



AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

**Dept. of Computer Science
Faculty of Science and Technology**

CSC2210: OBJECT ORIENTED PROGRAMMING 2

Summer 2023-2024

Section: B

**Project Report On
Hotel Management System**

**Supervised By
Jahid Hassan**

Submitted By:

Name				ID	
1. Abul Bashar Saurov				22-48823-3	
2. Md Sajib Mondol				22-48824-3	
Obtained Marks for CO2 and CO3 (Description given in the following page)					
Assessment Criteria	Not Attended/ Incorrect (0)	Inadequate (1-2)	Average (3)	Good (4)	Excellent (5)
Evaluation Criteria (CO2)	Total =		Evaluation Criteria (CO3)		Total =
Requirement fulfillment			Organization of the application		
Validation			Representation and Integration of Database		
Verification			Graphical User Interface		

Hotel Management System

Introduction

A Hotel Management System (HMS) is software that automates and streamlines a hotel's operational duties. It integrates many departments and tasks to provide a complete solution for managing all elements of hotel operations.

- Admin
- Employee
- Customer
- Room
- Reservation

User Story

Admin

The admin of Hotel Management System is a crucial component that provides users of Hotel Management System platform with a rich experience. The admin can monitor the status of users and agents. Admin tasks include evaluating user transactions, collection and management, policy enforcement for service delivery, approval of collections, display and guidance, and various types of reporting. Through this service, the admin of Hotel Management System ensures users have a healthy and secure experience.

Employee

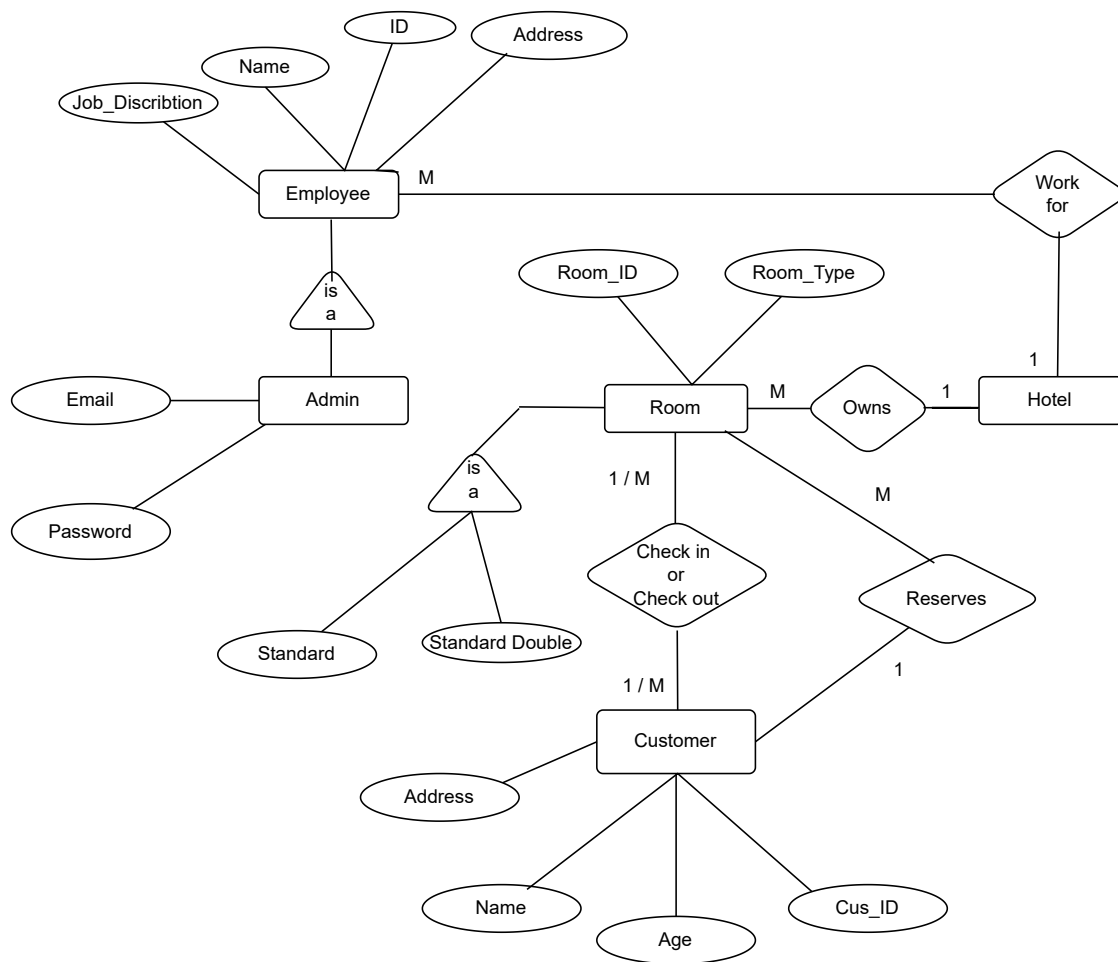
Employee logs into the HMS to evaluate the schedule for the day as well as any assignments that are urgent. They are aware that a visitor has asked to check out later than usual. They make the necessary adjustments to the system and then send an email to the visitor giving them confirmation.

A new visitor comes to check in at the hotel. They provide a cordial greeting to them and then utilize the HMS to cross-check their reservation and give them a room and hand them the key to their room and go over the many facilities that the hotel has to offer.

Customer

Customer shows their reservation number while entering the hotel. The HMS helps the receptionist to confirm the reservation and allocate a room. The client is handed the room key along with details on the features of the space. The consumer chooses to request room service later. Requesting room service, the client phones the front desk. The front desk personnel orders using the HMS and let the kitchen know. The consumer receives the room service order right in their room.

ER Diagram



ER Diagram of Hotel Management System.

Create Query:

```
CREATE TABLE [dbo].[UserInfo]
```

```
(  
    [Id] INT NOT NULL PRIMARY KEY IDENTITY(100, 1),  
    [Email] NVARCHAR(50) NOT NULL,  
    [Password] NVARCHAR(50) NOT NULL,  
    [Name] NVARCHAR(50) NOT NULL,  
    [User Type] NVARCHAR(50) NOT NULL  
)
```

```
CREATE TABLE [dbo].[Employee]
```

```
(  
    [Id] INT NOT NULL PRIMARY KEY IDENTITY(100, 1),  
    [Name] NVARCHAR(50) NOT NULL,  
    [Job Description] NVARCHAR(50) NOT NULL,  
    [Address] NVARCHAR(50) NOT NULL  
)
```

```
CREATE TABLE [dbo].[Customer]
```

```
(  
    [Id] INT NOT NULL PRIMARY KEY IDENTITY(100, 1),  
    [Name] NVARCHAR(50) NOT NULL,  
    [Age] NVARCHAR(50) NOT NULL,  
    [Phone Number] NVARCHAR(50) NOT NULL,  
    [Address] NVARCHAR(50) NOT NULL  
)
```

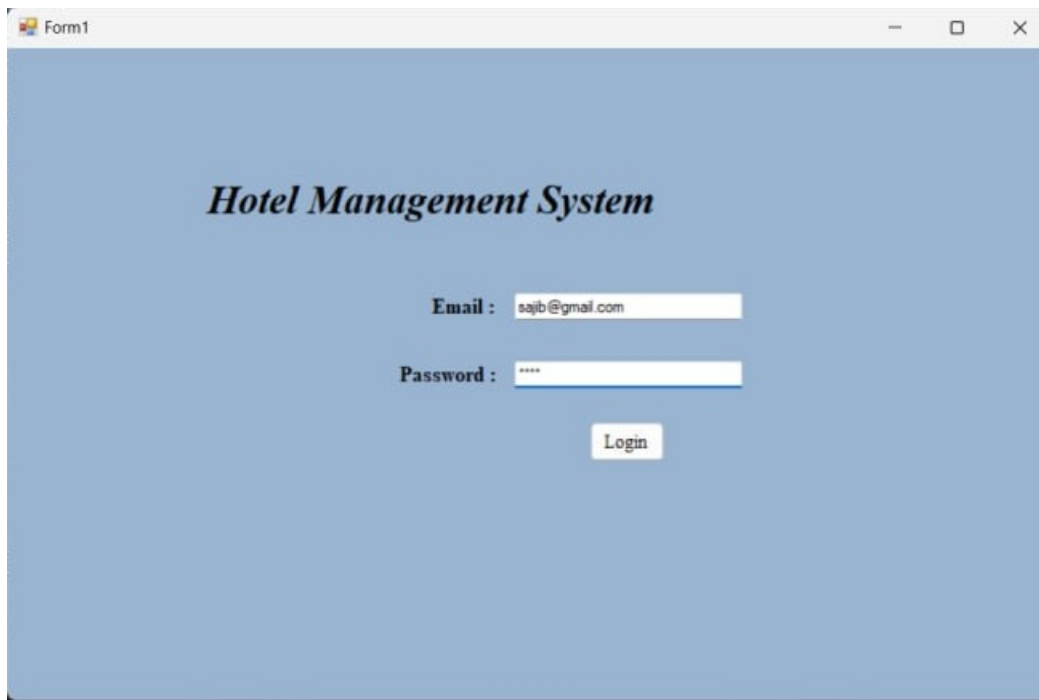
```
CREATE TABLE [dbo].[Room]
```

```
(  
    [Id] INT NOT NULL PRIMARY KEY IDENTITY(100, 1),  
    [RoomType] NVARCHAR(50) NOT NULL  
)
```

```
CREATE TABLE [dbo].[RoomRent]
```

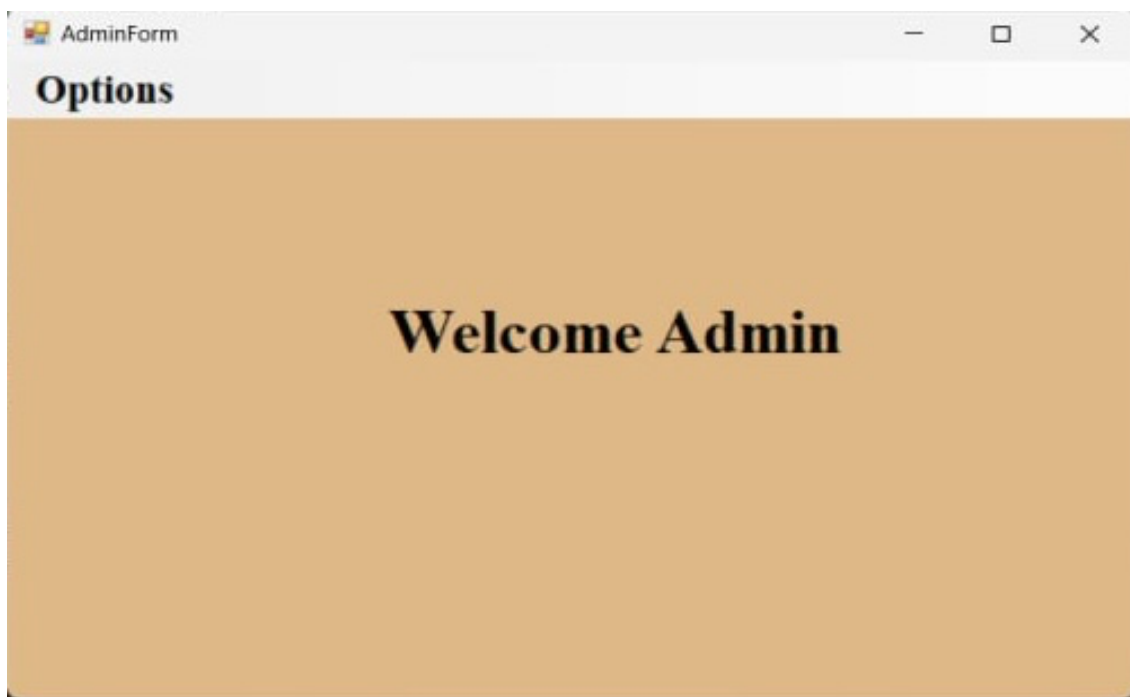
```
(  
    [Id] INT NOT NULL PRIMARY KEY IDENTITY(100, 1),  
    [CustomerID] INT NOT NULL,  
    [RoomID] INT NOT NULL,  
    [Amount] INT NOT NULL,  
    CONSTRAINT [FK_RoomRent_ToCustomer] FOREIGN KEY ([CustomerID]) REFERENCES [Customer]([Id]),  
    CONSTRAINT [FK_RoomRent_ToRoom] FOREIGN KEY ([RoomID]) REFERENCES [Room]([Id])  
)
```

User Interface



The screenshot shows a Windows-style window titled "Form1" with a light blue background. In the center, the text ***Hotel Management System*** is displayed. Below it, there are two input fields: "Email :" with the text "sajib@gmail.com" and "Password :" with four asterisks "****". A "Login" button is positioned below the password field.

Figure: Login Page.



The screenshot shows a Windows-style window titled "AdminForm" with a light orange background. At the top left, the word **Options** is displayed. In the center, the text **Welcome Admin** is shown in a large, bold font.

Figure: After completing the login process then show the Admin Interface.

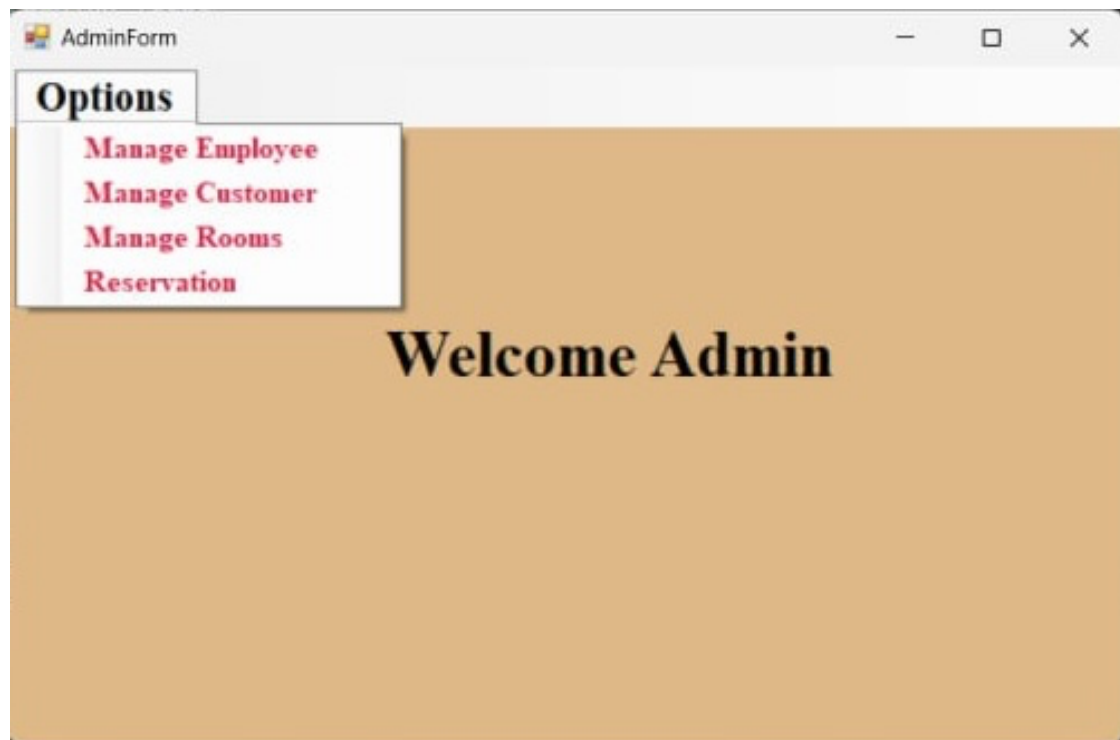


Figure: In Admin page, here we add the option menu.

Ref	Job Title	Address
100	Manager	Gazipur
103	manager	khulna
104	Computer Operator	Dhaka
105	Reception	Dhaka

ID :
105

Name :
Rahat

Job Description :
Reception

Address :
Dhaka

Figure: From option menu we select Employee and here are the Employee details and we can add, delete, save and refresh the details.

CustomerForm

New Delete Refresh Save

Ref	Name	Phone Number
100	Rayhan	1643932288
▶ 103	Sakib	1643932288
104	Rakib	1643932288
105	Rahim	643932288

ID :
103

Name :
Sakib

Age :
21

Phone Number :
1643932288

Address :
dhaka

Figure: From option menu we select Customer and here are the Customer details and we can add, delete, save and refresh the details.

RoomForm

New Delete Refresh Save

Ref	Room Type
100	Standard Single
101	Standard Double
▶ 103	Standard Double
104	Standard Triple
105	Standard Triple
*	

ID :
103

Room Type :
Standard Double

RoomRentForm

New Delete Refresh Save

Ref	Name	Room Type	Amount
101	Rayhan	Standard Single	1500
102	Sakib	Standard Double	2500
103	Rakib	Standard Double	3500
104	Rahim	Standard Triple	4500

ID :
103

Name :
Rakib

Room Type :
Standard Double

Amount :
3500

Figure: From option menu we select Reservation and here are the Reservation details and we can add, delete, save and refresh the details.