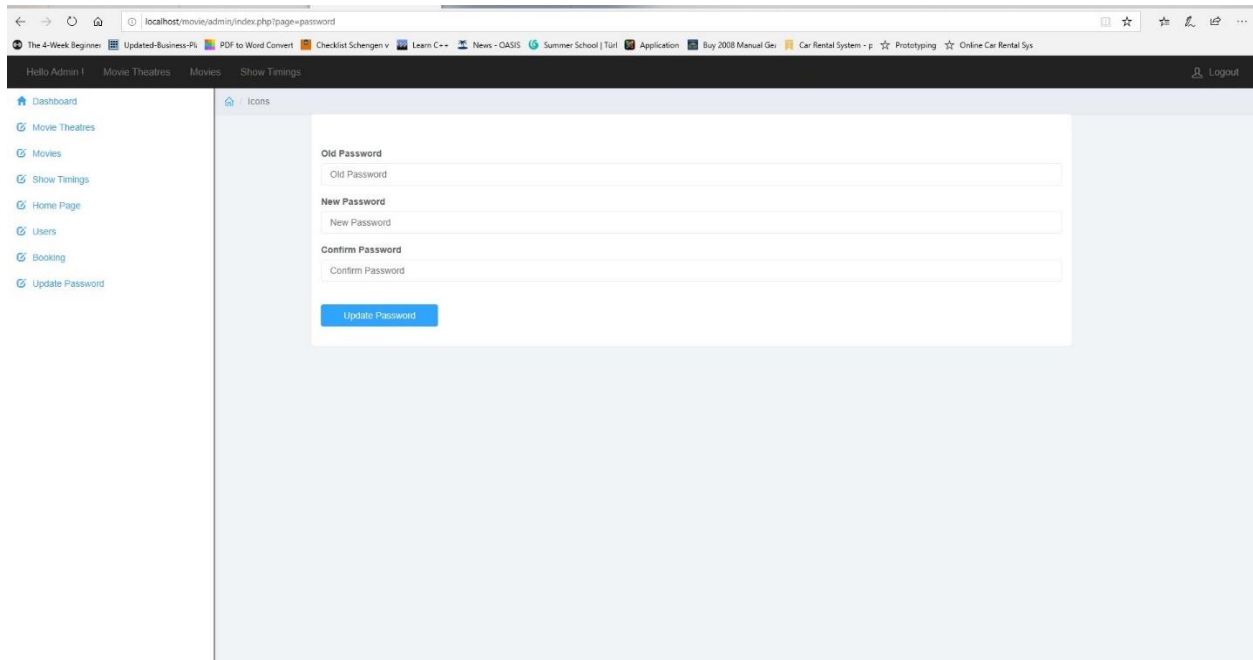
Figure 4. 14 Update password in admin dashboard

i. User Dashboard

Here customer can edit, see booking history, buy tickets update password
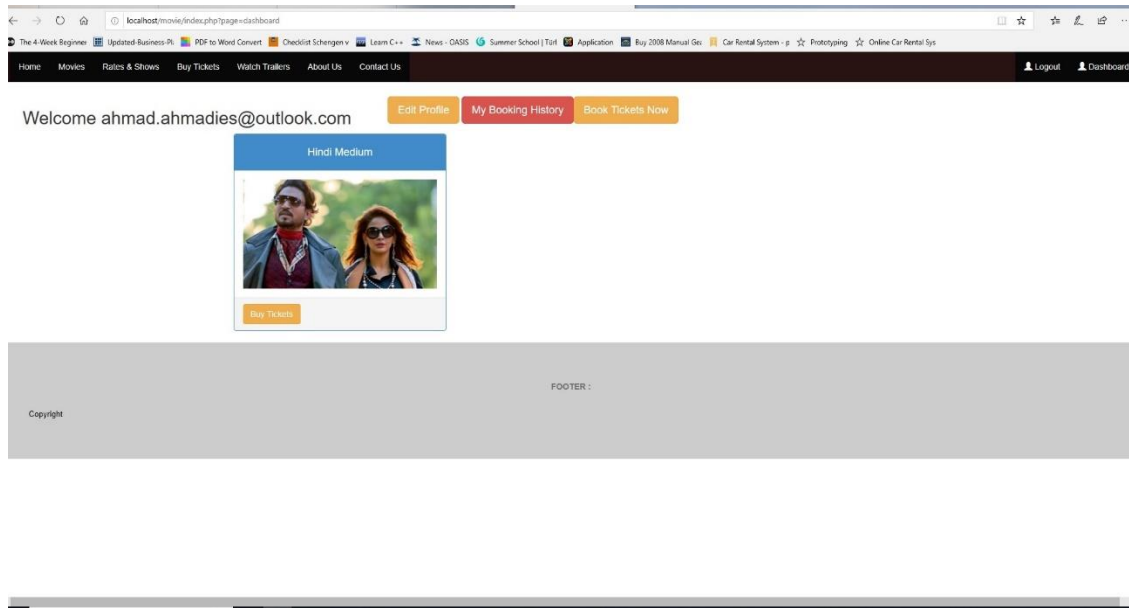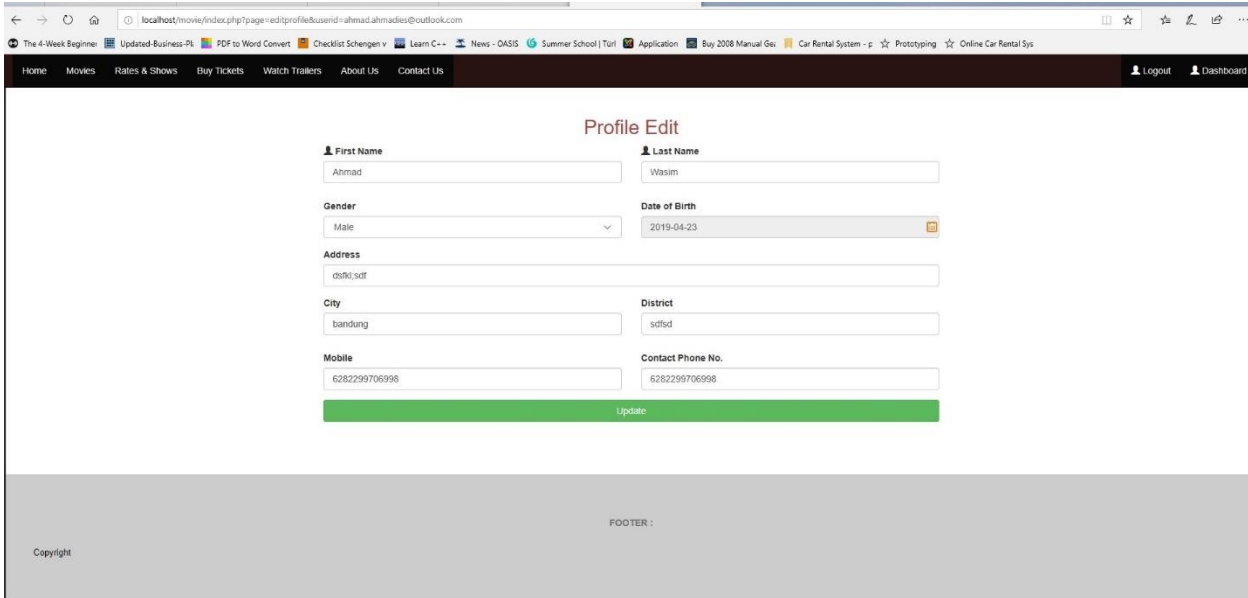
Figure 4. 15 User Dashboard

j. Profile edit in user dashboard

In here customers can update their information's
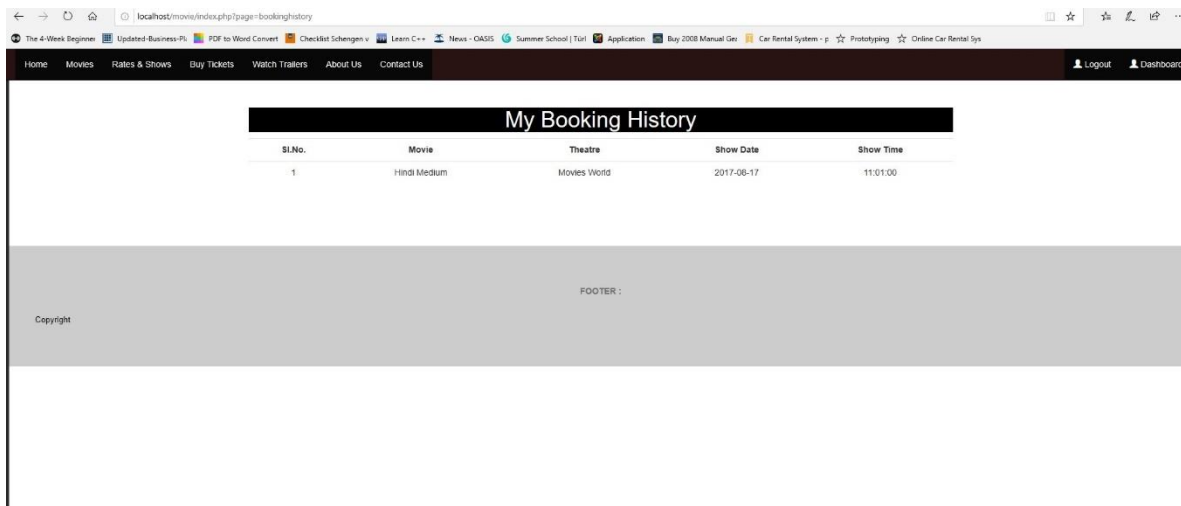
Figure 4. 16 Profile edit in user dashboard

k. My booking history in user dashboard

In here customers can check their booking history

Figure 4. 17 My booking history in user dashboard

l. Buy tickets in user dashboard

Step 1. Customer can book their tickets, choose the movie, show time, choose category

Figure 4. 18 Buy tickets in user dashboard

Step 2. Customer has 300 seconds to choose their favorite seats

Figure 4. 19 Choosing seats

Step 3. Booking confirmation
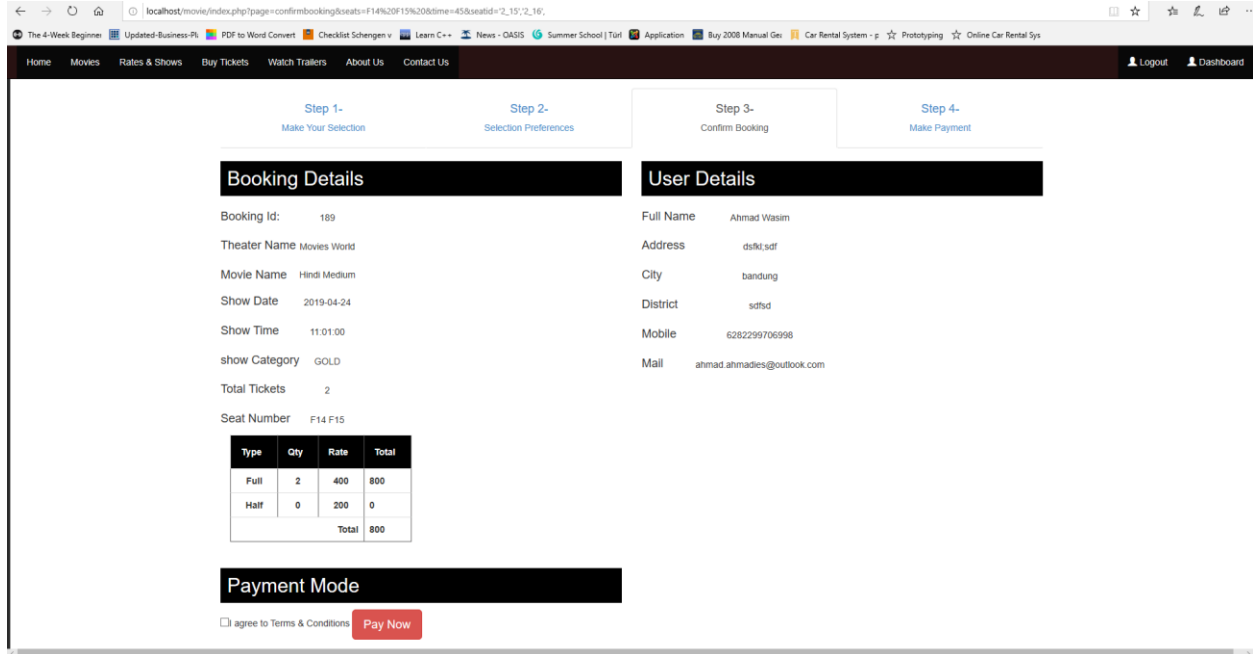
Figure 4. 20 Booking confirmation

Step 4. Payment, which will be added later

4.3.1. User Guide

Getting started

The first page you get is the home page which contains several functions/features for the online movie booking system. In order to login you fill in only two fields which are email address you have and the password you selected when you registered.

1. Customer login

   - Open any web browser and type the online movie booking address

   - Fill the username (your email address) and password

   - Click on login button

2. Editing your profile

   - Click on edit profile on user dashboard

   - After bringing changes to your profile click on update4

3. Booking History

   - To check your booking history click on my booking history on user dashboard

4. Buy tickets

   - To buy tickets click on book tickets now on user dashboard or you can click on buy tickets Menu

   - After clicking on book tickets or buy tickets select theatre, movie, show time, select category, show date, number of seats and number seats for under age customers then click on next

   - After clicking on next you will be direct to seat selection page, choose your favorite seat and click on next

- After click next you will be directed to confirmation page, check the date that you entered after that choose the payment mode and then click pay now, do the payment after that you will get the tickets on your email and you are good to go

4.4 Testing

After implementation of the system tests were carried out to check the functionality of the system. In this study the black box testing method was used to carry out testing.

4.4.1 Testing plan

Following are the results from testing of online movie banking system.

Table 4. 3 Testing plan admin page

No	Component tested	submenu	Scenario item	Testing resutlt
1	Display admin user		Display admin user login	Blackbox
2	Admin account menu	Movie theatre	Display add theatre	Blackbox
			Modify theater	Blackbox
			Delete theatre	Blackbox
3		Movies	Display add new movies	Blackbox
			Modify movies	Blackbox
			Delete movies	Blackbox

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No	Component tested	submenu	Scenario item	Testing result
4		Show timings	Display add show Modify shows Delete shows	Blackbox

Table 4. 4 Testing plan customer page

No	Component tested	submenu	Scenario item	Testing result
1	Display customer user		Display customer user login	Blackbox
2	Customer user menu	Edit profile	Display user detail Modify details Update details	Blackbox
4		Booking history	Display customer booking history	Blackbox
5		Book tickets now	Display movie title	Blackbox

			Theatre, show time, date, category, choose seats, confirmation, make payment	

4.4.2 Cases and Test Results

Base on the testing method above, the following is a case to test the proposed system

Table 4. 5 Cases and Test results admin account

No.	Menu	Test Case	Scenario test item	Expected result	Testing result
1	Admin login	Display user login	Selecting login form to login	Enter admin login address Display admin login	Accepted [√] Denied [ ]
2	Add movie theatre	Display add theatre	Selecting add theatre register theatre	Click on add theatre display theatre form	Accepted [√] Denied [ ]

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3	Edit theatre	Display edit theatre	Selecting edit theatre to edit theatre information	Click on modify theatre Display theatre	Accepted [√] Denied [ ]
4	Delete theatre	Display delete theatre	Selecting delete theatre to delete theatre information	Click on delete menu display theatre	Accepted [√] Denied [ ]
5	Add movies	Display add new movie	Selecting add new movies to register new movies	Click on add new movie Display add new movie form	Accepted [√] Denied [ ]
6	Modify movies	Display modify movie	Selecting modify movies to modify existing movies	Click on modify Display movie form	Accepted [√] Denied [ ]
7	Show timing	Display add show	Selecting add show to add more timing shows	Click on add show Display add show form	Accepted [√] Denied [ ]
8	Modify show timing	Display modify show timing	Selecting modify	Click on modify Display add show	Accepted [√] Denied

			To modify old show timing		[ ]

4.4.3 Conclusion result of Testing

The results gathered from the testing of the above cases, it can be concluded that the system is functioning well and thus is free from errors.