



Topic : Hotel Reservation System For Special Events

Group no : MLB_04.02_03

Campus : Malabe

Submission Date : 18/05/2022

We declare that this is our own work and this Assignment does not incorporate without acknowledgment any material previously submitted by anyone else in SLIIT or any other university/Institute. And we declare that each one of us equally contributed to the completion of this Assignment.

Registration No	Name	Contact Number
IT21265174	Sandanayake H.D	0785748316
IT21265006	Gunathilaka K.A.R	0711506842
IT21261596	Chamod S.G.K	0766642546
IT21266164	Udayantha D.M.S	0765677846
IT21264566	Chandrasena R.H.V	0760914580

Part 1

SYSTEM REQUIREMENTS FOR THE ONLINE HOTEL RESERVATION SYSTEM

1. The system should provide the service throughout the day (24x7)
2. The registered customers must enter valid login details, correct passwords, usernames.
3. The unregistered customers can view the website, in-order to make reservations they must register with the correct register details.
4. If there are any issues while registering to the system that customer can re-register to the system by entering incorrect and valid details.
5. The admins should be able to add, delete and update the system.
6. The system should be updated after each reservation.
7. When a registered customer search for a relevant hall, menu, and capacity the system should display the relevant details to that customer.
8. The system administrators can add recent new selection options to the system and remove options as well.
9. The registered customers can add items to the cart.
10. Users can add items to the cart and remove them before making the payment.
11. Then customer can make the payment by adding the payment method and confirm the final decision.
12. After making the payment the system should display the customer purchased details.
13. Once the money is transferred successfully, the transaction details and the reservation details must be added to the system as a new reservation.
14. Finally the customers should be able to add feedbacks and ratings to the system.

NOUN AND VERB ANALYSIS

Online Hotel Reservation System

Nouns are **red-colored**. Verbs are underlined.

- > The **customer** can visit the online reservation system using the URL address.
- > There are two types of customers as **unregistered customers** and **registered customers**.
- > **Unregistered customers** can only refer the website while the **registered customers** have the full access to the entire system.
- > **The unregistered customers** can register to the system by providing **his/she** details(name,id,passwords,emails).
- > The **unregistered customers** also can cancel the registration if **he/she** wants.
- > The **registered customer** can login to the system by the username and the password. Then the **system** checks whether the password is correct. Also, the **registered customer** can logout from the system whenever **he/she** wants to.
- > **The system administrators** also have the ability to log in to the system and add selection options to the system, delete and update details (hallID, name, prices).
- > At the end of each reservation **system** checks the availability of the halls.
- > **The registered customers** are able to add items to the cart and remove them from the cart whenever **he/she** wants.
- > Finally, **the system** calculates the total amount of the customer's reservation.
- > There are payment methods for do the payment for the selected items.
- > When the **customer** chooses a payment method and enters the details, **the system** checks the details and confirm the payment and at last the transaction report is displayed to the customer.
- > If **the transaction** is successful the reservation details will be added to the system as a new reservation.

Identified classes

- > Registered customer
- > Unregistered customer
- > Feedback
- > Hall
- > Payment
- > Recipe
- > Staff
- > Book

Methods

Registered customer	<ul style="list-style-type: none">- Login to the system.Check password validation.
Unregistered customer	<ul style="list-style-type: none">- Create a new accountCancel registration.
Feedback and reviews	<ul style="list-style-type: none">- Add reviews of the customers.
Hall	<ul style="list-style-type: none">- Add halls to the system.
Payment	<ul style="list-style-type: none">- Check the payment details.Confirm the payment.
Recipe Details	<ul style="list-style-type: none">- Add menu details
Recipe	<ul style="list-style-type: none">- Add recipe namesAdd prices
Staff	<ul style="list-style-type: none">- Add staff detailsCheck passwords validation.
Book	<ul style="list-style-type: none">- Add booking datesAdd hallID, customerID

CRC Cards

Registered customer	
Responsibilities	Collaborations
Login	
Purchase	payment
Booking	Hall, Menu
Leave feedback	Feedback

Unregistered customer	
Responsibilities	Collaborations
Register	
View	Hall

Cart	
Responsibilities	Collaborations
Add halls	Hall, Menu

Feedback	
Responsibilities	Collaborations
Add the feedback	Registered customer
Display the feedback	

Hall	
Responsibilities	Collaborations
Reserved a hall	Registered customer
Add capacity	

Payment	
Responsibilities	Collaborations
Add payment details	Reservation
Display confirmation	

Menu	
Responsibilities	Collaborations
Select the meal	
Display meal details	

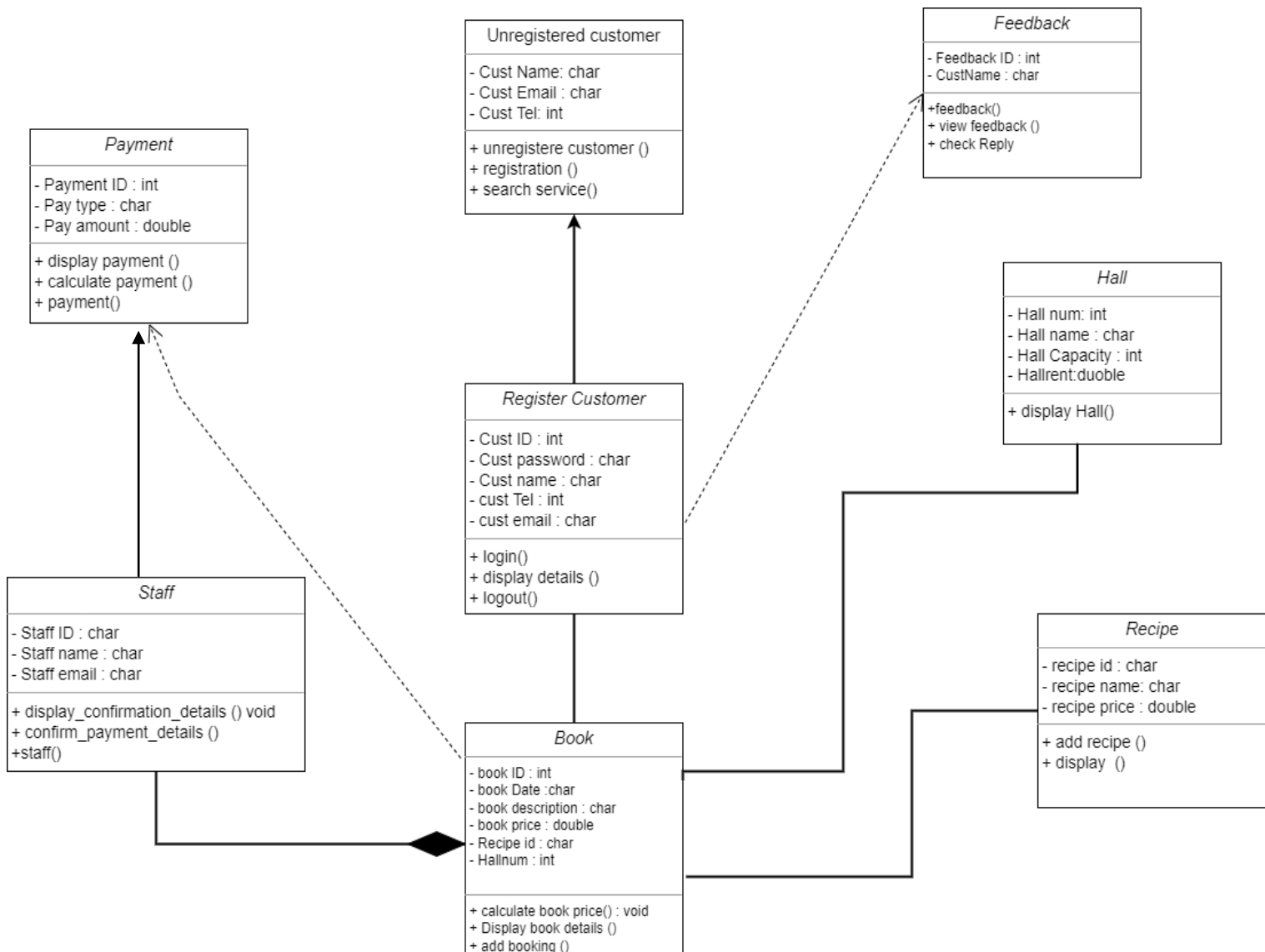
Reservation	
Responsibilities	Collaborations
Confirm the reservation	
Calculate the bill	Payment

Recipe	
Responsibilities	Collaborations
Add recipe names	
Add prices	Hall

Staff	
Responsibilities	Collaborations
Add staff details	
Check password validation	

Book	
Responsibilities	Collaborations
Add booking date	Hall
Add hall ID , customer ID	

Class Diagram



C++ Coding

```
#include<iostream>
```

```
using namespace std;
```

```
//unregistercustomer
```

```
class unregistercustomer{
```

```
private:
```

```
    char custName[30];
```

```
    char custEmail[50];
```

```
    int Tel;
```

```
public:
```

```
    unregistercustomer(const char custName[30],const char custEmail[50],int Tel);
```

```
    virtual void registration();
```

```
    void searchservice();
```

```
    ~unregistercustomer();
```

```
};
```

```
//unregistercustomer
```

```
unregistercustomer::unregistercustomer(const char custName[30], const char custEmail[50],int Tel)
```

```
{}
```

```
void unregistercustomer::registration()
```

```
{}
```

```
void unregistercustomer::searchservice()
```

```
{}
```

```

//Hall deatils

class Hall{

private:

    int Hallnum;

    char Hallname[10];

    int Hallcapacity;

    double hallrent;


public:

    Hall(int Hallnum , char Hallname[],int Hallcapacity,double hallrent);

    void displayHall();

    ~Hall();


};

//Hall

Hall::Hall(int Hallnum , char Hallname[],int Hallcapacity,double hallrent)

{


}

void Hall::displayHall()

{


}

//staff

class staff{

private:

    int staffID;

```

```

    char staffName[20];

    char staffemail[50];

public:
    staff(int staddID, const char staffName[], char staffemail);

    void display_confamation_details();

    void conform_payment_details();

    ~staff();

};

//staff-----

void staff::conform_payment_details()
{

}

void staff::display_confamation_details()
{

}

staff::staff(int staddID, const char staffName[], char staffemail)
{

}

// Feedback

class Feedback
{

private:

```

```
char custName[40];
```

```
int FeedbackID;
```

```
public:
```

```
Feedback(int fbID,char name);
```

```
void displayFeedback();
```

```
~Feedback();
```

```
};
```

```
Feedback::Feedback(int fbID,char name)
```

```
{}
```

```
void Feedback::displayFeedback()
```

```
{}
```

```
Feedback::~~Feedback()
```

```
{};
```

```
// Recipe
```

```
class Recipe
```

```
{
```

```
private:
```

```
char recipeID;
```

```
char recipeName;
```

```
double recipePrice;
```

```
public:
```

```
Recipe(char recipeID, char recipeName, double
```

```
    recipePrice);  
  
    void addRecipe();  
  
    void displayRecipe();  
  
    ~Recipe();  
  
};
```

```
void Recipe::addRecipe()  
{  
  
void Recipe::displayRecipe()  
{
```

```
// Booking
```

```
class Book  
{  
  
private:  
  
    int bookID;  
  
    char bookDate;  
  
    char bookDescription;  
  
    double bookPrice;  
  
  
public:  
  
    Book(int bookID,char bookDate,char  
    bookDescription,double bookPrice);  
  
    void calculateBookingPrice();  
  
    void displayBookingDetails();
```

```
void addBooking();
```

```
~Book();
```

```
};
```

```
Book::Book(int bookID,char bookDate,char bookDescription,double bookPrice)
```

```
{
```

```
}
```

```
void Book::calculateBookingPrice()
```

```
{}
```

```
void Book::displayBookingDetails()
```

```
{}
```

```
void Book::addBooking()
```

```
{}
```

```
// Payment
```

```
class payment
```

```
{
```

```
private:
```

```
int PaymentID;
```

```
char PayType;
```

```
double Payamount;
```

```
public:
```

```
payment(int PaymentID,char PayType,double Payamount);
```

```
void displayPayment();
```

```
void calculatePayment();
```

```
~payment();
```

```
};
```

```
payment::payment(int PaymentID,char PayType,double Payamount)
```

```
{}
```

```
void payment::displayPayment()
```

```
{}
```

```
void payment::calculatePayment()
```

```
{
```

```
}
```

```
// Registered customer
```

```
class rcustomer
```

```
{
```

```
private:
```

```
int custID;
```

```
char custPassword;
```

```
char custName;
```

```
char custEmail;
```

```
char telNo;
```

```
public:
```

```
rcustomer(int custID,char custPassword,char custName,char custEmail,char telNo);
```

```
void logging();
```



```
void logout();  
void displayDetails();  
~rcustomer();  
};
```

```
rcustomer::rcustomer(int custID,char custPassword,char custName,char custEmail,char telNo)  
{  
void rcustomer::logging()  
{  
void rcustomer::logout()  
{  
void rcustomer::displayDetails()  
{  
  
}
```

```
int main()  
{  
    unregistercustomer*nUser;  
    nUser->unregistercustomer();  
    nUser->searchservice();
```

```
    Hall * H;  
    H->Hall();  
    H->displayHall();
```

```
staff *s1;  
  
s1->display_confamation_details();  
  
s1->conform_payment_details();
```

```
Feedback*fb;  
  
fb->displayFeedback();  
  
fb->~Feedback();
```

```
Recipe *r1;  
  
r1->addRecipe();  
  
r1->displayRecipe();
```

```
Book *bk;  
  
bk->calculateBookingPrice();  
  
bk-> displayBookingDetails();  
  
bk-> addBooking();
```

```
payment *p1;  
  
p1->displayPayment();  
  
p1-> calculatePayment();  
  
rcustomer *rc1;  
  
rc1-> logging();  
  
rc1-> logout();  
  
rc1-> displayDetails();  
  
}
```

Individual Contributions

Student ID	Student Name	Contributions
IT21265174	Sandanayake H.D	Registered customer class Main programme Recipe class
IT21265006	Gunathilaka K.A.R	Book class Payment class
IT21261596	Chamod S.G.K	Unregistered customer class Hall class
IT21266164	Udayantha D.M.S	Feedback class
IT21264566	Chandrasena R.H.V	Staff class