

American International University- Bangladesh

Department of Computer Science
Faculty of Science & Technology (FST)

Project Title: Community Center System

Course Instructor: Farzana Binte Alam

Course: Software Requirement Engineering

Section: B

Submitted By:

| 1) Khurshida Binte Khaleque | 1) 15-30618-3 |
|-----------------------------|---------------|
| 2) Shaiq,Sadman | 2) 18-39276-3 |
| 3) Azwad,Afid Md | 3) 18-38261-2 |
| 4) Sarker,Safir uddin | 4) 16-32575-2 |

1. Introduction

1.1 Proposal and Purpose

Purpose: Now a day's people like to celebrate their special occasions. For that they want a perfect place. Because of that tendency the demand of booking community center is increasing. Dhaka is a big and busy city. It is not easy to find information about all community center nearby or at their preferable place. And if they find all community center then the most important problem arises like timing and costing.

It is one kind of the common problem that almost we face. As everyone is looking for community center, almost all well-known community center goes through a busy schedule. Every people don't get chance to book one of the well- known community centers. Some time they want to see review about those centers, want to know their facilities. Sometimes those centers give offer for their customers. People can't get to know about those offers. And sometime it also becomes costing problem. They don't find their desirable place at their preferable price.

People faces trouble for booking because it is not possible to visit all the center and find a best place at their own budget and to know the honest review of community center or about their offers. If they try to do so, it will cost them of their energy and also their valuable time.

It is also a problem for the authorities. They can't reach to their customers so that they can show their facilities and tell about their offers.

Proposal: To solve this problem, we come up to this, that online information base system will be the best solution. It will not cost any energy and it is also time saving. People can get any information from this system. More important think is people can reserve on online.

This system will contain all the community center list in it. People can know how many community centers are available at their location or in that location they want.

So, they will be able to pick one up easily. The system will contain the timing information of all community centers. By choosing one community center they can see what time are already booked and what time are available. So they can choose their time. They can see all the facilities are providing by the community center. Offers that are available. People can easily compare all them together and find out what is best one at their budget.

For the authorities it is helpful because they can find client easily and their clients can also connect to them. They can update their offers on online so that their customers can easily find them.

Mainly client will login to the system, choose their desirable one, system will check if it is available or not. If available the office clerk will give their client a reservation paper. And client can pay them by cash or by credit card.

Cancelation is also easy there. If client cancel booking, an office clerk will remove that reservation. But cancelation notice should be sent before 1 week from the reserved date.

1.2 Document Convention

This document uses the following conventions:

This document follows MLA Format. Bold-faced text has been used to emphasize section and sub-section headings. Highlighting is to point out words in the glossary and italicized text is used to label and recognize diagrams.

Main Section Titles

• Font: Times New Roman

Face: BoldSize: 18

Sub Section Titles

• Font: Times New Roman

Face: BoldSize: 15

Other Text Explanations

Font: Times New Roman

• Face: Normal

• Size: 14

1.3 Project Scope

- Client can see all community centers list.
- Time schedule of community centers will be given.
- Necessary information about venue will be provided.
- Community center of all range will be there.
- Office clerk will do all the reservation work.
- Easy to pay.
- Online booking.
- All offers will be included there.
- Client will get full refund if they cancel before 1 week from the reserved date.
- Client will get a good review and better suggestion so that they can have their best.

1.4 References

N/A

2. Overall Description

2.1 Productive perspective

This system consists of only one part which is the website itself. This website is intended to simplify the convention centers. In this website users can register/sign-up as Customer/Owner of Convention Centers. Customers can place their required orders (with details) and authority of convention centers can bid to any placed order. Then the customer will have the full freedom to choose any option which provided and confirm their interest. With the agreement of both Customers and authority of convention centers the deals will finally signed online (by also agreeing with the

terms and conditions of the website or the service they are receiving from the website).

Since this is a data-centric system it will need somewhere to store the data. For that, a database will be used. The web portal will communicate with the database. The web portal will add and modify data. All of the database communication will go over the Internet.

As all the data will be stored in server end, there will be no issues regarding client end storage capability.

2.2 User classes and characteristics

- Registered User:
 - Registered by email and other necessary information.
 - Enjoys advanced features depending on the user category (Clients/Community Center's Authority).
- Clients: Clients can customize their own profile, place an order and choose other options.
- Community Center: Authority can bid to any placed order, suggest offer.
- Non-registered User:
 - Not registered by email
 - Enjoys all the basic features; advanced features are not available

2.3 Operating Environment

- Hardware: Basic h/w requirements to browse for both smart phones and computers.
- OS: No specific OS needed as it is web based service. This website can run on any platform [must not use HTML 5 features].
- Geographical Location: Not specific. Globally usable.

2.4 Design and implementation constraints

- All data shall be stored on central server.
- User interface shall be composed using jQuery JavaScript library.
- Primary key for sign-up and log-in shall be email ID.

3. System Features

3.1 Description of feature

- Clients can see all community centers list.
- Clients and authorities can communicate with each other.
- Clients can see venues advertisement.
- Authorities of community center can get a notification of clients order.
- Show history of all clients.
- Show the rating system of all clients.
- Clients can book venue online.
- Clients can see the ranges of community center.
- Clients can see all the offers.
- Centers can provide chefs choice.
- Center can provide event management.
- Clients can see the pictures of venue.

3.2 Functional requirements

Admin:

- Admin shall be able to Sign up and log in.
- Admin shall be able to update all the features
- Admin shall be able to verify profiles of venues.
- Admin shall be able to verify customers profile.
- Admin shall be able to update/modify/create new content.
- Admin shall be able to update/modify/ create Special offers
- Admin shall be able to register venues and customers.

- Admin shall be able to see the users review.
- Admin shall be able to make boosting for venues

Customers:

- Customers shall be able to place order.
- Customers shall be able to search venues.
- Customers shall be able to see the categorized venues.
- Customers shall be able to also buy products which will be promoted by venues.
- Customers shall be able to see the venue details.
- Customers shall be able to see the venue specifications
- Customers shall be able to have lot of choices of venues.
- Customers shall be able to see the venue details.
- Customers shall be able to have lot of various type of venues.
- Customers shall be able to get venues by their demand.
- Customers shall be able to complain or review against venues.

Venues:

- Venues shall be able to choose and select orders.
- Venues shall be able to update their profile
- Venues shall be able to promote their profile.
- Venues shall be able to put advertisement.
- Venues shall be able to get information of customers.
- Venues shall be able to bid customers order.
- Venues shall be able to promotion their features.
- Venues shall be able to promotion of their services.
- Venues shall be able to upload their pictures
- Venues shall be able to give discounts.

Unregistered User:

- Shall be able to see the venues promotion.
- Shall be able to see homepage where venues advertise will be shown.

Registered Users:

- Shall be able to search/Select
- Shall be able to check details.
- Shall be able to update profile.
- Shall be able to modify and keep updating their profile always.

3.3 User requirements

From Customers:

- As a user, I want to access my account from anywhere with the app or the website so that I can place for any convention center.
- As a user, I want to update my details, my profile, change my password. So that my information will be up to date.
- As a user, I want to change my order requirements. So that I can fulfill my desires.
- As a user, I want to know the center details in the app or website so that I can order from them with the requirements.
- As a user, I want to contact with the authority or the persons who are playing the role as a via.
- As a user, I want to review convention centers with the satisfaction level with the services.

From Center (Authorities):

- As a user, I want to access my account from anywhere with the app or the website so that I can check the requirements customers want to order.
- As a user, I want to update my details, my profile, change my password. So that my information will be up to date.
- As a user, I want to add my advertisement so that I can inform the customers that our centers can do this with that.
- As a user, I want to be assured from the via team that the customer will not suffer for us.

3.4 Cross-reference

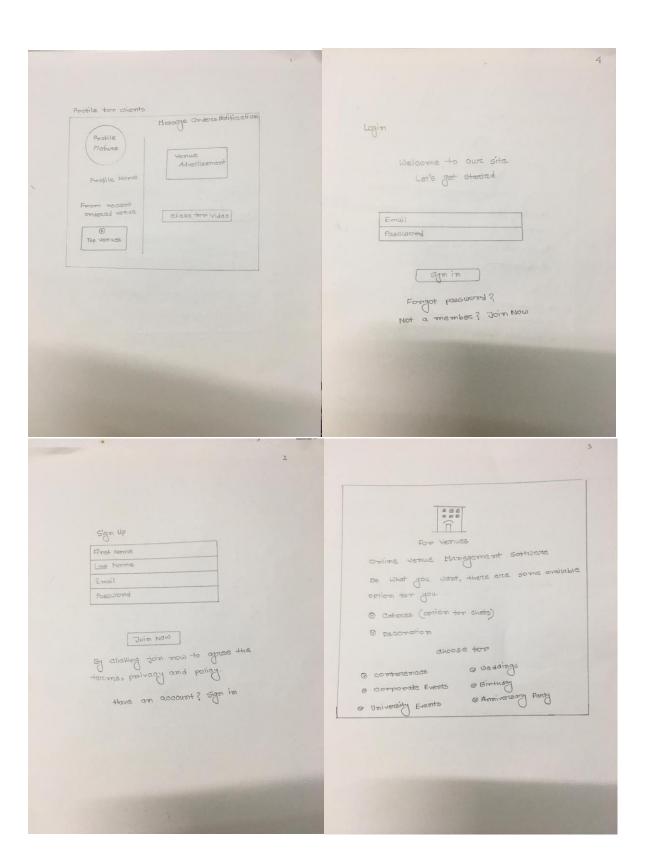
N/A

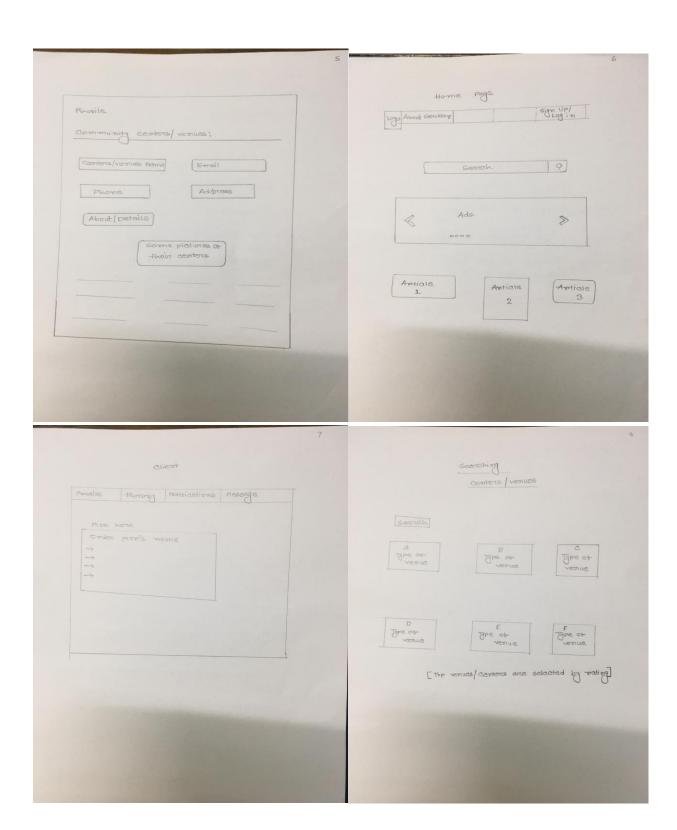
4. External Interface Requirements

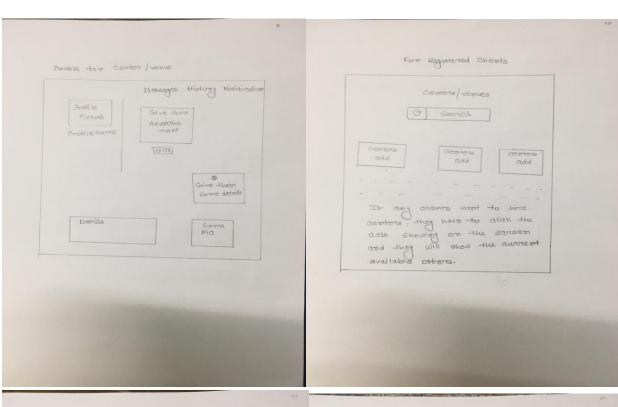
4.1 User interface

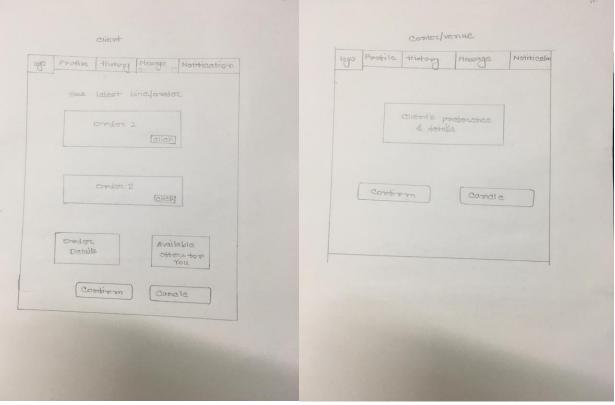
- The user interface for the software shall be compatible to any browser such as Internet Explorer, Mozilla or Netscape Navigator by which user can access to the system.
- The user interface shall be implemented using any tool or software package like Java Applet, MS Front Page etc.

• **Demo Sketch:** Demo Sketches are given below.









4.2 Software interface

- Time Management System
- o The time management system shall transmit data to be stored.
- Upon completion, system will display notification to user of result of data transmission.
- o If applicable, system will then generate notification to be displayed.
- Database The system shall communicate with a database through a programmatic interface for the following operations:
- o To manage employee, client, and project data.
- o To allow a user to submit timesheets/leave time.
- o To allow an administrator/project manager to approve/reject time.
- To store brand and theme preferences.

4.3 Hardware interface

• Since the application must run over the internet, all the hardware shall require to connect internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

4.4 Communication interface

• The e-store system shall use the HTTP protocol for communication over the internet and for the intranet communication will be through TCP/IP protocol suite.

4.5 Cross-reference

N/A.

5. Quality Attributes

5.1 Usability

- Availability: The system shall be available all the time.
- Data Entry Pattern: Data entry is one of the most important activities supported by the front end and one where usability requirements are most stringent.
- Internally Consistent: Result must be consistent
- Externally Consistent: Data showing on interface must match with database.

- Modifiable: If any changes happen, we shall be able to modify.
- Understandable: Value entered has be understandable to user.
- Organized: Database must be organized.
- Correctness: A bug free software which fulfill the correct need/ requirements of the client.
- Maintainability: The ability to maintain, modify information and update fix problems of the system
- Accuracy: The reliability on the information/output. Can depend/be sure of the outcome.
- Stability: The system outcome/output won't change time to time. Same output will be given always for a given input.

5.2 Performance Requirements

- Response time-The system will give responses within 1 second after checking the patient information and other information.
- Capacity-The system must support 1000 people at a time
- User interface- User interface screen will response within 5 seconds.
- Conformity –The system must conform to the Microsoft accessibility

5.3 Maintainability

- The application should be easy to extend. The code should be written in a way that it favors implementation of new functions.
- Test environments should be built for the application to allow testing of the applications different functions.

5.4 Portability

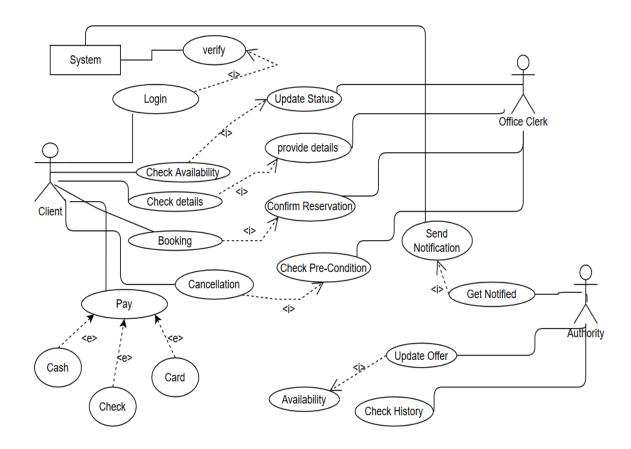
The application should be portable with iOS and Android.

5.5 Cross-references

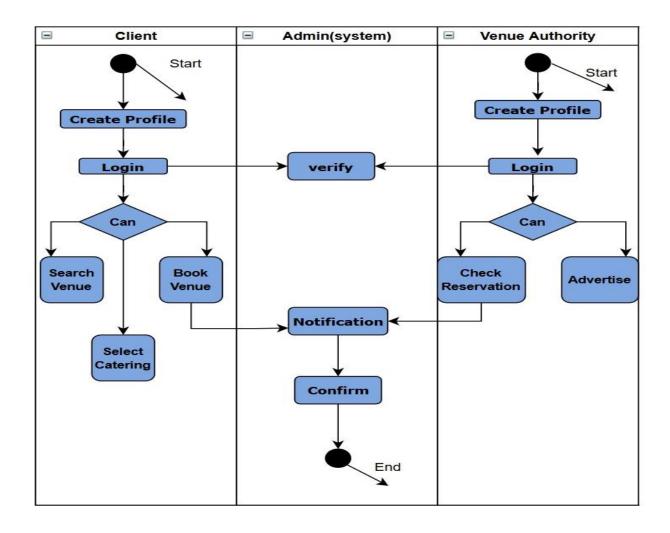
N/A.

6. Data Requirements

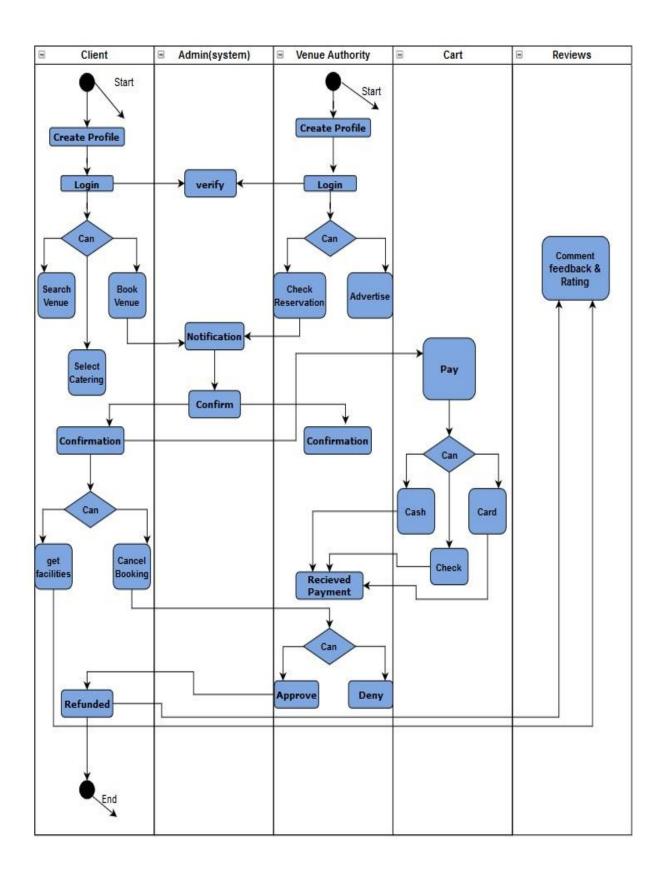
- 6.1 Logical data model UML diagrams
- **6.1.1** Use Case Diagram:



6.1.2 As Is Process Flow Diagram:



6.1.3 To Be Process Flow Diagram:



6.2 Data Dictionary

Data Dictionary

Table Name: Venue Inventories

| Attribute | Data Type | Is Null | Key |
|-------------|-----------|---------|---------|
| id | int | no | primary |
| referenceNo | nvarchar | no | |
| venueName | nvarchar | no | |
| value | int | no | |
| quantity | int | no | |
| adminId | nvarchar | no | |
| date | date | no | |

Table Name: Client Login

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| clientId | nvarchar | no | |
| password | nvarchar | no | |
| status | int | no | |

Table Name: Booking Schedule

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| clientId | nvarchar | no | |
| date | date | no | |
| venueName | nvarchar | no | |
| session | nvarchar | no | |

Table Name: Add Venues

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| venueName | nvarchar | no | |
| venueType | nvarchar | no | |
| quantity | int | no | |
| time | nvarchar | no | |

Table Name: Book A Venue

| Attribute | Data Type | Is Null | Key |
|-------------|-----------|---------|---------|
| id | int | no | primary |
| session | nvarchar | no | |
| clientId | nvarchar | no | |
| venueName | nvarchar | no | |
| payment | nvarchar | no | |
| employeeId | nvarchar | no | |
| time | nvarchar | no | |
| bookingDate | date | no | |
| bookingTime | nvarchar | no | |

Table Name: Employee Access

| Attribute | Data Type | Is Null | Key |
|------------|-----------|---------|---------|
| id | int | no | primary |
| employeeId | nvarchar | no | |
| session | nvarchar | no | |
| accessDate | datetime | no | |
| accessTime | nvarchar | no | |

Table Name: Employee Attendance

| Attribute | Data Type | Is Null | Key |
|------------|-----------|---------|---------|
| id | int | no | primary |
| employeeId | nvarchar | no | |
| date | date | no | |
| enter | time | no | |
| out | time | no | |

Table Name: Payment

| Attribute | Data Type | Is Null | Key |
|------------|-----------|---------|---------|
| id | int | no | primary |
| clientName | nvarchar | no | |
| dob | date | no | |
| religion | nvarchar | no | |
| gender | nvarchar | no | |

| degree | nvarchar | no | |
|------------------|----------|----|--|
| presentAddress | nvarchar | no | |
| permanentAddress | nvarchar | no | |
| category | nvarchar | no | |
| creditcard | int | no | |
| cash | float | no | |
| check | float | no | |
| discount | float | no | |
| BookingDate | date | no | |

Table Name: Guest

| Attribute | Data Type | Is Null | Key |
|-------------|-----------|---------|---------|
| id | int | no | primary |
| guestId | nvarchar | no | |
| gName | nvarchar | no | |
| gProfession | nvarchar | no | |
| email | nvarchar | no | |

Table Name: Employee Salary

| Attribute | Data Type | Is Null | Key |
|-------------|-----------|---------|---------|
| id | int | no | primary |
| employeeId | nvarchar | no | |
| basic | float | no | |
| home | float | no | |
| medical | float | no | |
| ta_da | float | yes | |
| incentive | float | yes | |
| festival | float | yes | |
| total | float | no | |
| referenceNo | nvarchar | no | |

Table Name: Fee

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| venueId | nvarchar | no | |

| venueType | nvarchar | no | |
|------------|----------|-----|--|
| listingFee | int | yes | |
| monthlyFee | int | no | |
| month | nvarchar | yes | |
| bookingFee | int | yes | |
| others | int | yes | |

Table Name: Discount Details

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| adminID | nvarchar | no | |
| venueName | nvarchar | no | |
| fromFee | int | no | |
| discount | int | no | |
| date | date | no | |

Table Name: Venue Availability

| Attribute | Data Type | Is Null | Key |
|-----------|-----------|---------|---------|
| id | int | no | primary |
| venueId | nvarchar | no | |
| venueName | nvarchar | no | |
| fromFee | nvarchar | no | |
| toFee | nvarchar | no | |
| day | nvarchar | no | |
| time | nvarchar | no | |

Table Name: Venues

| Attribute | Data Type | Is Null | Key |
|--------------|-----------|---------|---------|
| id | int | no | primary |
| venueId | nvarchar | no | |
| venueName | nvarchar | no | |
| venueType | int | no | |
| venueOwner | nvarchar | no | |
| catagory | nvarchar | no | |
| quantity | int | no | |
| availability | nvarchar | no | |

Table Name: Venue Owner

| Attribute | Data Type | Is Null | Key |
|------------------|-----------|---------|---------|
| id | int | no | primary |
| clientId | nvarchar | no | |
| clientName | nvarchar | no | |
| fatherName | nvarchar | no | |
| motherName | nvarchar | no | |
| dob | date | no | |
| religion | nvarchar | no | |
| gender | nvarchar | no | |
| bloodGroup | nvarchar | no | |
| presentAddress | nvarchar | no | |
| permanentAddress | nvarchar | no | |
| nationality | nvarchar | no | |