Community Center Reservation System

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This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering

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APPROVAL

This Project titled **"Community Center Reservation System,"** submitted by Md. Jamil Uddin, ID No: 142-15-3446 to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06th May,2018.

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DECLARATION

I hereby declare that this project has been done by me under the supervision of **Ms. Subhenur Latif, Assistant Professor, Department of CSE,** Daffodil International University. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

This project is on online Community Center/Convention Center reservation system. The purpose of the project is to allow users to find best community centers from anywhere in Bangladesh using a website and book it from home.Nowadays it is very hard to find a big open place.If we want to make any kind of programmes like marriage,birthday party,business meeting etc,we need a community center.This website will help the users to find and book the best community centers of the city.This is the first project of Bangladesh about online community center reservation system.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES PAGE NO

CHAPTER 1

INTRODUCTION

1.1 Introduction

Throughout the world, a Community Centre is defined as a public building which is run for the benefit of the community. These buildings consist of at least one large room which is commonly used for a range of public and private events, such as community & council meetings, voting, sports clubs, local drama and dance productions, bring and buy rummage sales and private parties. Often a Community Centre or Community Hall is found to have a charitable status.

1.2 Objectives

The major objectives of this project are to design and simulation of a computerized community center reservation system.Moreover, few more objectives are there also. There are as follows-

- To design the record for users into a computerized system.
- To develop large number of lists of community centers.

1.3 Motivation

Bangladesh is a over populated country.It is very hard to find out big open places in big cities of Bangladesh.If we want to arrange any kind of programmes like marriage ceremony,birthday party,thirty first night celebration etc we need community centers/convention centers.Besides there are so many problems in open places but in community centers we can arranage our programmes in proper security.But there is no such a website in Bangladesh which can book or reserve community centers from home.I build a website that will help users to find out and book best possible community centers of the city.This is the first website in Bangladesh which will help to reserve community centers from home.

1.4 Expected Outcome

Nowadays there are rapid changes in our society especially if we talk about computers and its technology.Community Center reservation system is a kind of website which will help users and save their valuable times.

- Streamline Community Hall enquiry and venue booking system quickly, efficiently and avoid any double bookings.
- Customers can view availability and make reservations online in real-time, reducing the amount of calls community center manager take.
- Manage bookings for multiple rooms in Community Centre or Community Hall.
- The website can manage users Invoicing and track payments.
- Registered users will be notified by email about special offers.
- Users can pay bills by using paypal,mastercard,bkash,Rocket or hand cash.All kinds of payment method are available in this system [11].

1.5 Report Layout

Chapter 1 (Introduction): In chapter 1 I describe about introduction,motivation,objectives, Expected outcomes and report layout.

Chapter 2 (Background): In this chapter 2 describe background introduction. Also describe related work with comparative studies, scope of the problem and challenges we face.

Chapter 3 (Requirement Specification): This chapter basically based on our project requirement with Business Process Modeling we use for our project. Also describe Logical data model and design requirements.

Chapter 4 (Design Specification): In this chapter, we talk about our project Front-end Design, Back-end Design, Interaction Design and UX and Implementation Requirements.

Chapter 5 (Implementation and Testing): The Chapter have project Implementation of Front-end Design Also Back-end Design and Interactions.

Chapter 6 (Conclusion and Future Scope): This Chapter describes about project Conclusion, Further Improvement Scope and Project Limitation.

CHAPTER 2
BACKGROUND

2.1 Introduction

Bangladesh is now a developing country.IT sectors of this country is growing rapidly.There are thousands of freelancers are working in this sector for so many foreign companies like Upwork,Fiverr,Freelancers etc.But e commerce sector is not fully developed in our country.Only few e commerce we have which produce good products and results.I want to develop this sector.That's why I choose this project.I want people to get more good service from home and save their valuable time.Community centers is now a part of city life.Without it we cannot arranage big programmes with security and safety.I hope this project will help lot of people.This is not just final year project,this will be a real life business plan in future.

2.2 Related Works

There are some projects and websites about hotel booking system but this is the first project and business model about online community center reservation system. Hope this project will help all the community centers owners a lot.

2.3 Feasibility Study

Feasibility is an important study to check a project feasible or not. For every project, feasibility study should be clearly understood, considered and carefully Figure-d out. This Application needs a feasibility study. There are many type of feasibility estimating techniques the most common and effective feasibility is carefully checked, and this application is feasible [2].

2.3.1 Time Schedule

Table: Time scheduling of this project

Step	Part/Phase	Duration/Time
1	Data collection and Requirement	15 days
2	System Design	15 days
3	Development and coding	30 days
4	Implementation	10 days
5	Software Testing	7 days

2.4 Scope of the Problem

It can be said that each project has scope of facing problem. My plan is to develop such kind of website which can be used comfortably. This website can use any type of user who can use computers and mobile phone. The aim of this project is to give some instruction to the user and some facilities by which user can be benefited.I think that by using this website user May remain little bit better than before. Every work has scope of problem and it also has a problem. The problem is exact result showing. If there is internet problem, there must be a problem.

2.5 Challenges

Before developing any type of work we should keep in mind about the challenges of the work. Some kind of challenges discussed below:

(a) Data collection

(b) Resources

(c) Internet connection

(d) Users satisfiction

(e) Getting notification

(f) Service providing.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Methodology is the process used to collection information and data for the purpose of making decisions. The methodology may include publication research, interviews, surveys and other research techniques and could include both present and historical information. In order to develop my project title is "Design and development of computerized Community Center Reservation System". I have used the agile model [1].

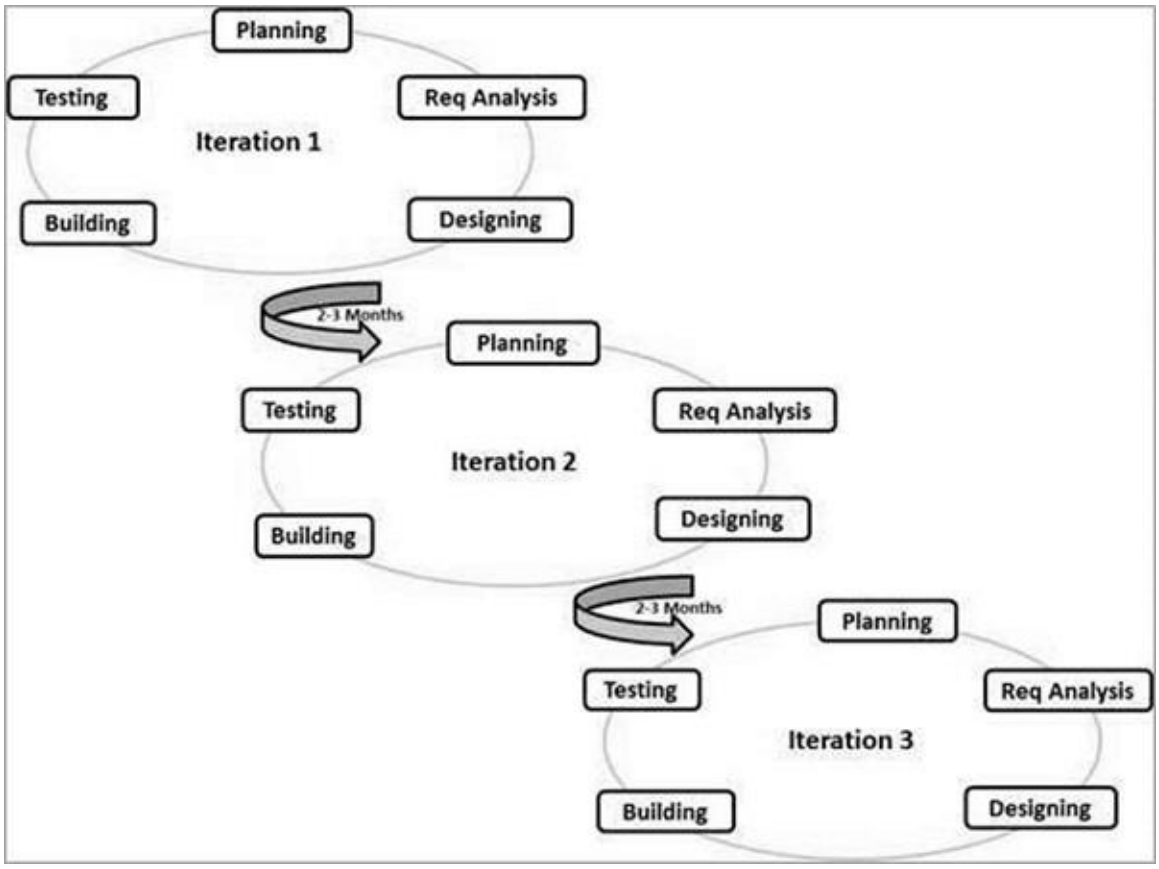

Figure 3.1: Agile Model

Agile model believes that every project needs to be handled differently and the existing methods need to be tailored to best suit the project requirements. In Agile, the tasks are divided to time boxes (small time frames) to deliver specific features for a release.

Iterative approach is taken and working software build is delivered after each iteration. Each build is incremental in terms of features; the final build holds all the features required by the customer.

3.2 Requirement collection and analysis

The goal of this phase is to understand the exact requirements of the customers and to document them properly.

3.3 Use Case Modeling and Description

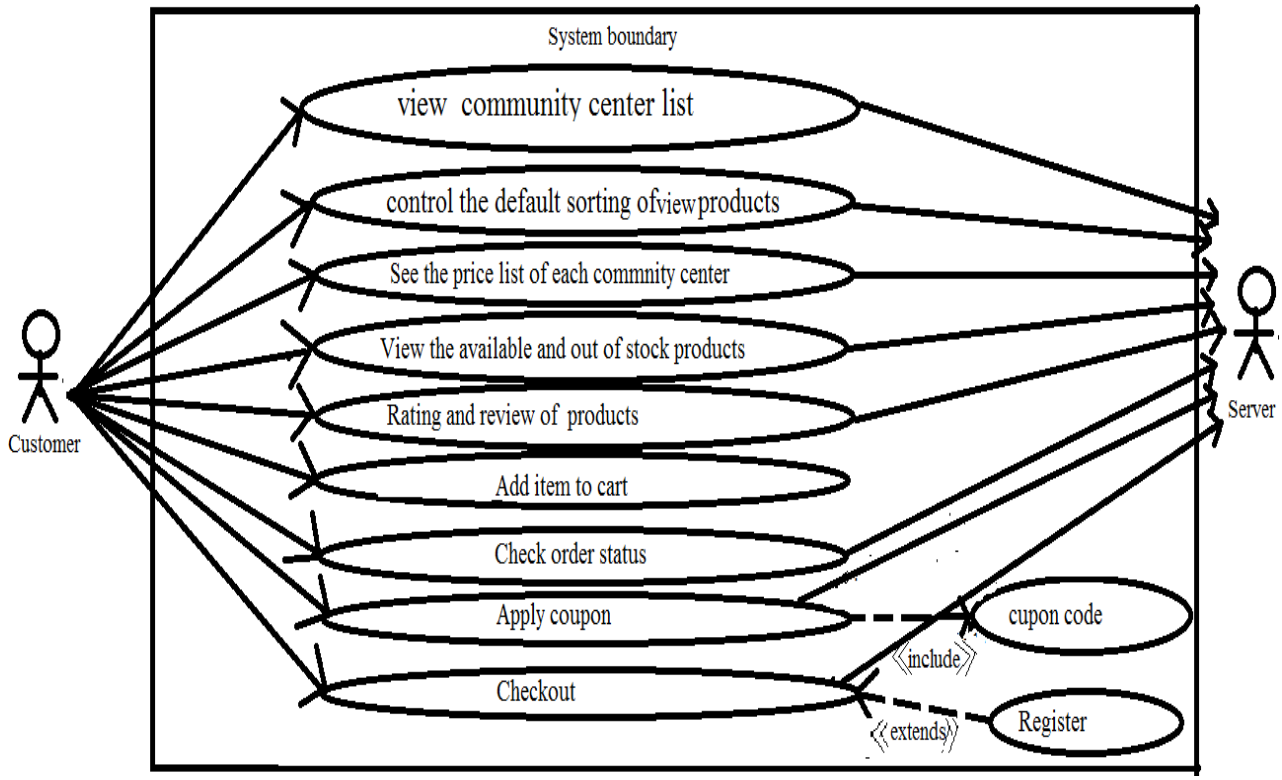

Figure 3.2: Use Case Diagram

3.4 Logical Data Model

The most creative and challenging phase of the system development life cycle is design. To simplify the design to understand I explains some few parts of my application. The main user interface of my application has two parts one is Searcher Part and other is Suggests Part and the backend Part of my application is SQL Light database. A logical design of my application is given below [3].

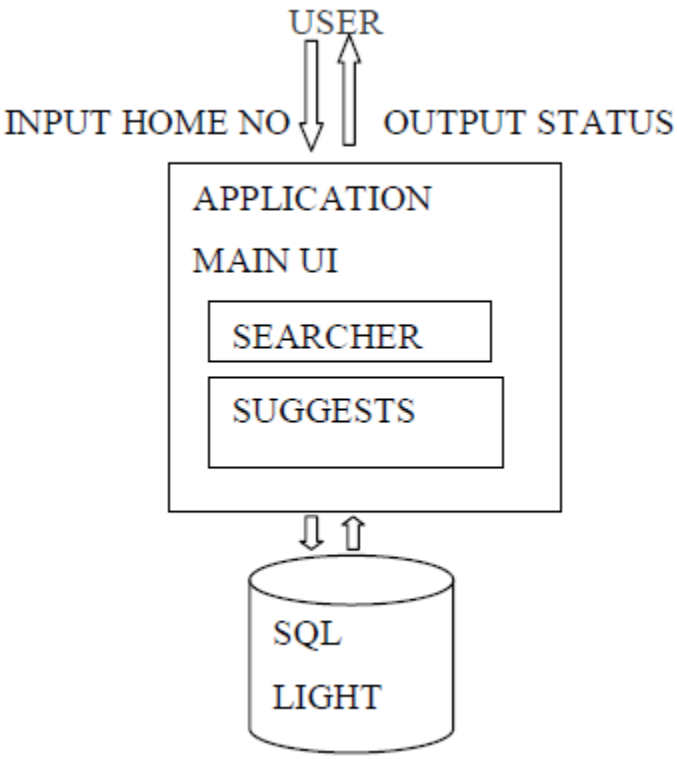

Figure 3.3:Logical Data Model

3.5 Design Requirements

For the development of a website there must be specific designs. Design is effective and essential for a website. There must be front-end design, Back-end design and interaction design. Design should be in a way which is user friendly and user feel comfortable using website. The color combination and specification should be unique. For all design there must be some related work like html.css,bootstrap,jquery etc.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Front-end is the part of any website which is visual to the user. User can interact with the back-end and also with database through the front-end. We will discuss about the initial front-end design in this part. Figure 4.1 shows the initial home page of the website.

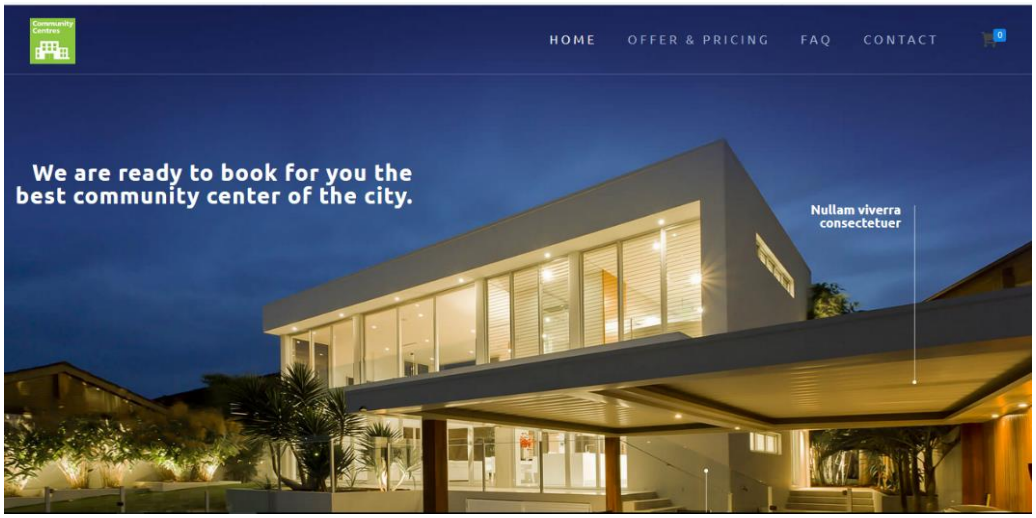

Figure 4.1: Initial home page

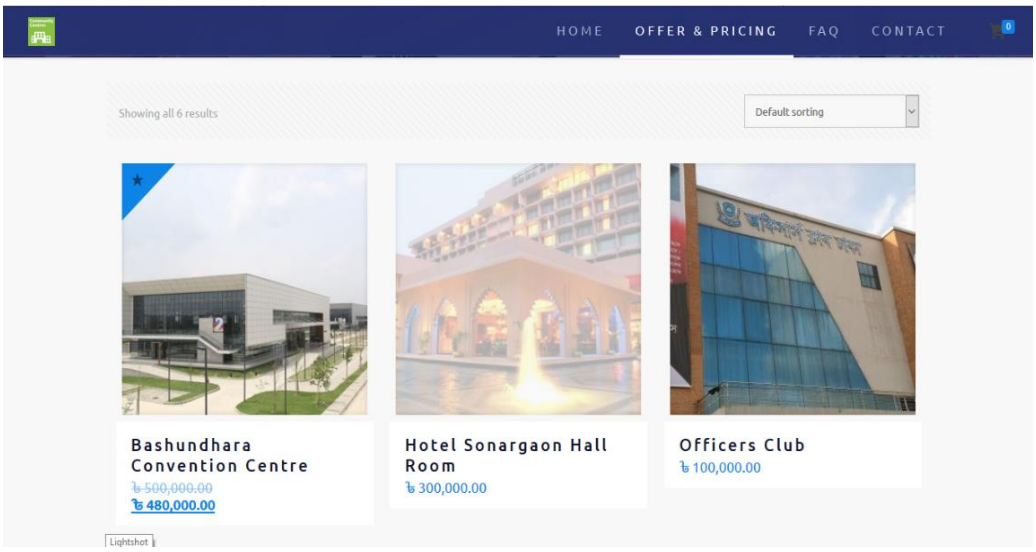

Figure 4.2: Offer and Pricing Page full

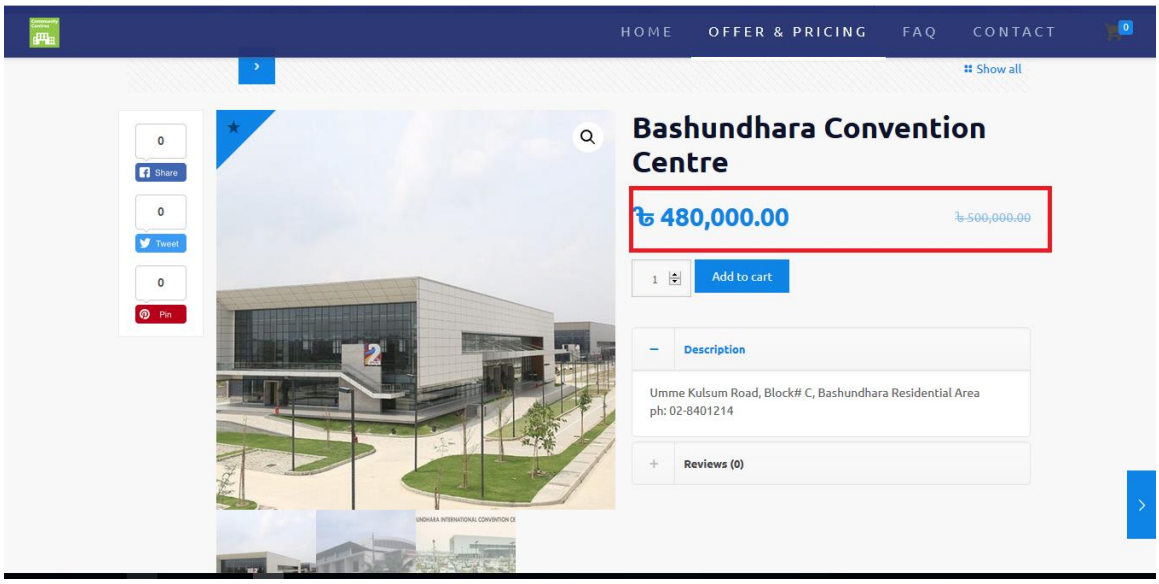

Figure 4.3: Offer Page

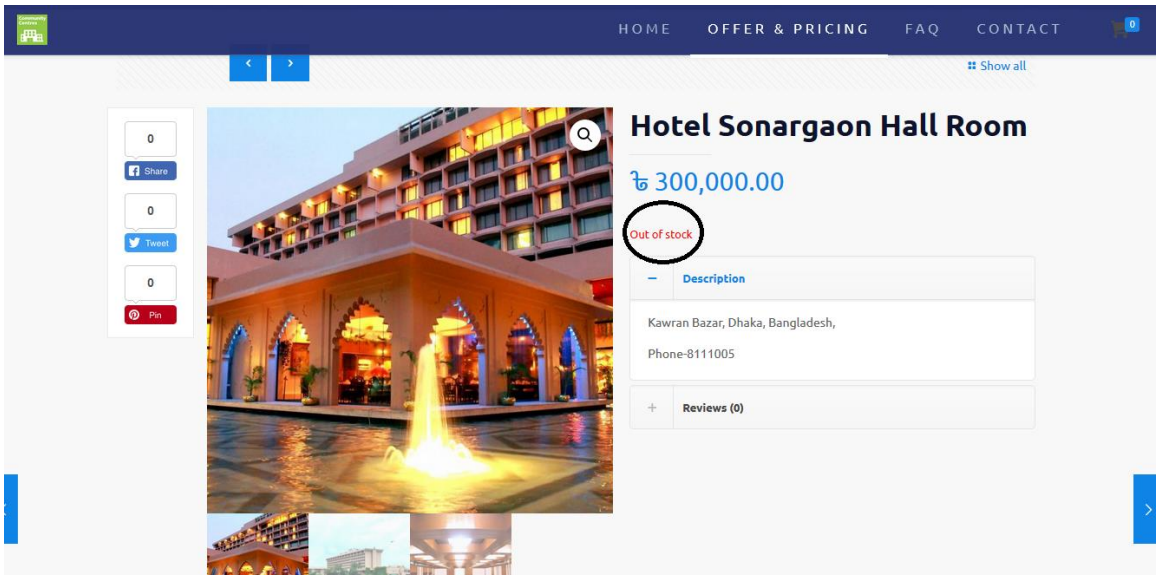

Figure 4.4: Out of Stock Page

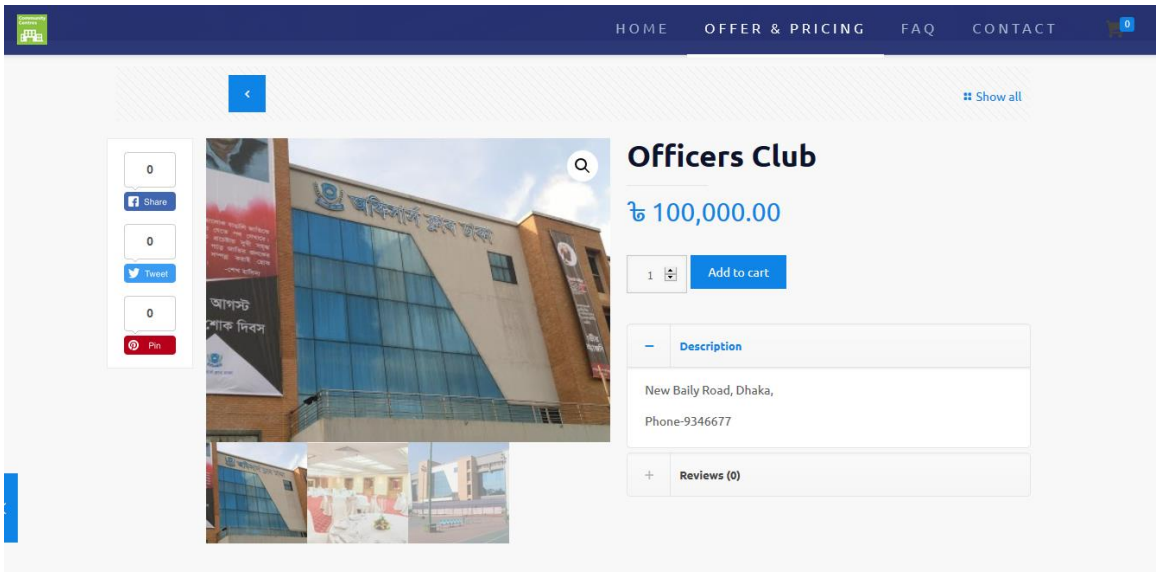

Figure 4.5: Normal Price Page

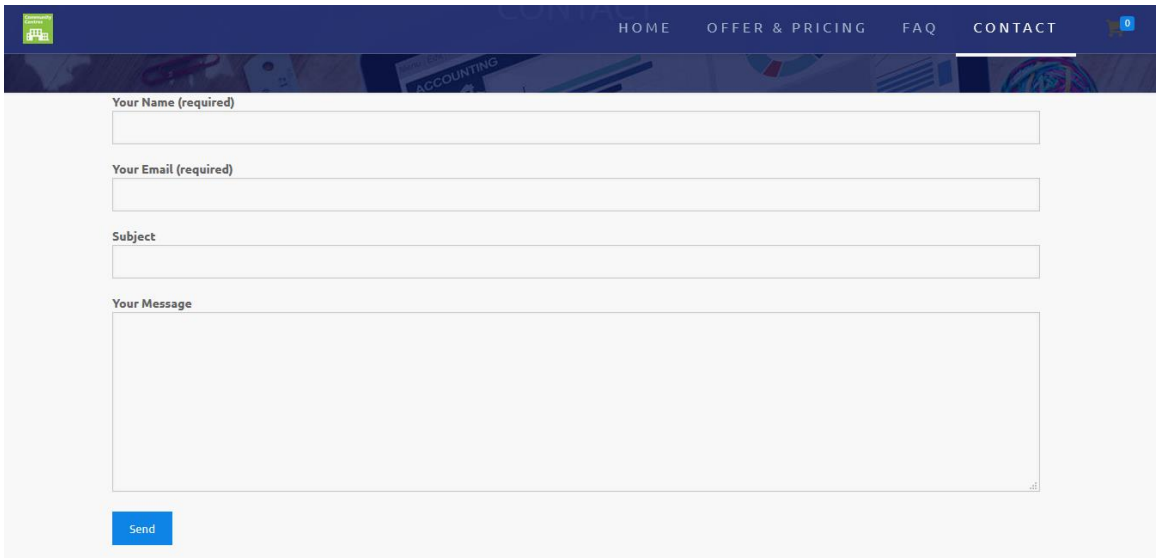

Figure 4.6: Contact Page

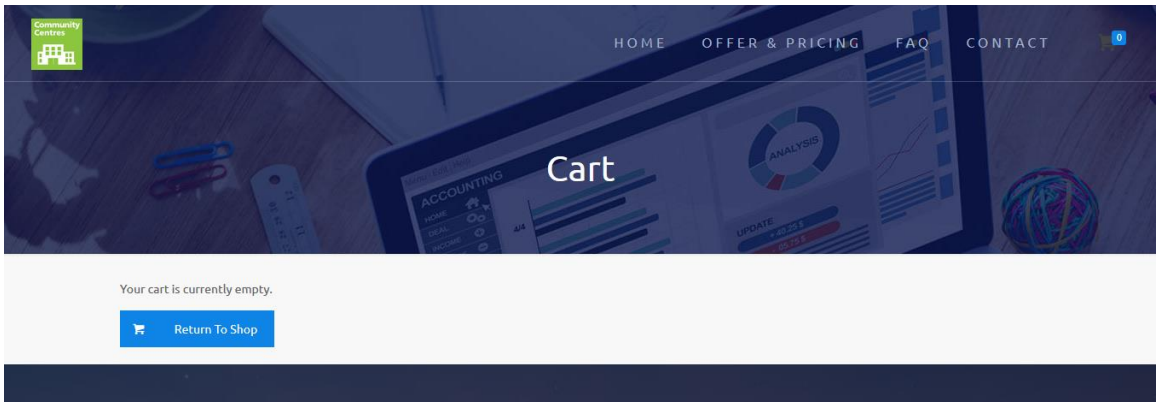

Figure 4.7: Cart Page

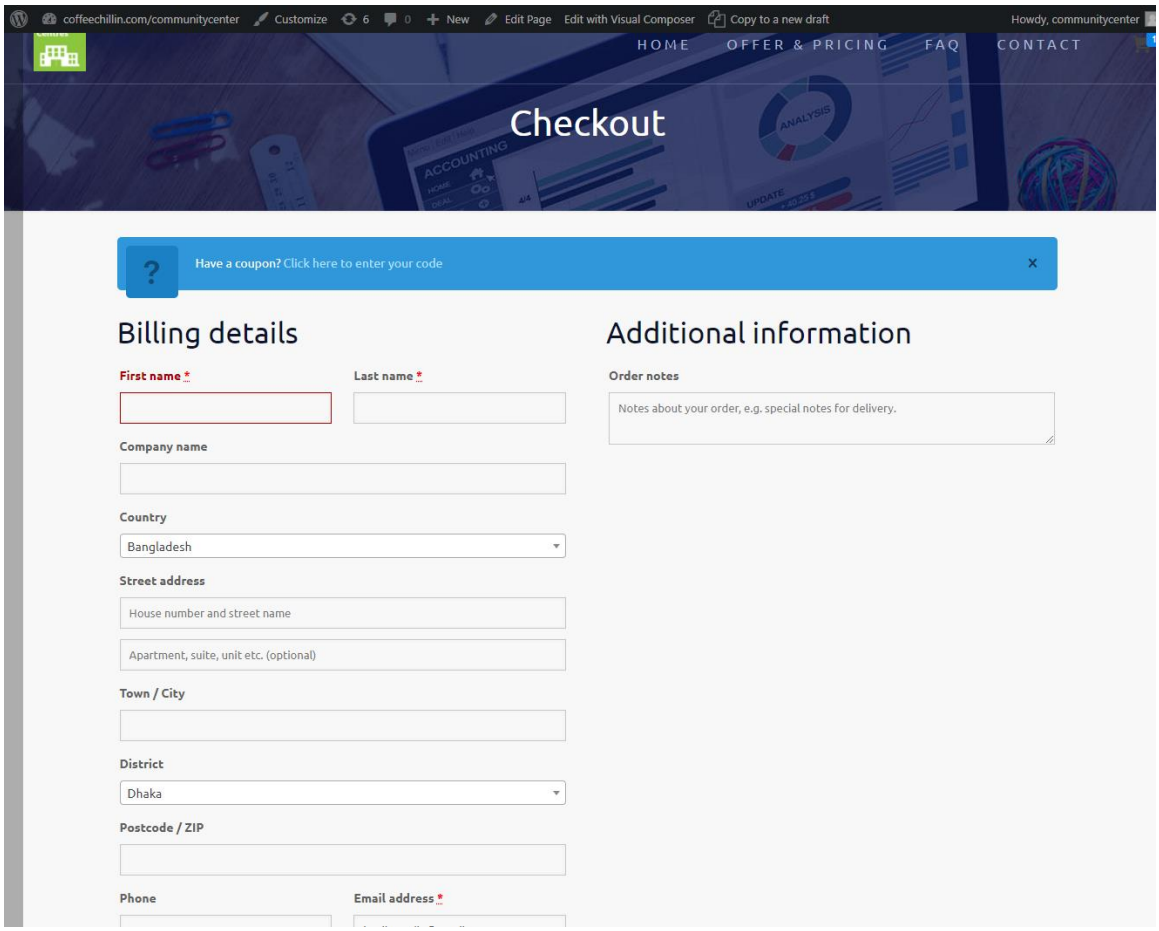

Figure 4.8: Billing Details

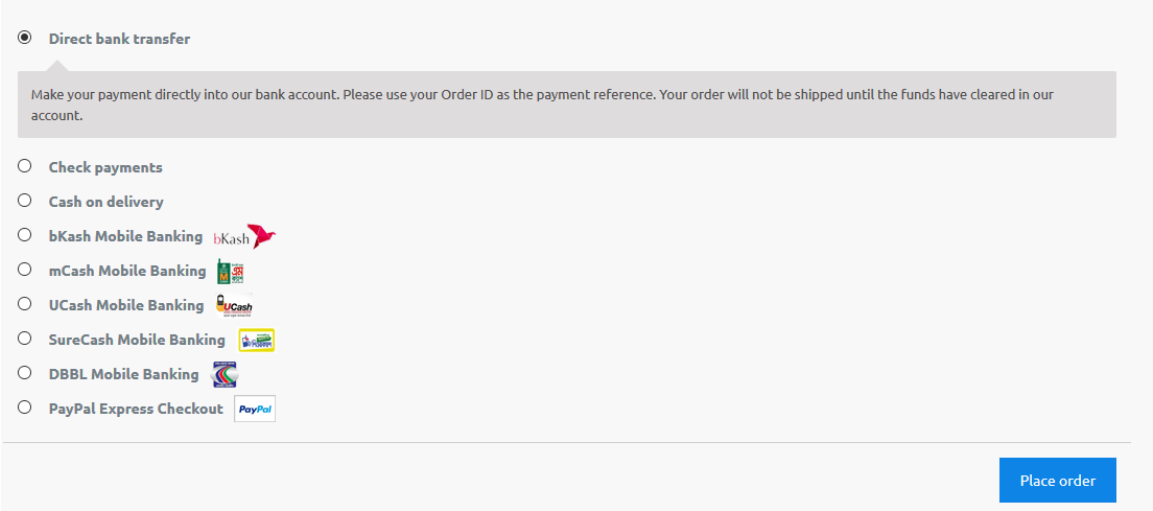

Figure 4.9: Payment Methods

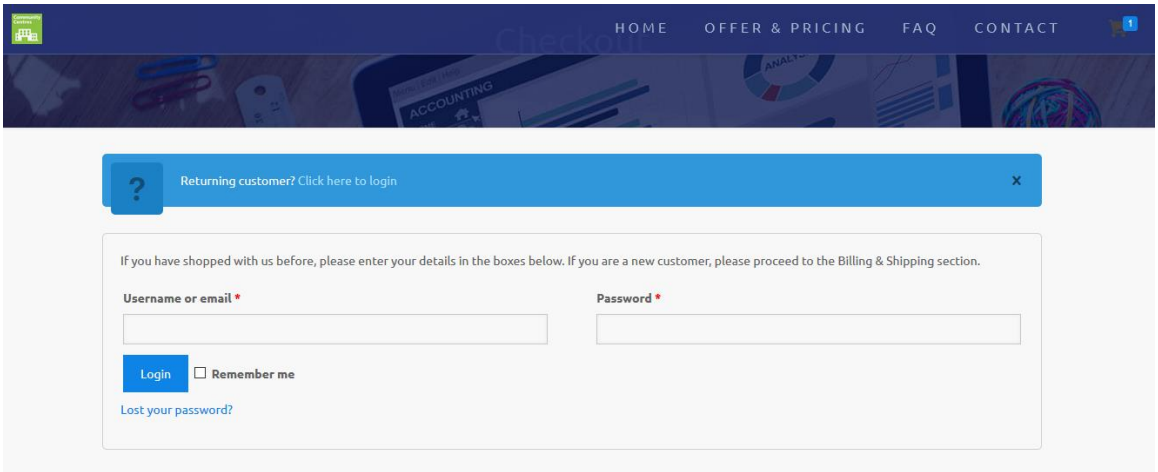

Figure 4.10: Login Page

4.2 Back-end Design

In this part the back end is designed the way that database and other required features can be easily retrievable for both developer and user. Back end is very essential part of the app and it is designed according to the plan so that it is comfortable for the user and they can easily access and use it.

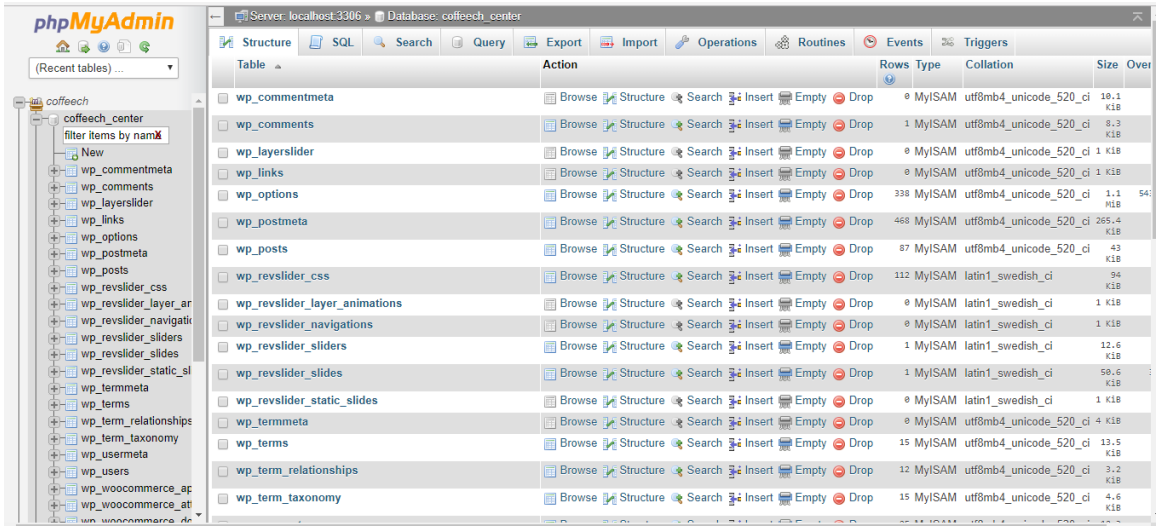

Figure 4.11: Database

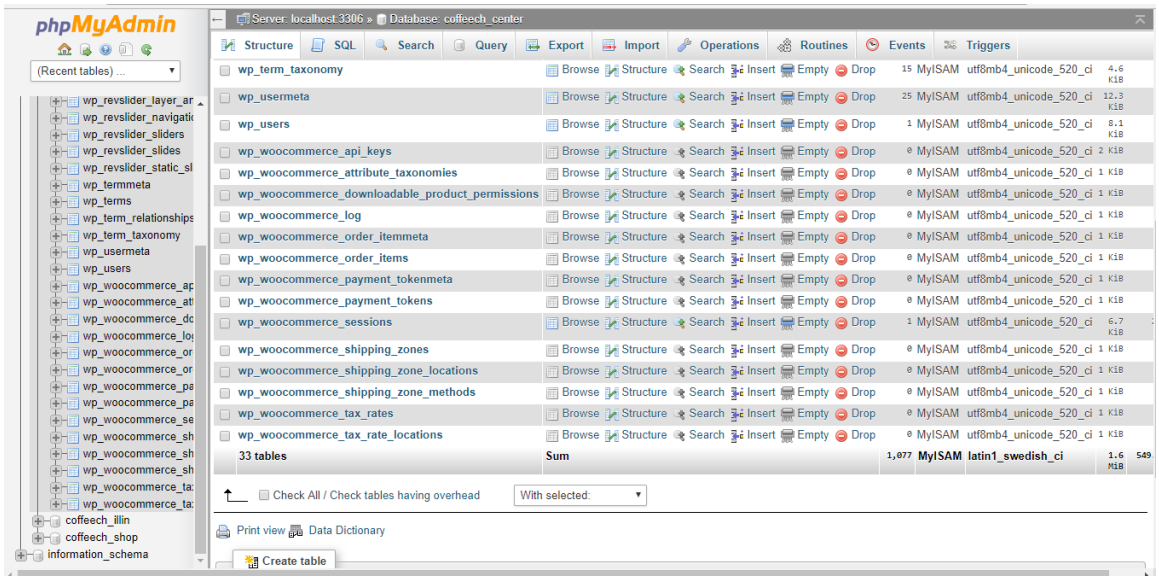

Figure 4.12: Database

4.3 Interaction Design and UX

Interaction design is specifically a discipline which examines the interaction (via an interface) between a system and its user. It may also incorporate design focused on how information should be presented within such a system to enable the user to best understand that information though this is often considered to be the separate discipline of “information design” too. User experience design focuses on the overall experience between a user and a product. It is not just concerned with the interactive element but also the way that certain elements look, feels or contrive to deliver certain output [4].

4.4 Implementation Requirements

Requirement specification is most important to develop a website. In my website, I have used html,css,bootstrap,javascript,php,mysql,wordpress and xmpp.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

The database of my project is implemented and executed by Mysql. After collecting our necessary data I have implemented the database according to my plan. I have developed and executed using Mysql so that data can be easily retrieved [9].

.5.2 Implementation of Front-end Design

1. HTML: HTML is used to create and save web document. E.g. Notepad/Notepad++
2. CSS : (Cascading Style Sheets) Create attractive Layout
3. JavaScript: it is a programming language, commonly use with web browsers.
4. Bootstrap is used to make the website responsive [9].

5.3 Implementation of Interaction

It is said that the project build for create a big community to help each other. Without users help it's a useless project.I try my best to close to user and give them the best experience to my application. I ensure that I protect their information and don't give any public uses for bad purpose. Why a user uses my application, cause it a clean UI, faster load time, easily contact to the right person.I create an option to receive user feedback using email. It's long project and it was update day by day. Not only as a developer can do this, every project will be successful to help each other. So be a user they will be an important part of my project.

5.4 Testing Implementation

I tested the case with which the user interfaces can be used. I checked the application or the product built is user-friendly or not.My website is comfortable with different parameters the flow, navigation and layout, speed and content especially in comparison prior or similar applications.

5.4.1 System Test

System testing has been carried out prior to installation and it is observed that the system works according to requirements as there is no problem [5].

5.4.2 Unit Test

Each part of the application is tested to ensure that the detailed design is correctly implemented. It has been carried out to ensure that each part of the system works as per requirements [5].

5.4.3 Usability Test

Usability test were carried out by users. These verify that the system provides the required functionality. Firstly, I selected five users to test our system for usability test. Users have run the website very smoothly and fast, facing no problem [5].

5.5 Testing Result and Reports

In this part overall work testing and report will be discussed.

Test Case	Test Input	Expected Outcome	Actual Outcome	Result
Interface visibility	Tested desktop and mobile web browser.	Interface are display correctly	Interface are displayed correctly	Pass
Correct response for each button	Tested desktop and mobile web browser.	Display Correct Activity.	Displayed Correctly.	Pass
Payment Methods	Tested desktop and mobile web browser.	All the methods should work perfectly	All the methods worked perfectly	Pass
Billing details	Tested desktop and mobile web browser.	Work Perfectly.	Worked Perfectly.	Pass
User Login	Tested desktop and mobile web browser.	It should login.	Successfully logged in.	Pass
User feedback form	Tested desktop and mobile web browser.	It should work properly.	Worked properly.	Pass

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

Community Center Reservation System is a web based service provider application.This website is dynamic and user friendly. User can easily access all of the services. Finally I build my system. I do everything with honesty because I know honesty is the best policy. My customers are satisfied with our services.CCRS will reduce customers anxiety and save their times.

6.2 Scope for Further Developments

- Ensuring more security.
- More convenient.
- More features update.
- Spread the service all over the country
- In future there will be a licensed chat box in the website for instant help.
- Create a mobile application for giving better user experience.

6.3 Limitations

This website has some limitations which mention below.

- Without internet this system will not work.
- Customers must login to their own profiles to order.
- Guests must create their own accounts.

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Appendix: Plagiarism Check Report