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Online Event Reservation System

Bachelor of Science in Computer Science

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Certificate

We accept the work contained in the report titled "Online Event Reservation System", written by Mr. Abdul Rahman Khan as a confirmation to the required standard for the partial fulfillment of the degree of Bachelor of Science in Computer Science.

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Abstract

As we know that the world had progressed very much in the field of science especially in the field of computer science and IT etc. That is why it is called an era of online developments. It help people to be in contact with their love ones, and also they provide other extensive facilities to their user. The application I had developed would be very useful to all people who wanted to arrange different ceremonies/event at their home or desired place with in their financial status. So the main objectives of this application is to provide people required facility to arrange an event easily according to their demand at lowest cost. So basically an online event management system by which a user feel free to select their desired facilities for that event. Using this application, user would be able to send his request for reservation of an event. Application server will receive request from user and will store it in database and will reserve the hall for said request. After the confirmation of the hall the database will be updated according to the request. The application which I developed surely help in saving lots of time, efforts to arrange a valuable event by a customer. Our purpose is to provide the facility of arrange different events to the customers at their door steps. And I am sure that this will fulfill the purpose for which it is designed.

Acknowledgments

First of all I would like to thank Allah Almighty God who blessed me at every stage of my life. He gave me healthy life and good mind; with which I am able to get comprehensive knowledge. I would also like to thank my parents and other members of my family for their support throughout my studies. There are few other people to be thanked, because without their support it wasn't possible for me to achieve all of this. First, I would like to thank my honorable supervisor Sir Rizwan Aamir without his guidance and help I couldn't have come this far in complete my project. He guided me at every stage about each and every aspect of this project. He motivated me in such a friendly many ways that were very helpful for me to complete this project. Secondly, I would like to thank my teachers who did their best to deliver me the best of their knowledge. They played an important role, in completion of my project. I am also thankful to my friends who encouraged and supported me during the completion of my research work. It would have been difficult for me to complete this project without their help and support.

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Introduction

1.1 Overview

The use of website has become a part of our daily routine. The main Project idea is to make a Web portal application where customers can register themselves and can reserves ceremonies, event or weddings according to their desired marriage halls, catering services, designers and decorators.

1.2 Objective

The main objective of this application is provide customers a platform to place a reservation through which they can reserve for their important events.

1.3 Problem Description

In this web application, information about caterings, marriage halls, designers, decoration and other services provider will be shown. These services providers are showing their rate lists for booking of marriage halls, catering services, designers, decorators and other services, they are showing per head rates of the different menu to visitor (Customer). The visitors (Customer) are able to compare the rates of different services provided by different operational partners. If the visitors (Customer) wanted to acquire different companies according to their financial situation, then these services could be provided accordingly to the visitor (Customer). At the back end of this web application, there is a database in which rate lists offered by different vendors and users' are saved.

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1.4 Project Scope

In this project we will focus on developing the application that will help customer to reserve an event the event can be of any type like wedding, birthday and ceremonies which are important for the customers.

1.5 Tools Used

The techniques which are being used in online event reservation system, some of which are being used here below.

1.5.1 Php

PHP is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.[1][2]

1.5.2 Adobe Dream weaver

Adobe Dream weaver is a proprietary web development tool developed by Adobe system. The current version of Dreamweaver have support for web technologies like CSS, JavaScript, and various server-side languages and frameworks including ASP, JavaScript, ASP.Net, Csharp, ASP.Net, VB, PHP and many more. Dreamweaver lets its users design, code and manage websites. [3]

1.5.3 SQL

Sql is the structure query language which is used to for databases and store the data of the project. As the web portal also have database at the backend which stores the login and other information there. [4]

1.5.4 Internet

Internet connection is required for 24/7, for the proper functioning of the developed application.

Literature Review

Different reservation systems are already existing in the world. Nowadays a lot of people are using such reservation systems in their daily lives.

2.1 Online Event Reservation System

Online Event Reservation System is web application in which reservation of different type of events are done. Those event which are important to the customers. The reservation system provide different facilities like caterings, marriage halls, designers, decoration and other services for the customers those who want to use these services in order to fulfill the requirements that they want to utilize. The privacy of information of different customers the website offers the signup option so that none of the customer can see the information of the other customers. The application is very useful for the reservations of event. Online event reservation system will provide required an internet access. This application is very simple and easy to use for the reservation of any ceremony, wedding or event of any type. This system will provide customer some better facilities that are important for their desired events. These reservation will be different from other

2.2 Online Traveling Reservation System

These reservation system are very important part of our daily life. As majority of was use bus services, airline service and train services to travel from one place to another. For that we use some online reservation system for that are used to reserve you seat or like some other important reservation for example luxury, meal, seats. [5]

Requirement Specifications

3.1 Existing System

The reservation system are an existing systems that are made for website. My systems is a little bit different from other system that are already found in the market, as my system is online event reservation. The system that are found before are usually for the reservation of Airlines services, Bus services and many other services which do not include events

3.2 Proposed System

Our system will provide all the features which are required for the event, wedding and ceremonies. The features will help the customers to get all those requirements that are importantly required for the event such as Car Decoration, Hall Reservation and other some other features.

3.3 Requirement Specifications

3.3.1 Functional Requirements

This section elaborates all the functional requirement that were gathered while keeping all the stakeholder in focus. Usually things become easy to handle when they are divided into small parts; when long steps are divided into small steps and then integrated them to get desired product.

3.3.1.1 Register

Whenever user (customer) first time use the Web for the reservations for the services then first user have to register using Sign-up. This process is mandatory for all user to use this system to reserve the required services. After this process of sign up user will be allocated a username and password for future reservation.

3.3.1.2 Reservation

After being registered with system the user is free to reserve any services which he/ she want to avail.

3.3.1.3 Database

All the reservations and data of the users and provider be saved in database. These records will be kept in the history of every user for future reservations.

3.3.2 Non-Functional Requirements

Along with functional requirements non-functional requirements are also important to be fulfilled.

3.3.2.1 Performance

A web-based application always required faster internet speed along with the active server which could process the request fast enough for the best response. The application is light weighted to keep the best performance.

3.3.2.2 Reliability

It will be very easy for users to use this application if the interface is simple. Simple things have more impact on user than the complicated one. The interface is designed by keeping in mind the requirements of the users. In case of any failure it should maintain the actual state. The application is reliable and chance of crashing is very less.

3.3.2.3 Operability

Interface will be user friendly will be easy to understand.

3.3.2.4 Robustness

System must handle crashes and recover from them.

3.3.2.5 Simplicity

As the interface and software be user friendly it will be simple to use. The work flow will be easy. It will be easy to use for the final user.

3.3.2.6 Scalability

System should be upgradeable if required.

3.3.2.7 Maintainability

System should be easy to manage according to the requirements

3.3.2.8 Security

The privacy of the users of both ends should be secure. Only registered users should be able to change anything. It should be password protected.

3.3.3 Use Case diagram

Use case diagram show the interaction or relationship of user with different parts of the proposed system and it helps us to show the functionality of our system. Use cases are also helpful in defining the role of different users along with their interaction with several activates.

3.3.3.1 Admin Use Case

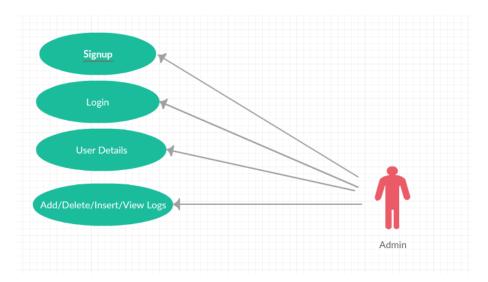


Figure 3.1: Use Case Diagram for Admin

3.3.3.2 Customer Use Case

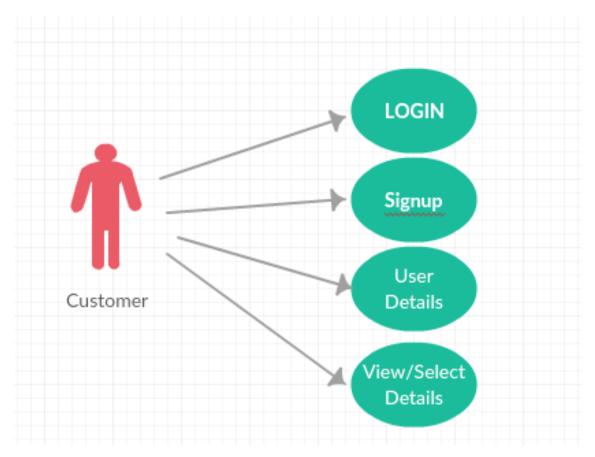


Figure 3.2: Use Case Diagram for Customer

3.3.4 Use Case Tables

3.3.4.1 Tables of Customer

Table 3.1: Sign Up Use Case

Use Case ID	1
Title	Sign Up
Description	Customer creates an account to register
Primary Actor	Customer
Pre-Condition	Customer must open web portal
Post-Condition	Account will be created successfully.

Table 3.2: Sign In Use Case

Use Case ID	2
Title	Sign In
Description	Customer Log-in.
Primary Actor	Customer
Pre-Condition	Account must be created.
Post-Condition	Customer can use the system.

Table 3.3: Halls View Use Case

Use Case ID	3
Title	Online Event Reservation System
Description	Customer View
Primary Actor	Customer.
Pre-Condition	Account must be Sign In.
Post-Condition	Customer can View Halls

Table 3.4: Profile View Use Case

Use Case ID	4
Title	Online Event Reservation System
Description	Customer View
Primary Actor	Customer.
Pre-Condition	Account must be Sign In.
Post-Condition	Customer can View Profile.

Table 3.5: Reserve an Event Use Case

Use Case ID	5
Title	Online Event Reservation System
Description	Customer View
Primary Actor	Customer.
Pre-Condition	Account must be Sign In.
Post-Condition	Customer can reserve and event.

Table 3.6: Reserve and event with other features Use Case

Use Case ID	6
Title	Online Event Reservation System
Description	Customer View
Primary Actor	Customer.
Pre-Condition	Account must be Sign In.
Post-Condition	Customer can user other features.

3.3.4.2 Tables of Admin View

Table 3.7: Sign Up Use Case

Use Case ID	7
Title	Sign Up
Description	Admin creates an account to register
Primary Actor	Admin
Pre-Condition	Admin must open web portal
Post-Condition	Account will be created successfully

Table 3.8: View Activity Use Case

Use Case ID	8
Title	Online Event Reservation System
Description	Admin View
Primary Actor	Admin
Pre-Condition	Account can View
Post-Condition	Admin can see all activities

Table 3.9: Delete Use Case

Use Case ID	9
Title	Online Event Reservation System
Description	Admin View
Primary Actor	Admin
Pre-Condition	Account can Delete
Post-Condition	Admin can Delete

Table 3.10: Insert Use Case

Use Case ID	10
Title	Online Event Reservation System
Description	Admin View
Primary Actor	Admin
Pre-Condition	Account can Insert
Post-Condition	Admin can Insert

Design

In this portion of report the detail architecture of proposed system with the help of detailed diagrams is discussed. Different UML diagrams would be used to show different aspects of our system like its structure, flow and other things. The UML diagrams which are used as:

4.1 Activity Diagram

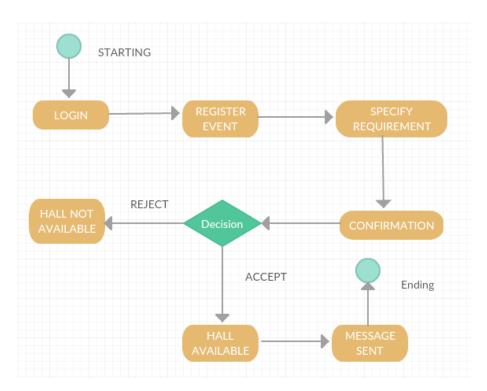


Figure 4.1: Administer Diagram

4.2 Sequence Diagram

A Sequence diagram is an interaction diagram that shows how objects operate with one another and in what order. It is a construct of a message sequence chart. A sequence diagram shows object interactions arranged in time sequence.

4.2.1 Admin Side

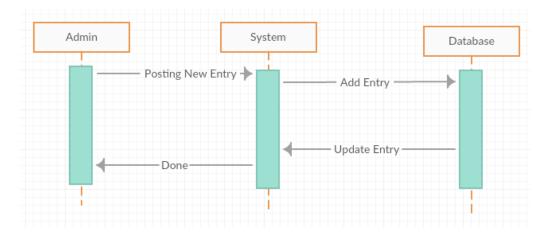


Figure 4.2: Entering Data Sequence Diagram

4.2.2 Customer Side

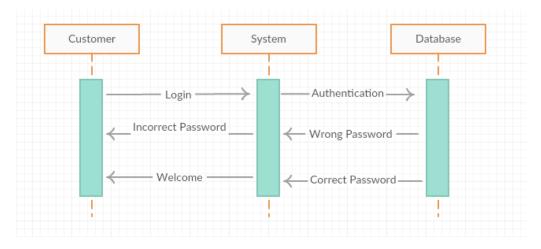


Figure 4.3: Login Sequence Diagram

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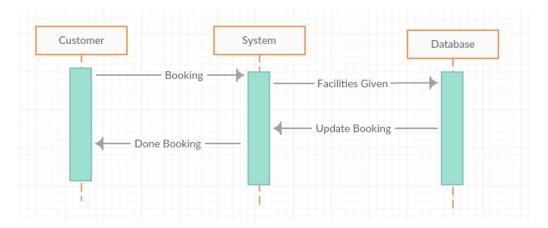


Figure 4.4: Booking of Event Sequence Diagram

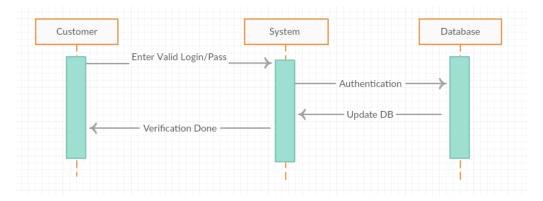


Figure 4.5: Sign-Up Sequence Diagram

4.3 Graphical User Interface

Graphical user interface is designed in such a way that it remains highly usable and intuitive for users of any age and did not get frustrate of it

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4.3.1 Registration Page

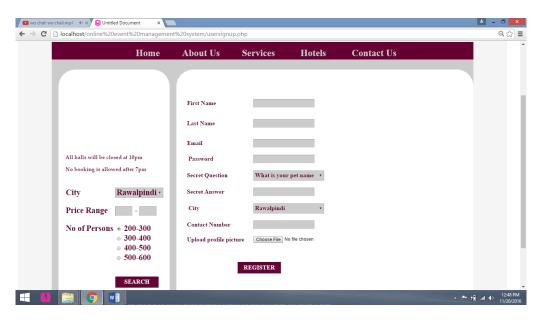


Figure 4.6: Registration Page

4.3.2 Login Page

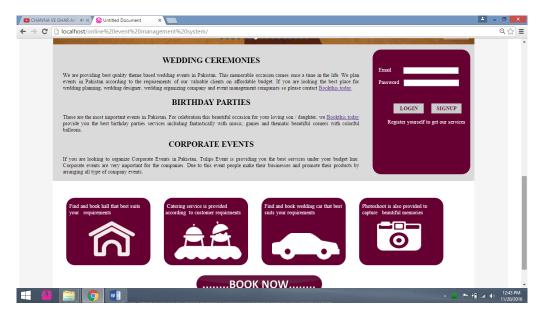


Figure 4.7: Login Page

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4.3.3 Booking/Reservation Page

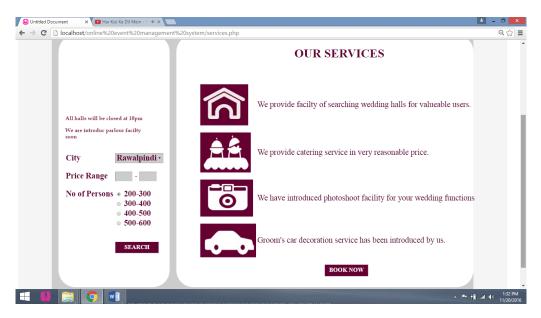


Figure 4.8: Booking/Reservation Page

4.3.4 Sign In Page

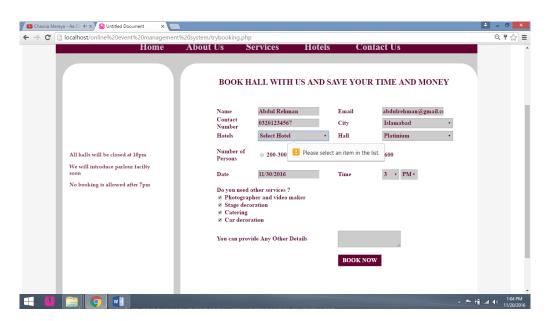


Figure 4.9: Sign In Page

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4.3.5 Welcome Page

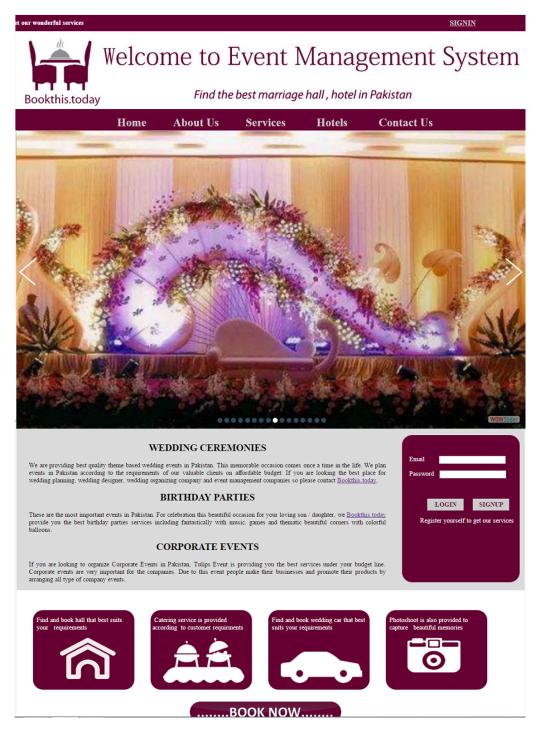


Figure 4.10: Welcome Page

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4.3.6 View Details Page

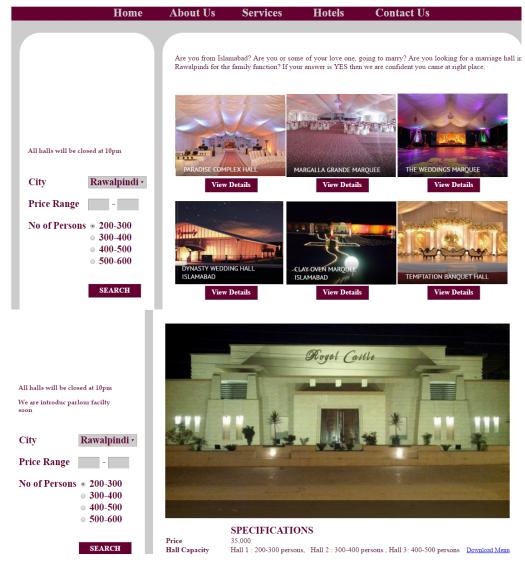


Figure 4.11: View Details Page

System Implementation

5.1 System Architecture

In this chapter system implementation would be explained in detail.

5.1.1 Web Application

This application required a web browser and an internet connection. Only users can use this application. User can user this to login into his/her account and to reserve, view or to compare the rate of the halls. User can send feedback to the administrator. Web portal is currently on wamp server. Admin can use this application to add, delete, update, and view users and update hotels information. User can also use this application to view and reserve halls.

5.2 System Internal Component

5.2.1 Sign Up

In this application a sign up process is required to register an account in the system database, for becoming a member of this application and can be access all the features of the application. User will add first name, last name, email, password, secret question, secret answer, city, contact number and profile picture.

5.2.2 Sign In

The application is useful successfully after signing in data will be store in database of the wamp server. This is a password base system for a user to access his/her own account neither someone's other account for security purposes.

5.2.3 Register Event

This is the system component in which user can easily make a reservation of the event and also can use different facilities like catering, stage decoration, car decoration, photographer and video maker.

5.3 Tools and Technology

The techniques which are being used in online event reservation system, some of which are being used here below.

5.3.1 Php

PHP is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. [1][2]

5.3.2 Adobe Dream weaver

Adobe Dream weaver is a proprietary web development tool developed by Adobe system. The current version of Dreamweaver have support for web technologies like CSS, JavaScript, and various server-side languages and frameworks including ASP, JavaScript, ASP.Net, Csharp, ASP.Net, VB, PHP and many more. Dreamweaver lets its users design, code and manage websites .[3]

5.3.3 SOL

Sql is the structure query language which is used to for databases and store the data of the project. As the web portal also have database at the backend which stores the login and other information there. [4]

5.3.4 Internet

Internet connection is required for 24/7, for the proper functioning of the developed application.

System Testing and Evaluation

Web Application testing process ensures that each module of the product is working and providing results according to the requirements. Each of the individual modules of the application is tested individually and complete application is also tested. The main objective of testing is to check whether the developed application meets the required quality standards or not. Testing is also aimed at determining whether the application is providing the desired result. Testing can be of many types like explained below:

6.1 Graphical User Interface Testing

Graphical User Interface testing is done on all the system components to ensure such as layout, icon etc are well suitable for the user to understand the system quickly.

Table 6.1: Test Case 01 (Signup Test Case)

TC_FUNCT_01			
Tests 1	Tests the Sign-up Screen		
This is	This is only applicable for Web Application		
Functi	Functional Requirement		
User s	User should have account		
Step	Task and Expected Result		
1	Open Signup page		
2	Verify Signup page is Displayed on screen	Pass	
3	User Enter a valid Information	Pass	
4	Verify User E-mail address for single account	Pass	
5	User Record save properly	Pass	
6	User Register Successfully	Pass	

Table 6.2: Test Case 02 (Sign In Test Case)

TC_F	UNCT_02		
Show	Show the User Profile		
This is	This is only applicable for Web Application		
Functi	Functional Requirement		
User r	User must be Login into the Application		
Step	Task and Expected Result		
1	Login by entering email and password	Pass	
2	Verify email and password	Pass	
3	Press Login Button		

6.2 Usability Testing

As the application tested many time in the normal environment to measure the product capacity to meet its intended purpose.

Table 6.3: Test Case 03 (Reservation of event Test Case)

TC_F	TC_FUNCT_03		
Usabi	ity Testing		
This is	This is only applicable for Web Application		
N/A	N/A		
User s	User should have account		
Step	Task and Expected Result		
1	Login the system.	Pass	
2	Verify that the search button is displayed.	Pass	
3	Avail all services with the Hall	Pass	
4	Use booking button to reserve	Pass	
5	Display the booking ID	Pass	

6.3 Load Testing

The application is very much good to take the load when used by several visitors.

Table 6.4: Test Case 04 (Load Test Case)

TC_F	UNCT_04		
Load '	Testing		
This is	This is only applicable for Web Application		
N/A			
Intern	Internet and Computer should be available		
Step	Task and Expected Result		
1	Verifying by adding minimum 10 users in the DB.	Pass	
2	Verify by logging all the user from database.	Pass	

6.4 Performance Testing

The application shows good performance while using.

Table 6.5: Test Case 05 (Performance Test Case)

TC_F	TC_FUNCT_05		
Perfor	Performance Testing		
This is	This is only applicable for Web Application		
Functi	Functional Requirement		
Intern	Internet and Computer should be available		
Step	Task and Expected Result		
1	Verifying after availability of Internet Log-in the system.	Pass	
2	Verify user enter a valid ID and Password.	Pass	
3	After press log-in button details will fetch within 2 sec from database	Pass	
4	Verify user can see his friend location on Google map within 5 to 6 sec.	Pass	

6.5 Security Testing

Security testing is defined as the testing an application to determine that an information system protects its data or not. Some basic concepts in security testing are:

6.5.1 Confidentiality and Authentication

Confidentiality and Authentication had been secured by the Login Password. Everyone who wanted to check or book the portal must have a log in/ password which make the whole system much safer.

6.5.2 Integrity

As every information of the system had been secured and the whole database only accessible to the admin. Admin would be the any person whole can access the database.

6.5.3 Availability

As the portal will be available 24/7 round the clock. Portal could be accessible from any place and at any time.

Table 6.6: Test Case 06 (Security Test Case)

TC_FUNCT_06			
Securi	Security Testing		
This is	This is only applicable for Web Application		
N/A	N/A		
Intern	Internet and Computer should be available		
Step	Task and Expected Result		
1	Verify user enter a valid ID and Password.	Pass	
2	Verify user with wrong password cannot login.	Pass	
3	Verify user with wrong Email ID cannot login	Pass	
4	Verify user cannot make another account with single E-mail address.	Pass	

Conclusions

7.1 Conclusion

The basic purpose of developing "Online Event Reservation System" was to develop a web application which can provide people with the facility to manage different events at the time of special occasions of their lives. This application is a web application, website and app server. PHP, HTML and CSS were used for developing website, and it was the most important part of project. The basic version of this application was developed by me, but there was long way to go to improve this application and make more user friendly and easy to use. As I already got offers from different hotels, catering services and many other own to deploy this application for them. This application will be converted into other platform to increase span of its usage. Another important thing to do will be connecting this application with Cloud database as we know present era is of Cloud computing, and converting normal database to Cloud Database will be good for application especially for data handling. It was because of the blessings of Allah Almighty and prayer of our love ones that we have achieved this goal and developed an application that will change concept to new level.

7.2 Future Enhancements

Future enhancement includes:

• Android/ IOS Development

In future android application will be made so that this application is not available only to the website users.

Appendix A

User Manual

- 1. To reserve a wedding, ceremony or any other event customer should create his/her account.
- 2. User (Customer) should fill complete information in sign up form to register.
- 3. User (Customer) should enter a valid email and password to logging into system.
- 4. This system allow User (Customer) to make reservation according to the requirement.

A.1 Sign Up Page

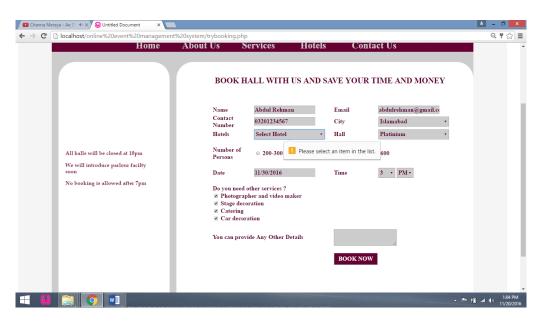


Figure A.1: Sign In Page

A.2 Login Page 25

A.2 Login Page

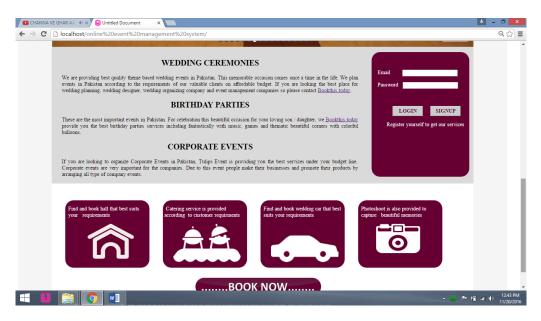


Figure A.2: Login Page

A.3 Profile Page

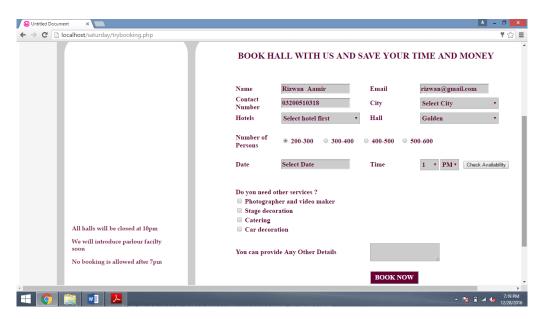


Figure A.3: Profile Page

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A.4 Main Page

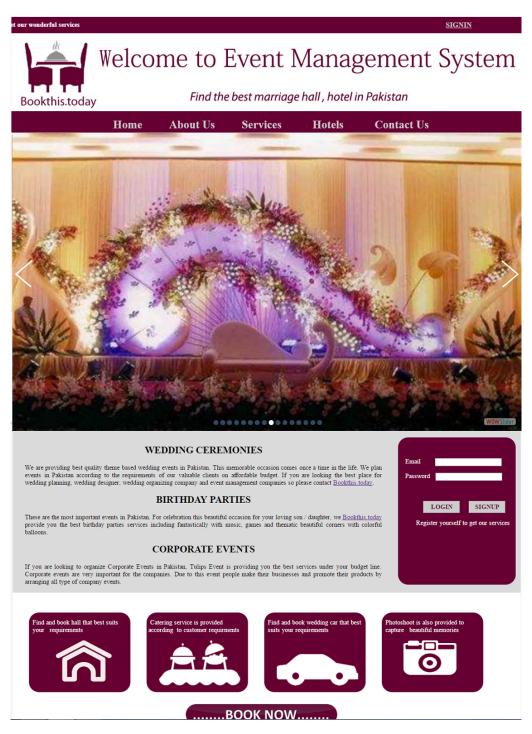


Figure A.4: Main Page

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