Software requirement Specification

For

EXPLORE HOTELS

BY

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Under the guidance of

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1. Introduction

- This document specifies the production and design of Hotels exploring app.
- This project helps you to locate and identify your nearest Hotels. It enables one to establish a direct connection with Hotel owners: they always have the service right in their pockets and the business logo on their home screens.
- This app with speedy check-in and digital key functions make late registrations more manageable and prevent lengthy queues at reception. You can also made comparisons between different and nearest hotels their prices, spaces, and in between their services.

2.1Goals and Objectives

- To present the hotel as an excellent, or the best, choice to its target market.
- To make it easy for customers to make reservations. The Objective of this reservation system is to help hotelier to get more direct bookings easily.
- It would have some effective features that help to generate revenue.

2.2 Scope

- The scope of the online Hotel reservation system is to create an online web-interface for the users to check the availability and book the Hotel from any part of the world.
- This system will be an alternative to the traditional offline way of checking available rooms and book them.
- The scope of the sub-system which is described in this document is the user interface. The system will have two major types of users: customers and hotel manager.

3.1 Hardware Interfaces

- Touch Screen: The app will access the touch screen of the device for taking inputs.
- Stable internet connection: Reservation alerts will be sent to the manager as an email notification. So, there is a need of broadband internet connection. Client should be able to keep a stable internet connection.
- A laser printer will be needed when printing bills and several reports.
- GPS: It will be used for tracking.
- RAM And hard disk: It support the RAM of 512MB and hard disk of 10GB.

3.2 Software Interfaces

- The system supports windows 7, windows XP, Linux.
- Net 4.0 will be installed and that will be the platform the particular software will be run.
- The database is MySQL Server.
- It supports browser opera, chrome etc.

Functional requirements

5.1.1 FR-01 Log-in and Checking page availability

Identifier	FR-01
Title	Log-in and Checking page availability
Requirement	The user should know how to log-in(User must know username and password).
Source	Supervisor Name
Rationale	To book the hotel
Restrictions and Risk	Nil
Dependencies	Page should be available
Priorities	High

5.1.2 FR-02 Register

Identifier	FR-02
Title	Register
Requirement	The user should know how to register. Then user should know how to use the browser and open the page.
Source	Supervisor Name
Rationale	To book the hotel
Restrictions and Risk	Nil
Dependencies	Page should be available
Priorities	High

5.1.3 FR-03 Search Hotel

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Identifier	FR-03
Title	Search Hotel
Requirement	The user can search the desired hotel by checking the list of different available hotels
Source	Supervisor Name
Rationale	To get the information about address, ratings, price , availability, check-in, check-out dates etc.
Restrictions and Risk	Nil
Dependencies	Page should be available
Priorities	High

5.1.4 FR-04 Select Hotel

Identifier	FR-04
Title	Select Hotel
Requirement	The user can select a particular hotel from the list of different hotels
Source	Supervisor Name
Rationale	To get the information about desired hotel
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

5.1.5 FR-05 Check Room Availability

Identifier	FR-05
Title	Check Room Availability
Requirement	The user can check whether any rooms are available in the hotel which he has selected or not. The page should display all the available rooms with the list of prices and facilities.
Source	Supervisor Name
Rationale	To get the information about availability of rooms in particular hotel
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

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5.1.6 FR-06 Confirm Booking

Identifier	FR-06
Title	Confirm Booking
Requirement	The page will display the message that the booking has been confirmed
Source	Supervisor Name
Rationale	To further proceed and store the details of the customer
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

5.1.7 FR-07 Cancel Booking

Identifier	FR-07
Title	Cancel Booking
Requirement	The page will display the message that whether booking is confirmed or cancel.
Source	Supervisor Name
Rationale	To cancel booking and stop further proceed.
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

5.1.8 FR-08 Store Customer's Details

Identifier	FR-08
Title	Store Customer's Details
Requirement	The page should store Customer's surname, phone number, email address and all the required details accordingly.
Source	Supervisor Name
Rationale	To display the information of customer and also display the cancel button if the customer wants the booking and return him to the homepage.
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

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5.1.9 FR-09 Confirmation Message

Identifier	FR-09
Title	Confirmation Message
Requirement	The page will display the message through email that booking has been confirmed.
Source	Supervisor Name
Rationale	To confirm booking. Staff can also edit customer's booking information (check-in, check-out, room preferences, bed preferences, cancel booking) if needed.
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

5.1.10 FR-10 Make Payment

Identifier	FR-10
Title	Make Payment
Requirement	The page shall display the price of the selected room, field for credit card number, mandatory check boxes, terms and conditions.
Source	Supervisor Name
Rationale	To make the customer able to pay for room via cash or credit card. Customer can also click on cancel button to return to hotel home page.
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

5.1.11 FR-11 Generate Report

Identifier	FR-11
Title	Generate Report
Requirement	The page shall display the final report after confirmation.
Source	Supervisor Name
Rationale	The customer will be able to find reservation status and cancelation status if he
	cancels the confirmation.
Restrictions and Risk	Nil
Dependencies	Nil
Priorities	High

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5.1.12 FR-12 Forget Password

Identifier	FR-12
Title	Forget Password
Requirement	The user should know the process of recovering password if he/she forgets and will continue to book the hotel.
Source	Supervisor Name
Rationale	To book the hotel
Restrictions and Risk	Nil
Dependencies	Page should be available
Priorities	High

Non Functional Requirements

5.2.1 Performance Requirement

The system should have immediate response time.

Identifier	NFR-01
Title	Performance Requirement
Requirement	Every booking submission & modification should be updated in Hotel's common database within 10 seconds after each submission & modification activity. Results for cross checking of availability of rooms in internal database and customer's choice shall be in 5 seconds. Results for cross checking of availability of rooms in internal database and customer's choice shall be in 5 seconds. Results for cross checking of availability of rooms in internal database and customer's choice shall be in 5 seconds. Confirmation email shall be sent into customer's mentioned email within 2 secs after confirmation page termination

5.2.2 Reliability Requirement

System shall be accessible 98% of the time.

Identifier	NFR-02
Title	Reliability Requirement
Requirement	Database should be synchronized to cloud every 5 minutes. Database should be synchronized to cloud every 5 minutes

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5.2.3 Security Requirement

The system should be secure as it contains personal information about the customer.

Identifier	NFR-03
Title	Security Requirement
Requirement	Customer's personal details shall be encrypted. Customer's credit card details shall be deleted from database after checkout date

5.2.4 Maintainability Requirement

Identifier	NFR-04
Title	Maintainability Requirement
Requirement	No method in any object may exceed 100 lines of code. System failure recovery shall be within 40 mins

5.2.5 Portability requirement

System shall be accessible on mobile devices.

Identifier	NFR-04
Title	Portability requirement
Requirement	System shall be accessible on Google Chrome, Firefox, Safari, Opera and Internet explorer

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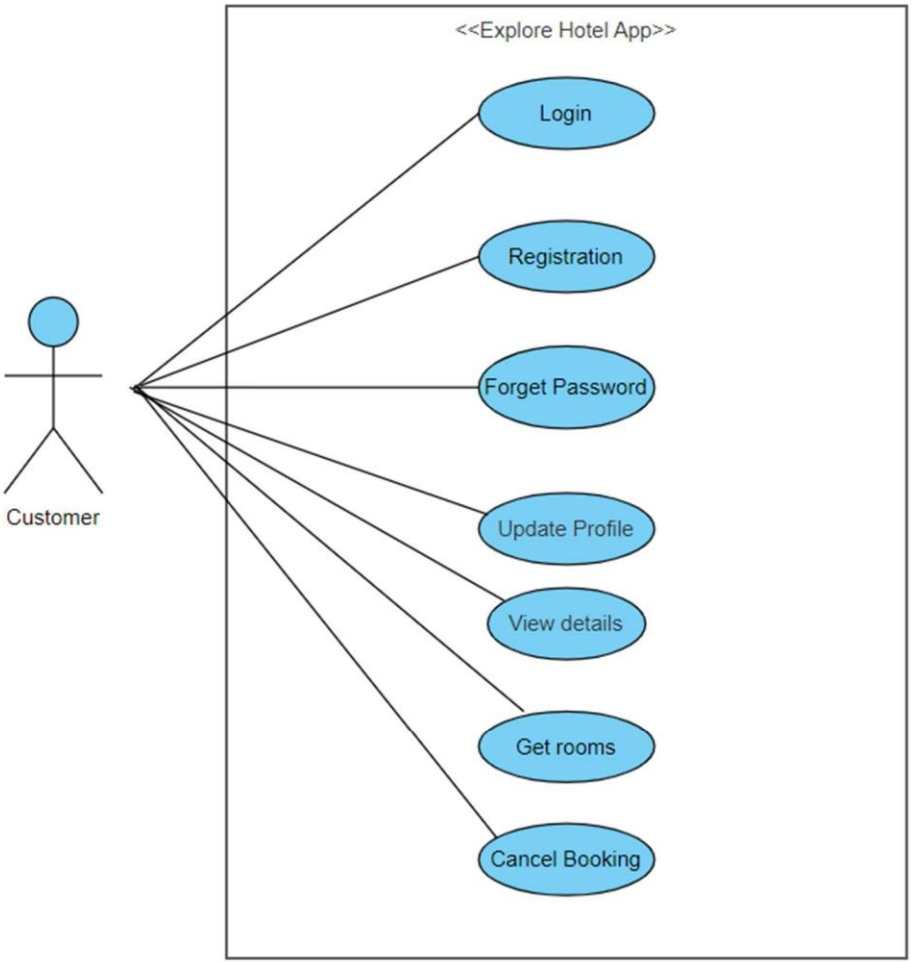
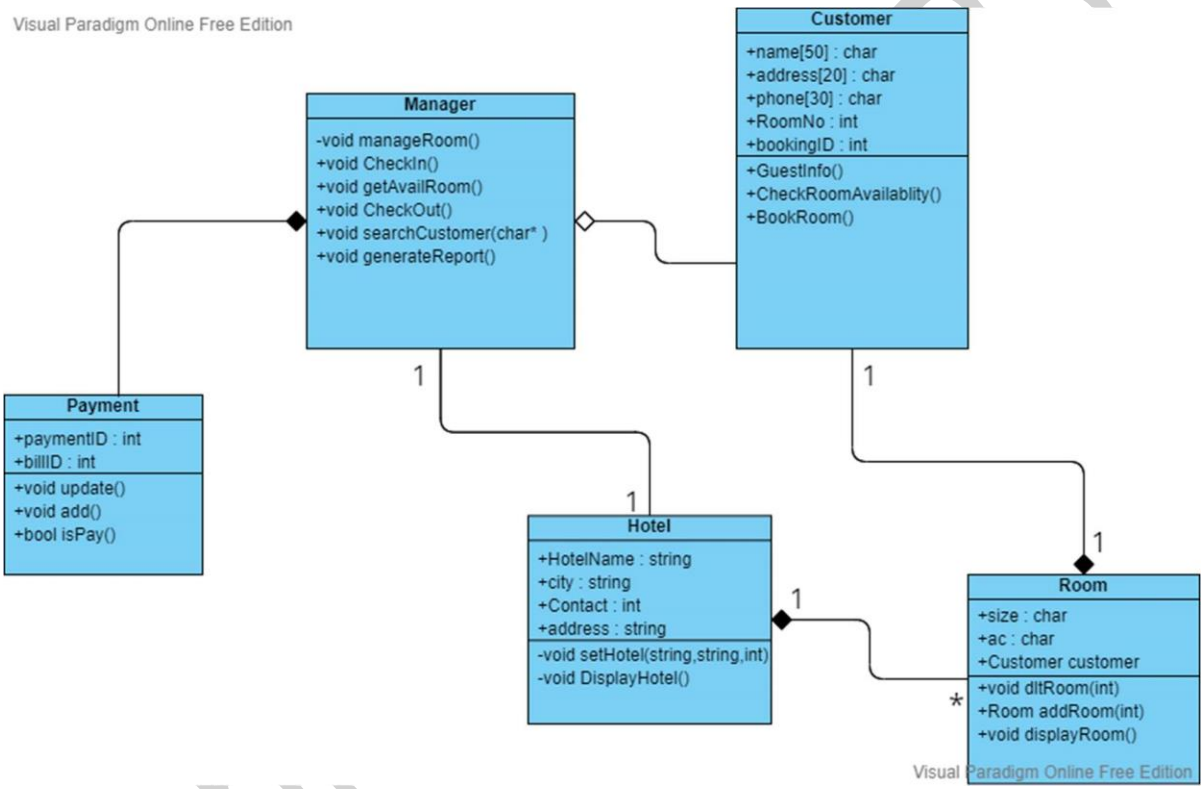
Diagrams

Use-Case Diagram

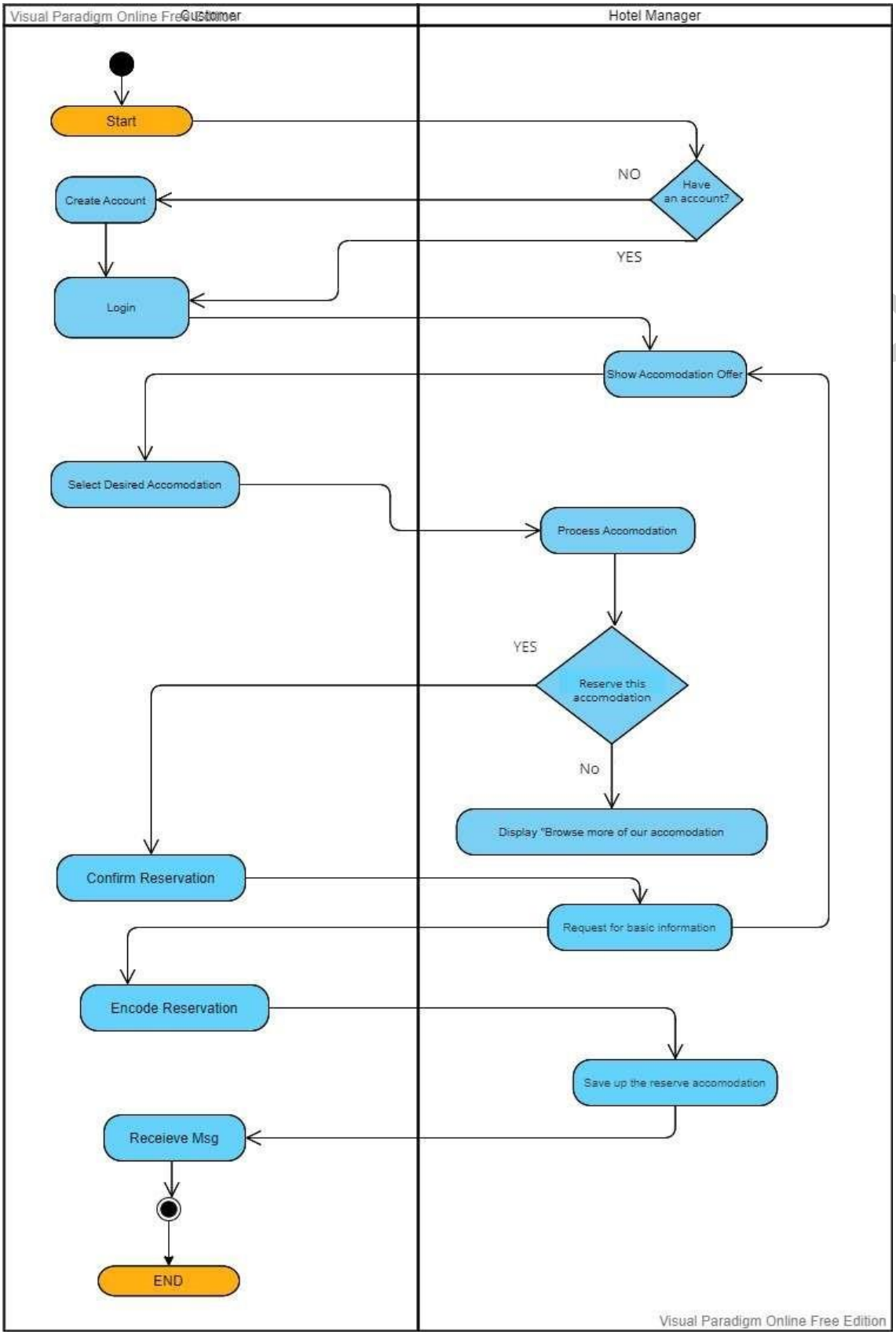

<<Explore Hotel App>>
Login
Registration
Forget Password
Update Profile
View details
Get rooms
Cancel Booking
Customer

<<Explore Hotel App>>
Login
Add customer
View Customer
Generate Reports
Make Payment
Update Room
Hotel Manager

Class Diagram

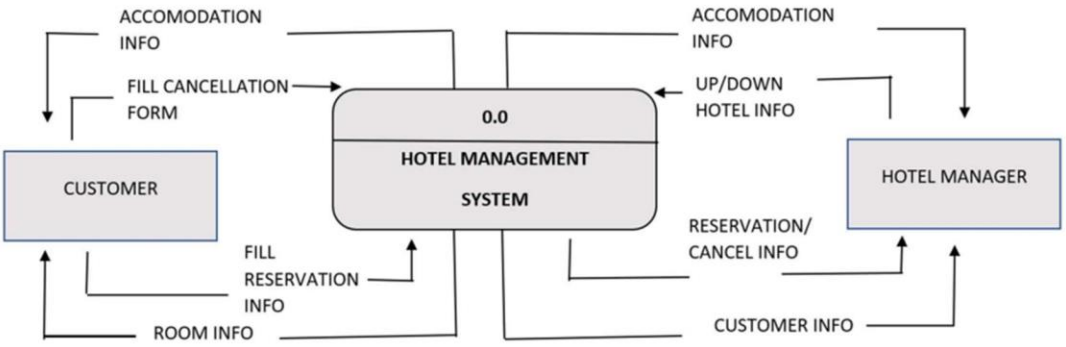


Activity Diagram

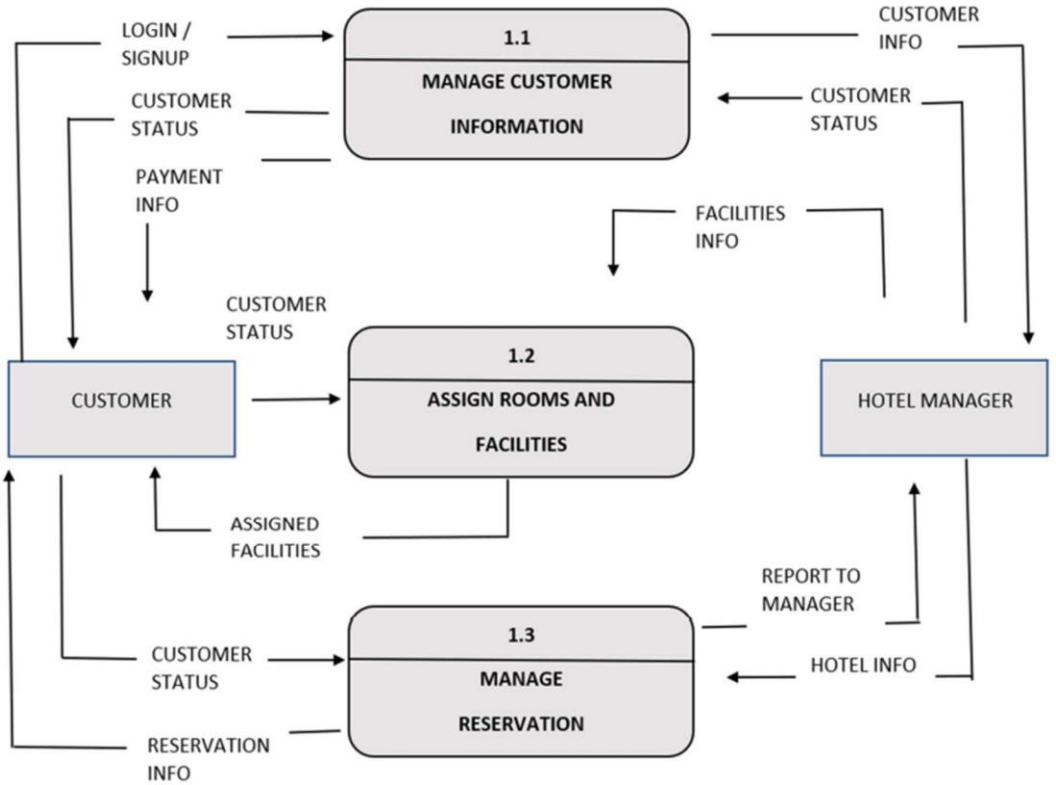


Data Flow Diagram

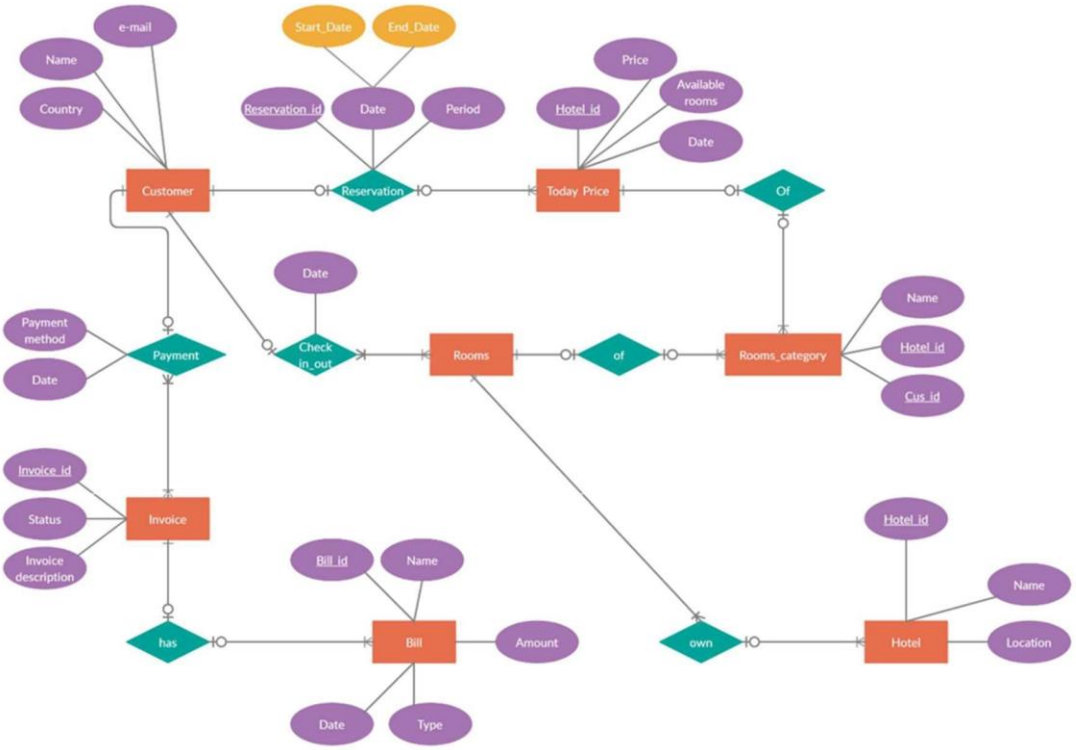
LEVEL -0



LEVEL -1

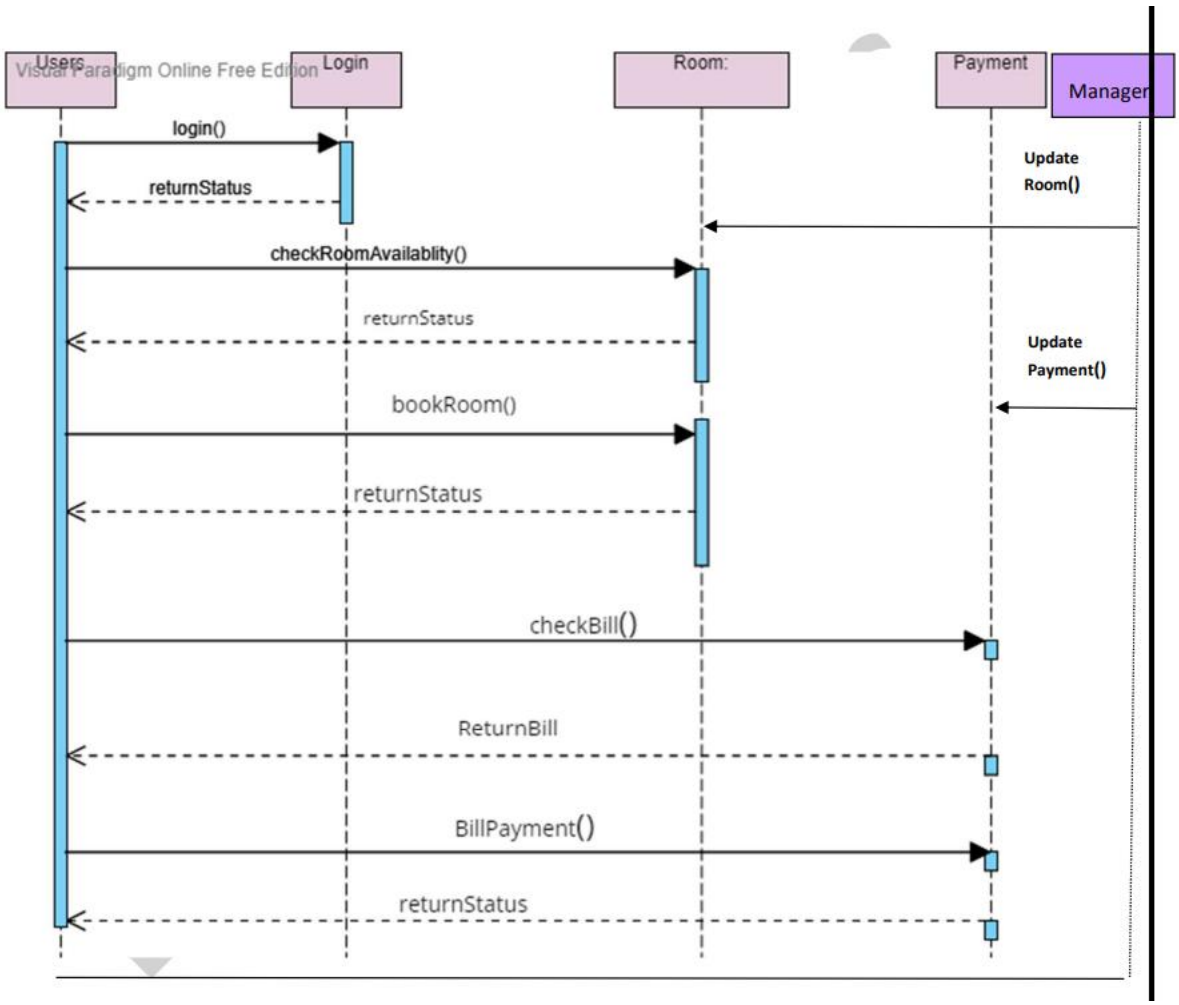


ERD Diagram



Explore

Sequence Diagram



Testing methods

Unit Testing

- Unit testing focuses verification effort on the smallest unit of software i.e. the module. Using the detailed design and the process specifications testing is done to uncover errors within the boundary of the module. All modules must be successful in the unit test before the start of the integration testing begins.
- In this project each service can be thought of a module. There are so many modules like Login, Master Admin, Normal User, and PManager. Giving different sets of inputs has tested each module. When developing the module as well as finishing the development so that each module works without any error. The inputs are validated when accepting from the user.
- In this application developer tests the programs up as system. Software units in a system are the modules and routines that are assembled and integrated to form a specific function. Unit testing is first done on modules, independent of one another to locate errors. This enables to detect errors. Through this error resulting from interaction between modules initially avoided.

Integration Testing

- After the unit testing we have to perform integration testing. The goal here is to see if modules can be integrated properly, the emphasis being on testing interfaces between modules. This testing activity can be considered as testing the design and hence the emphasis on testing module interactions.
- In this project integrating all the modules forms the main system. When integrating all the modules we have checked whether the integration effects working of any of the services by giving different combinations of inputs with which the two services run perfectly before Integration.

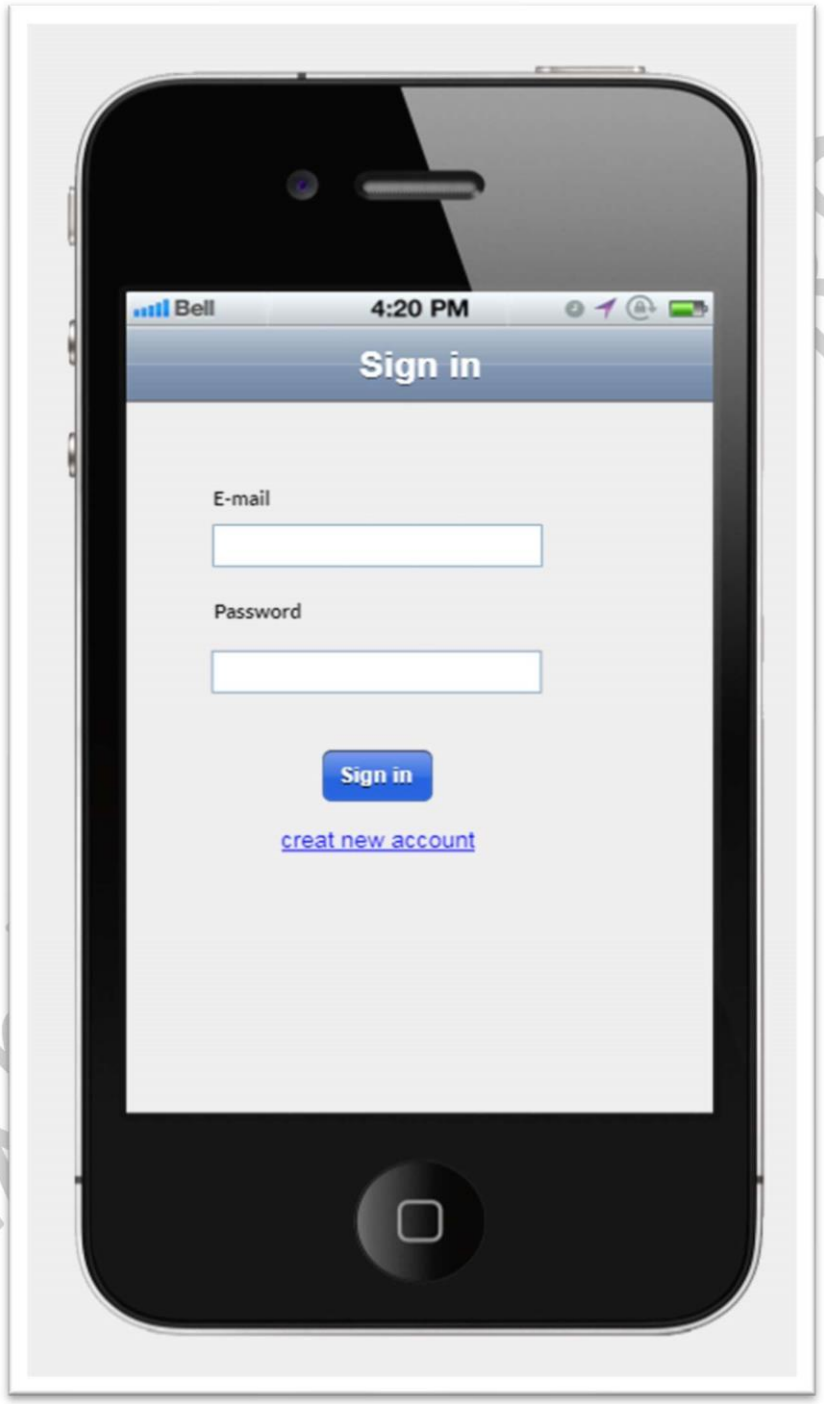
System Testing

The philosophy behind testing is to find errors. Test cases are devised with this in mind. A strategy employed for system testing is code testing.

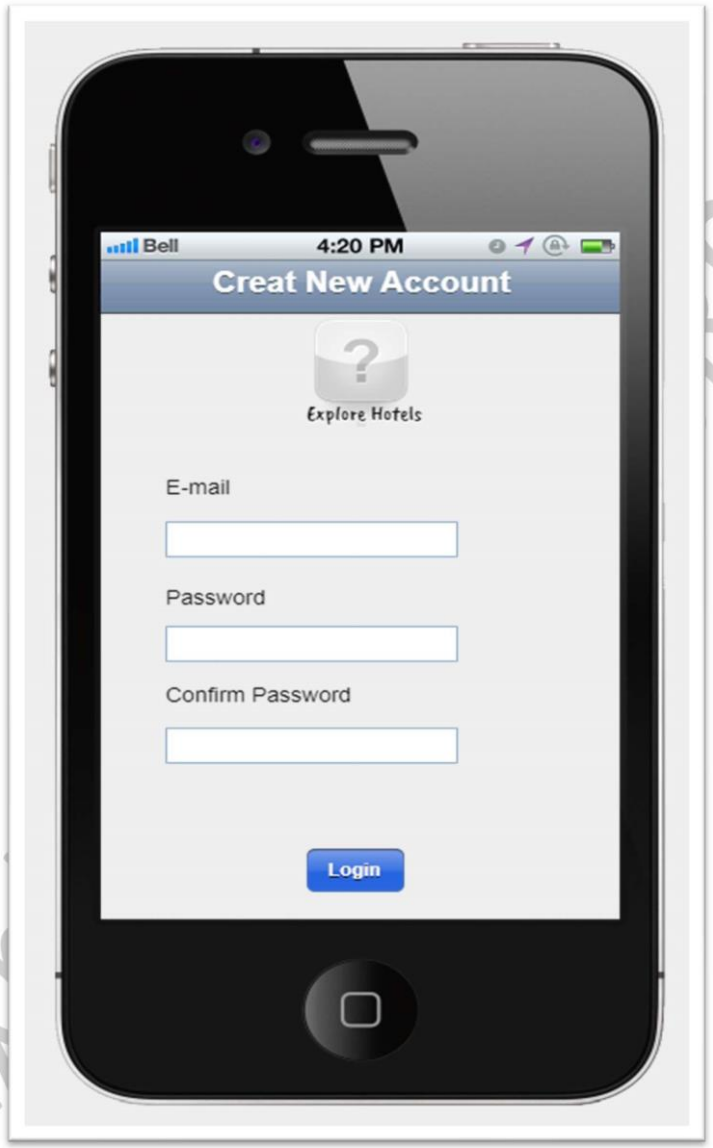
- Here the entire software system is tested. The reference document for this process is the requirements document, and the goal is to see if software meets its requirements.
- Here entire system has been tested against requirements of project and it is checked whether all requirements of project have been satisfied or not.

USER INTERFACE DESIGN (MOKEUPS)

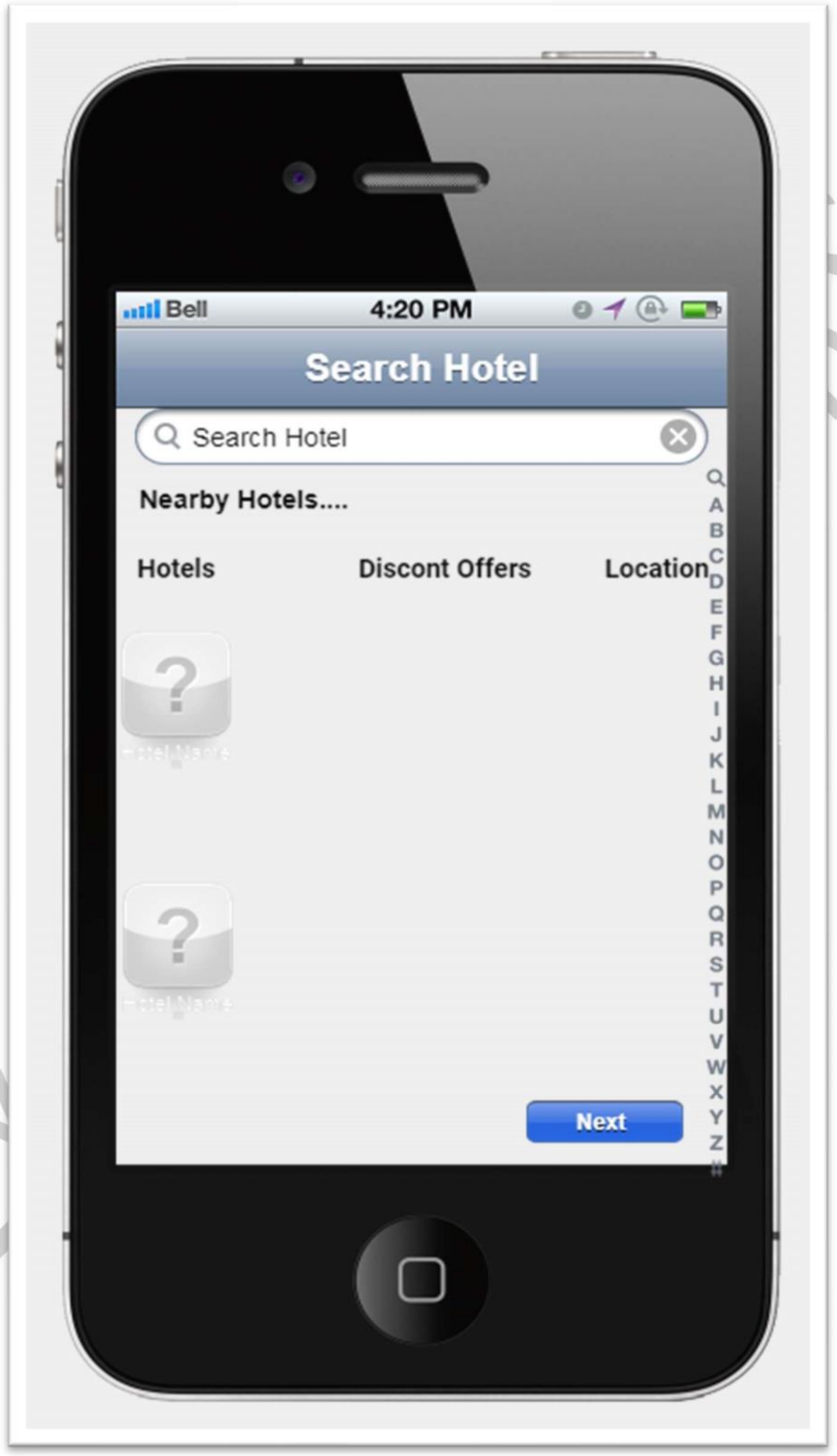
sign in page



Create Account



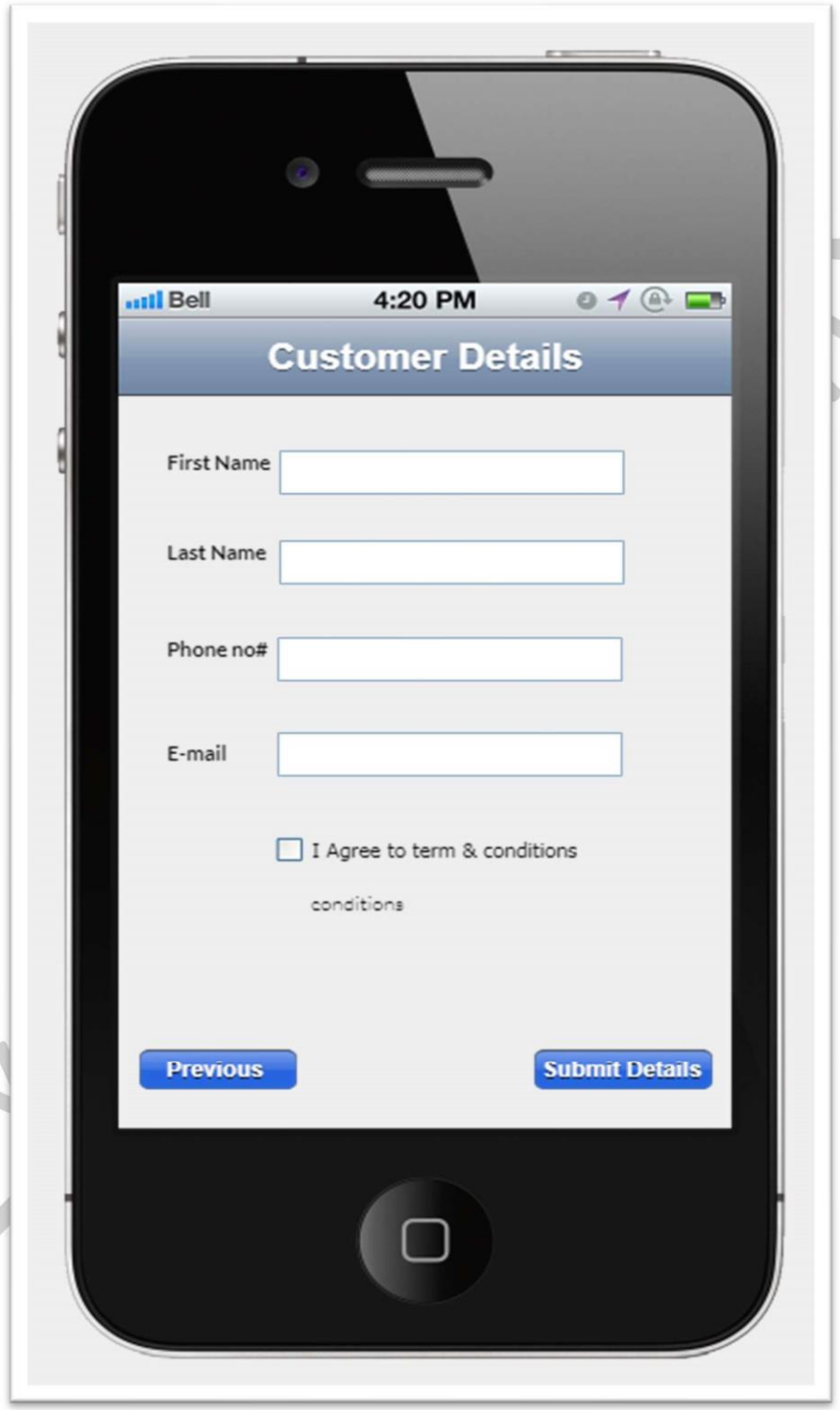
Search Hotel



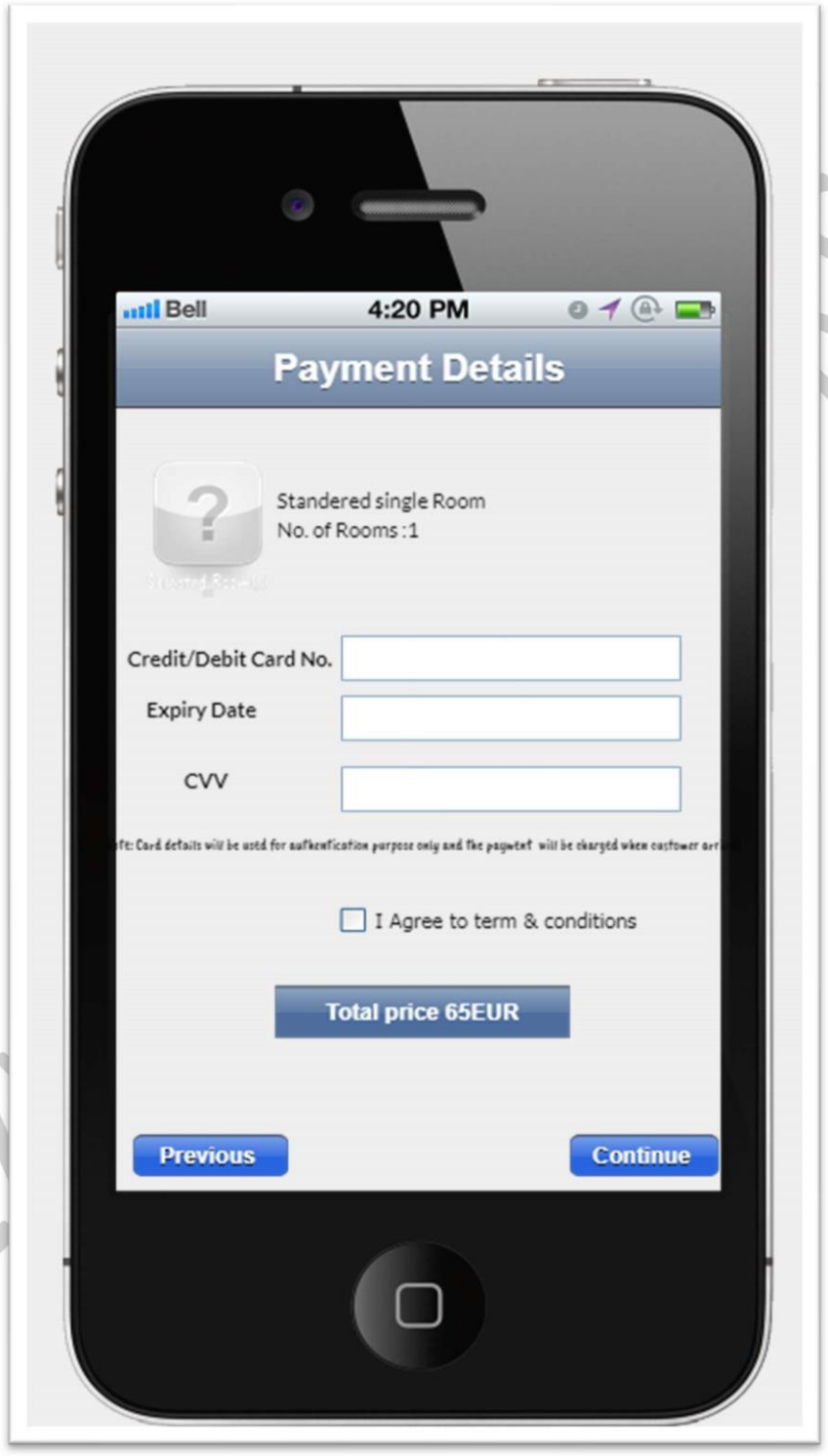
Check Room Availability

Selection of Room

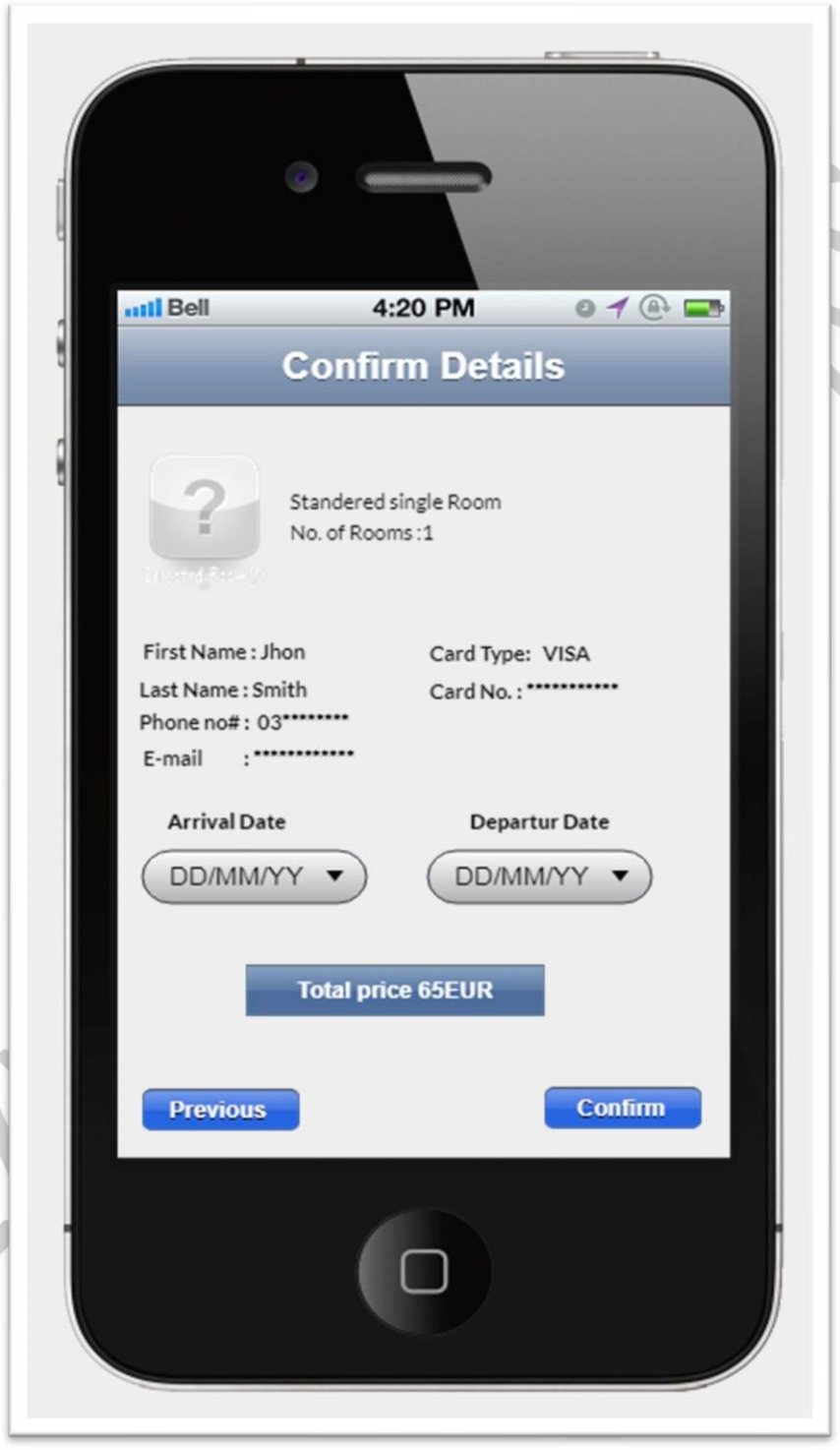
Customer Details



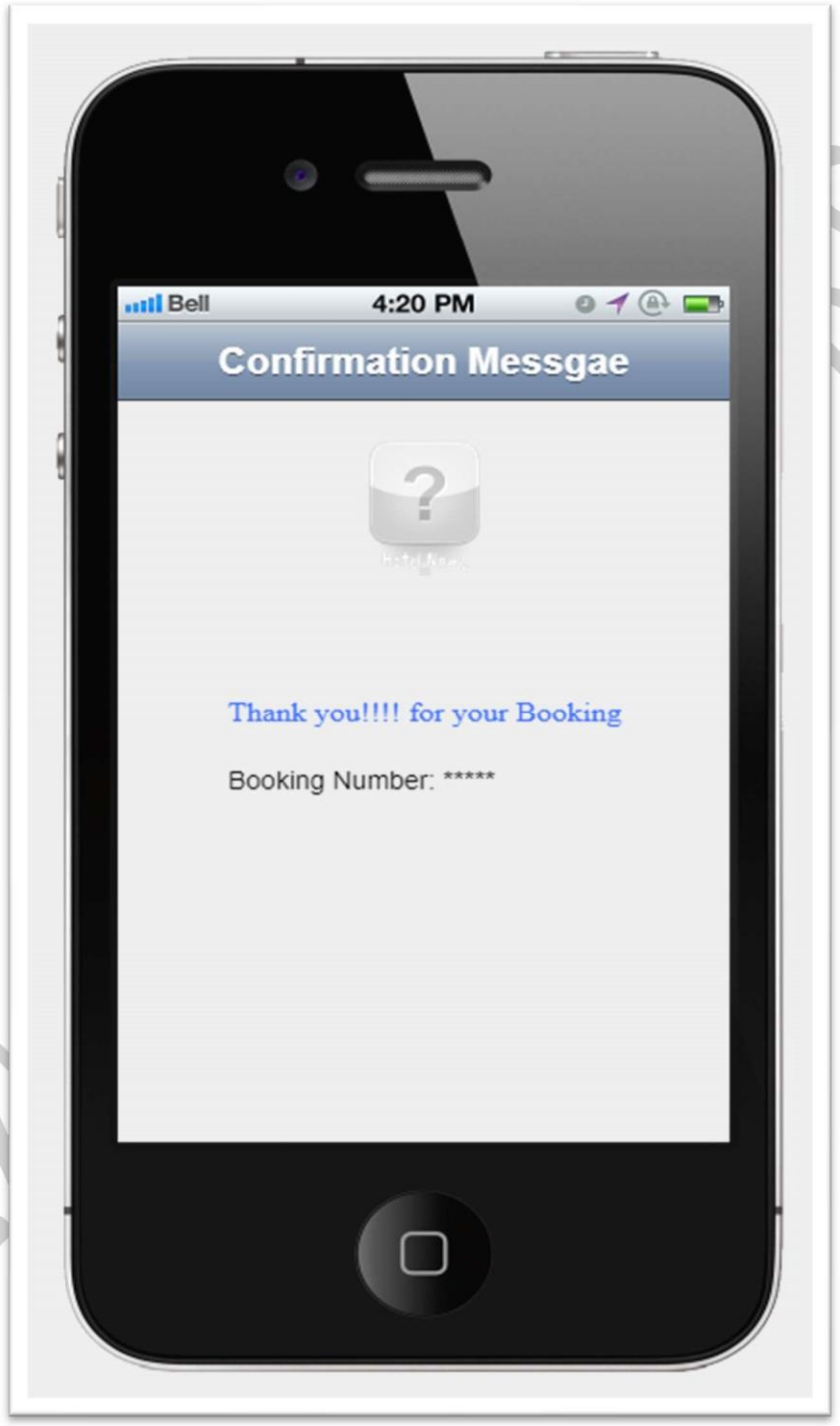
Payement Details



Confirm Details



Confirmation Message



References

GCR TEMPLATE:

We have taken the concept from this tutorial and are able to write the document in our own way.

ERD diagram tutorial: https://www.guru99.com/er-diagram-tutorial-dbms.html

We have learnt through this link that what is ERD and how to draw it then after gaining concept from this tutorial we are capable to draw ERD of HOTEL MANAGEMENT SYSTEMS.

https://www.scribd.com/doc/50269323/Hotel-Management-System

https://classroom.google.com/c/NTQ3MzQ4MTQ2NTk5/m/NTc1OTM4NTI3Njk1/details

http://gurramv.blogspot.com/2011/03/hotel-management-system-testing.html