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HOTEL BOOKING MANAGEMENT SYSTEM

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Hotels BOOKING is an tourist agent which provides the facilities for booking hotels, Events, Travels, houses, holiday apartments and other accommodations' for customers. They operate their business in KSA . Any customers need to book hotel, or apartment they need to visit their office which for checking the availability as well as negotiation. Recently they have decided to change their booking pattern from manual to web based system. It will help them to manage the customers booking easily and also to keep the customers data more safe. It will also help staffs to keep in track their customer's online booking request as well as easily to reply feedback to the cust

1.1.1 PROBLEMS Definition

As *Hotels BOOKING* is having manual booking system, they are facing some problems issuing booking requests of customers. All the necessary booking stuffs are being done in hard copy. So it become much difficult for staffs to keep the records updated all the time. As for example, if the customers need to change the check in date it become difficult for them to find out the customers booking details for updating as there are so many customers booking records. Again, regarding current system customers cannot give feedback online and also staff cannot reply to them promptly. Besides tourists from other KSA need to call directly for booking purposes. So they cannot get the chance to view their apartment rooms or hotels rooms before they make book.

1.1.2 Goals:

Create the system for reserve room and event from multiple hotels around the KSA.

1.1.3 Objectives
The project "Hotel Booking Management System" is aimed to develop to maintain the day-to-day state of admission/vacation of residents, List of workers, List of Bills etc.
There are following main objectives of the hotel**:**

- Keeping user satisfaction as at most priority.
- Scheduling the allotment of user with room to make it convenient for user.
- Keeping records of user registration details accurately arranged order so that the treatment of Customers becomes quick and satisfactory.
- Keeping details about the users, their needs and payment detail reports etc.
- Keeping the best hotel facilities.
- Give the user choices from the cheapest rooms between the hotels.
- Keep the user connected by the hotel to receive the confirmation.
- Send the confirmation letter to the user about his bill and date.

1.1.4 Critical success factors

- Simplifies Front Office Tasks – A hotel booking system can provide the 'real time' status of the hotel rooms. ...
- Enables distribution – ...
- Improves guest reservations – ...
- Increases multi-tasking – ...
- Centralizes hotel management –

1.1.5 Organization chart and responsibilities
The Internet connection is also a constraint for the website. Since the website fetches data from the database over the Internet, it is crucial that there is an Internet connection for the website to function. The web portal will be constrained by the capacity of the database.

1.1.6 General rules (assumptions)

One assumption about the product is that it will always be used on computer or mobile phones that have enough performance. If the computer or phone does not have enough hardware resources available and software for the website. For example the users might have allocated them with website, must be the Browser supports JavaScript.

Chapter 2

1.2 INTRODUCTION

  Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization.

Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

  Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

1.3 Description of Data Flow Diagram (DFD)

UML design is the shortest form of "**Unified Modeling Language**". The purpose of this modeling language is to visualize the design of the system. There are total 14 types of UML diagram. They are:

- Class Diagram.
- Component Diagram.
- Deployment Diagram.
- Object Diagram.
- Package Diagram.
- Profile Diagram.
- Composite Structure Diagram.
- Use Case Diagram.
- Activity Diagram.
- State Machine Diagram.
- Sequence Diagram.

- Communication Diagram.
- Interaction Overview Diagram.
- & Timing Diagram.

Here we will show only 2 diagrams out of 14. For that we have chosen "*Use Case Diagram*" & "*Class Diagram*".

1.3.1 Class Diagram

This is the most used UML diagram in the field of software engineering design. It is called as a main building block of any object oriented solution. Usually it illustrates the classes in a system, attributes and operations of each class and also the relationship between each class.

Below is the "*CLASS DIAGRAM*" of our new proposed system.

FIGURE 2: CLASS DIAGRAM

Customer

-CustomerID
-Customername
-address
-phone

+add()
+edit()
+delete()

Booking

-bookingid
-customerid
+Customername
+Roomid
+amount
+BookingDate

+createdbooking()
+editbooking()

Hotel

-hotelid
-hotelcat
-hotelprices

+addhotel()
+modifyhotel(int hotelid)
+selectedhotelitem(int hotelid)

Room

-roomid
-roomprice
-roomtype

+addroom()
+modifyroom()
+selectroom()

Event

-eventid
-eventprice
-eventprice

+addevent()
+modifyevent()
+selectevent(int evenid)

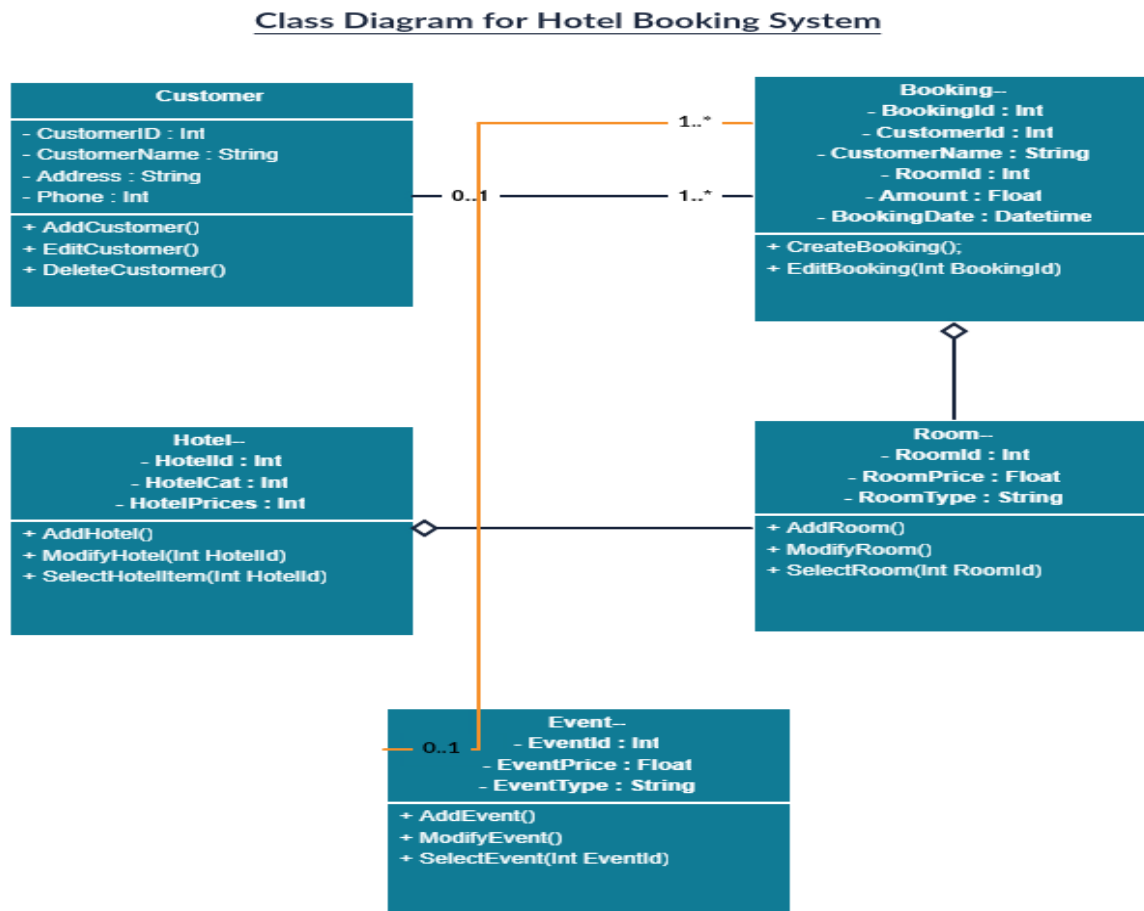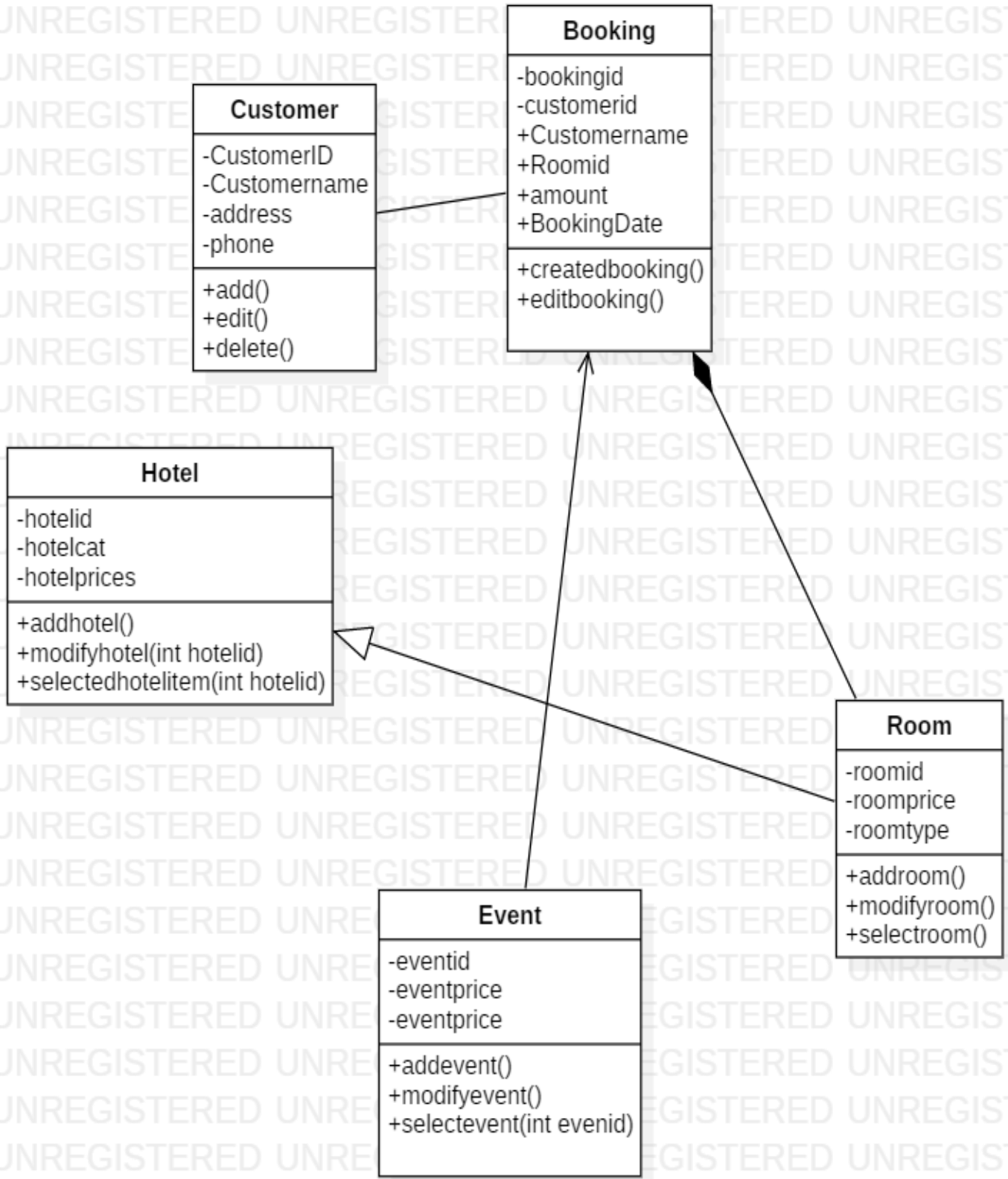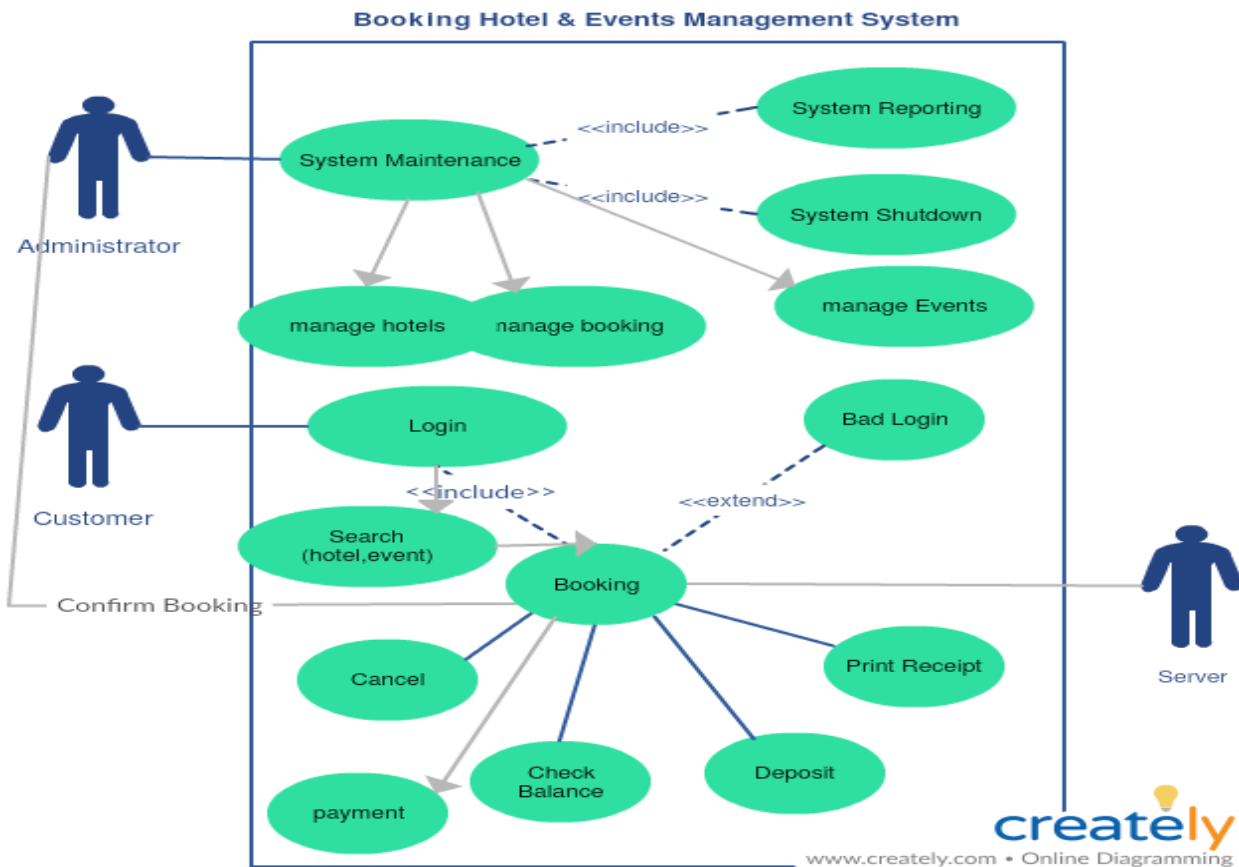### 1.3.2 Use Case Diagram

It is also called behavioral UML diagram. It gives a graphic over-view of the actors involved in a system directly. It shows how different functions needed by the actors how they are interacted.

Below is the "***USE CASE DIAGRAM***" of our new proposed system.
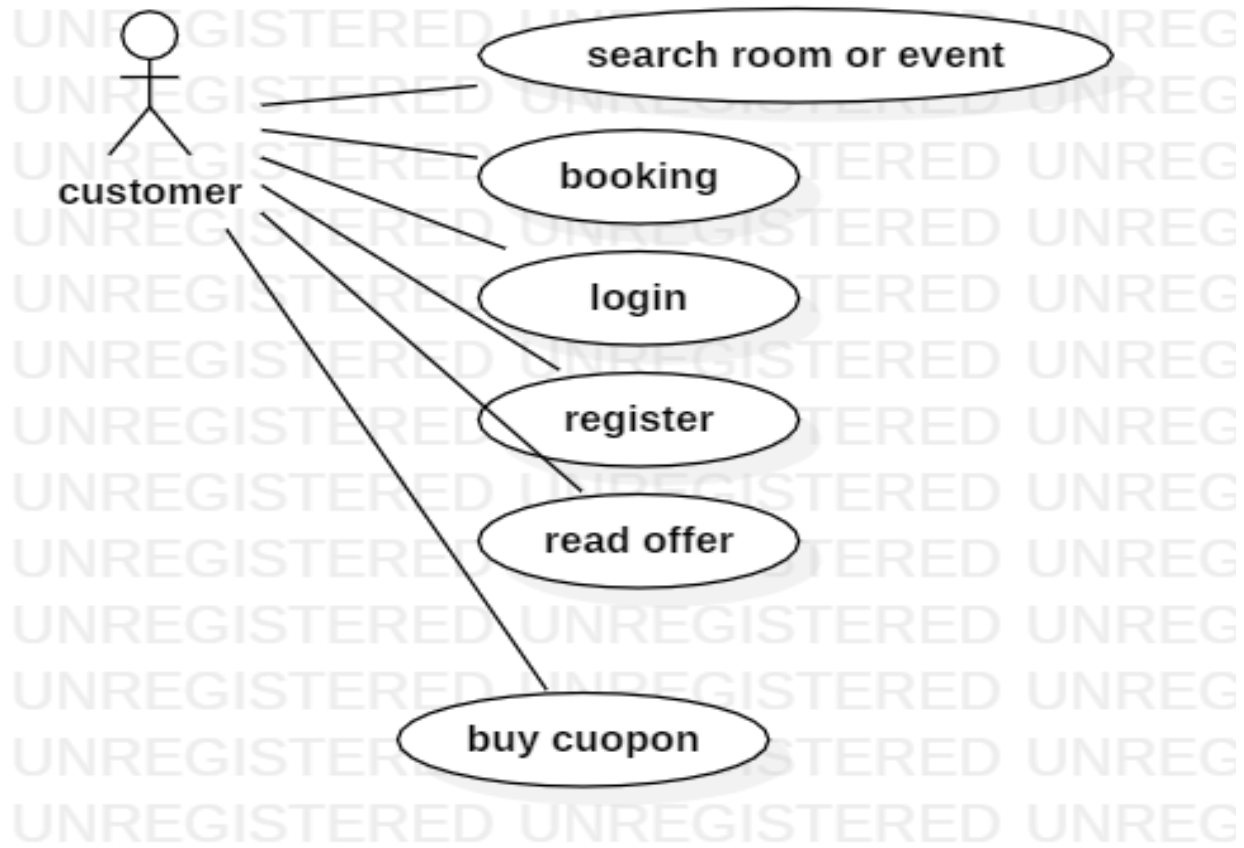
1.3.3 Object Diagram

1.3.4 Sequence Diagram
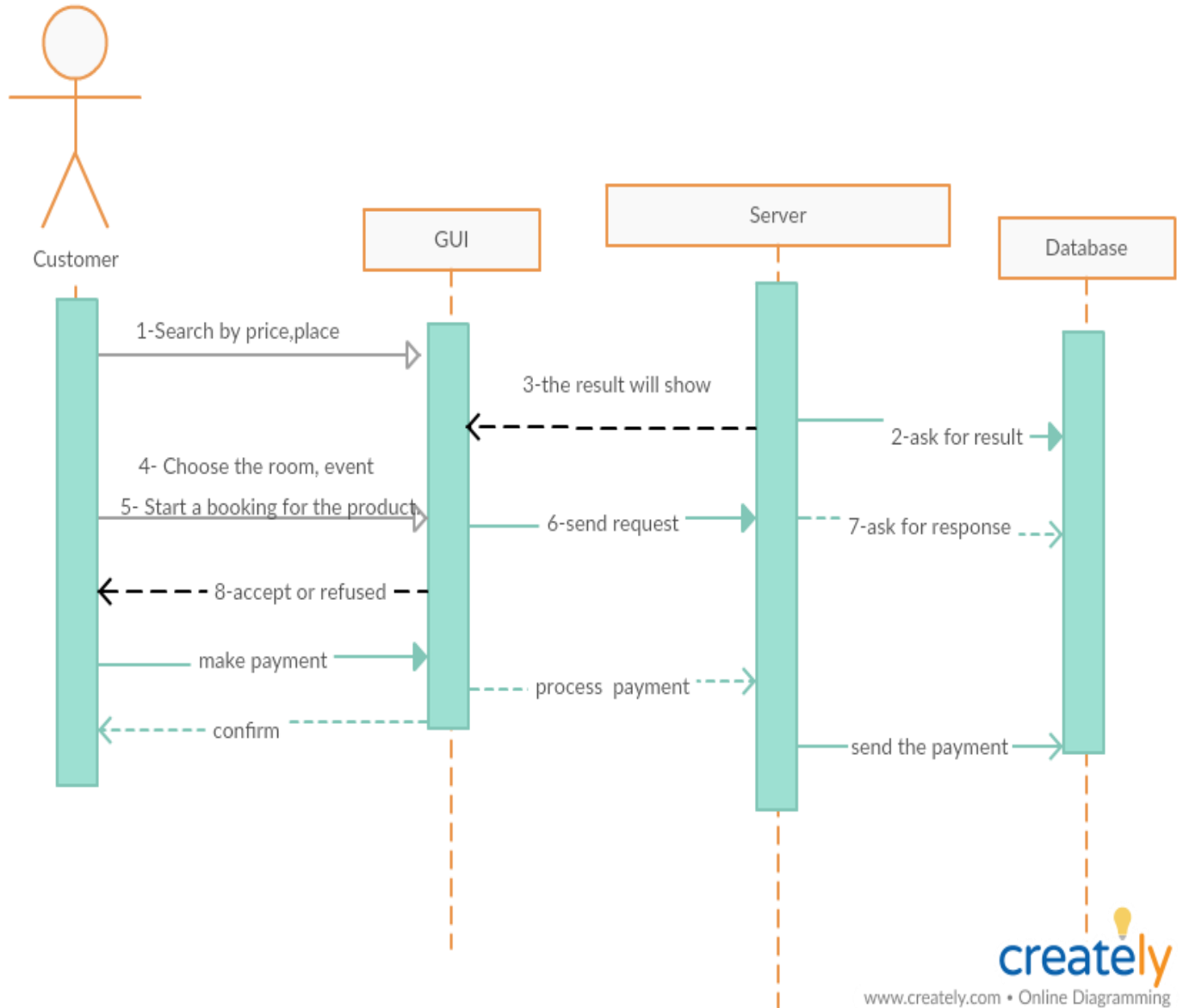
interaction SequenceDiagram1

customer   admin

1 : search room

2 : create booking

3 : confirm booking

4 : pay bill

5 : confirm

6 : read balance

7 : update bill
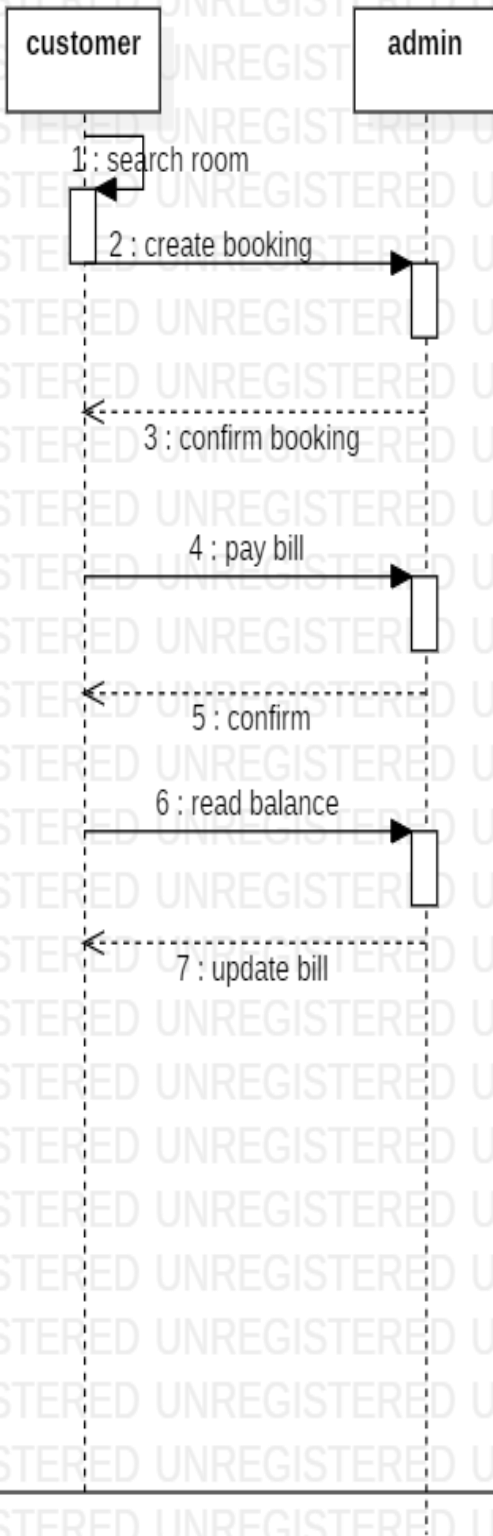
2 CHAPTER 3

2.1 Description of procedures and function

This project contains 3 modules namely:-

- ➢ **User Registration**,

- ➢ **Booking Rooms,**

- ➢ **Submission module,**

User Creation:-

In this module we are Registration the username, password, phone and card id' are user creations.

Booking Room:-

In this module we are Registered the Customer Name, hotel number, room price as well as paying the money.

Submission Module;-

In this module the admin is confirmed the order and before registering the

Customer name, order no and phone

2.2 Relation database schema

2.3 E-R Diagrams:

2.3.1 *Tables*

Database Schema:

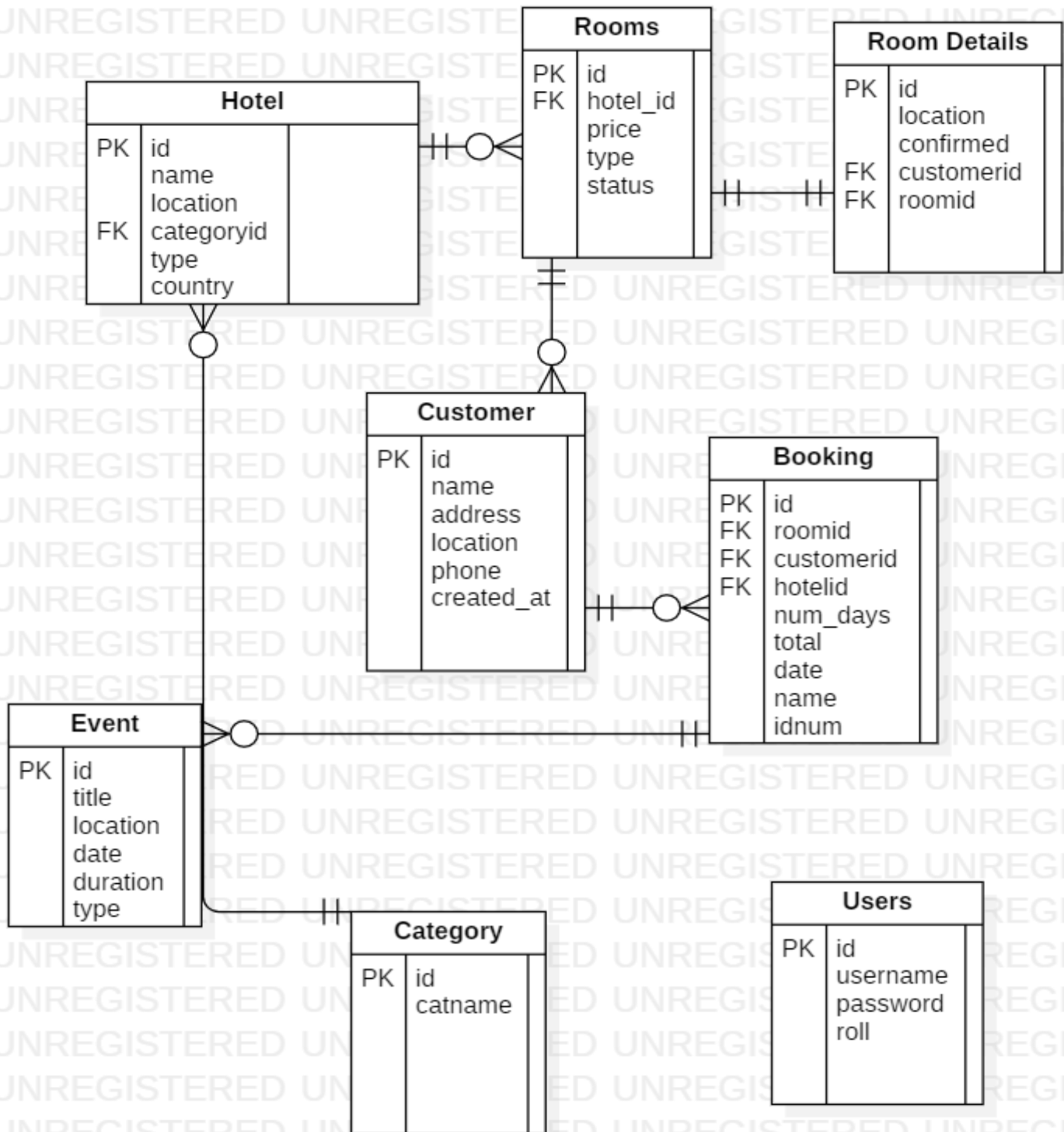| Name :	Booking
Actor :	Customer
Description :	Describe the process used to add a new booking
Successful Completion :	1. Customers can book 2. Staffs enter the customers details into the database
Alternative :	None
Precondition :	Customers registered as a member

Post condition :	Event is booked by customer
Assumption :	None
Name :	Update Event Availability
Actor :	Staff
Description :	Can update the availability of hotel's event
Successful Completion :	1. New availability for hotel's event 2. Staffs enter the available event appointment into the database
Alternative :	None
Precondition :	Staffs update the system entering new event availability
Post condition :	Customers can see the latest availability of hotel's event
Assumption :	None

Post condition :	Room is booked by customer
Assumption :	None
Name :	Update Room Availability
Actor :	Staff
Description :	Can update the availability of hotel's room
Successful Completion :	1. New availability for hotel's room 2. Staffs enter the available room details into the database
Alternative :	None
Precondition :	Staffs update the system entering new room availability
Post condition :	Customers can see the latest availability of hotel's room
Assumption :	None

Name :	Payment
Actor :	Customer
Description :	Describe the process of payment through the system
Successful Completion :	1. Customers will receive the invoice
	2. Staffs enter the customers payment details into database
Alternative :	Pay after arrive into the destinations
Precondition :	Customers registered as a member
Post condition :	Room is booked by customer
Assumption :	None

Name :	Generating Receipt
Actor :	Staff
Description :	Describe the process used to generate the booking details
Successful Completion :	1. Staff can check the booking details
	2. Staffs will keep the copy of the generated receipt
Alternative :	None
Precondition :	
Post condition :	Room is booked by customer
Assumption :	None

Name :	Booking
Actor :	Customer
Description :	Describe the process used to add a new booking
Successful Completion :	1. Customers can book
	2. Staffs enter the customers details into the database
Alternative :	None
Precondition :	Customers registered as a member
Post condition :	Room is booked by customer
Assumption :	None

2.3.2 Attributes

2.3.3 Relations

2.4 Hardware and software requirements
<u>Hardware Requirements</u>:-

- Quad core 2GHz+ CPU.
- 6GB Ram.
- Hard disk 1 TB.
- Minimum database space: 10GB.

<u>Software Requirements</u>: -

- **Operating System :**   Windows
- **Web-Technology:**   pup
- **Front-End:**   html5,php
- **Back-End:**   myself
- **Web Server:**   apache

3 Chapter 4: Implementation and Testing

3.1 Introduction

System description	Hotel Booking Management System
Supports	High-end laptops, mobile responsive
Game localization	English, Arabic
Supported platforms	Php,codeginator

3.2 Procedures

3.3 Reports

3.1 List of functionalities that were checked

Functionality	Result
Check internet-connection on the device	passed
Check that website size corresponds to the approved marketing	failed
Check that website is responsive, on all screens	passed
User Interface	
All graphic elements, texts and animations have high resolution	passed
In the home page there is menu	passed
Check social media functionality	failed
Check the ability to return to previous page from any screen	passed

Check that fixed menu	passed
Check the spring effect in the end of the scroll/swipe	passed
Proper device operability after playing the website	
Checking the speed for website after lunching	passed

Wifi works correctly	passed
All standart website and downloaded images work properly	passed
All emails can be sent and received	passed
Check hint functionality	
Check that hints are worked correctly	passed
Hints appearing for new functionality	failed
Check In-App Purchase	
Check that Gateway payment is worked correctly	failed
Loading processes	
Check that loading on all screens phases is correctly displayed and works as expected	passed
When loading takes more than 3 sec loading process should be displayed	failed
User LogIn	
Check user login page	passed
Check registration functionality	passed

|	
Check Login functionality	passed
Check Forgot Password functionality	failed
Suspend Events	
Correct operation of the website, if during the website send the notfication.	passed

3.2 List of bugs

Key	Summary	Priority	Environment	Description
1	The map is not work because the issues related to the google billing .	Major	Google crome Firefox	**Steps to reproduce:** 1. Run the website 2. Start reserve room or event 3. Open Map 4. Continue playing the website **Actual result:** The map is not displayed. **Expected result:** The map should be displayed when the billing activated in google map.
2	Payment is not working because its demo system	Major	System browser	**Steps to reproduce:** 1. Install the gateway 2. Run the gateway. 3. Connect the merchant account with the admin dashboard. 4. User click payment **Actual result:** the payment not done because it has to integrated with actual account in gateway like strips or PayPal **Expected result:** payment done

3	Language Arabic not completed	Major	Internet Browser	**Steps to reproduce** 1. Create the new record as Arabic language 2. Go to the website manager 3. Tap language menu 4. Look at the language **Actual result:** website should display in Arabic language **Expected result: Arabic language should displayed correctly in complete the website**

3.4 Layouts

PHYSICAL DESIGN
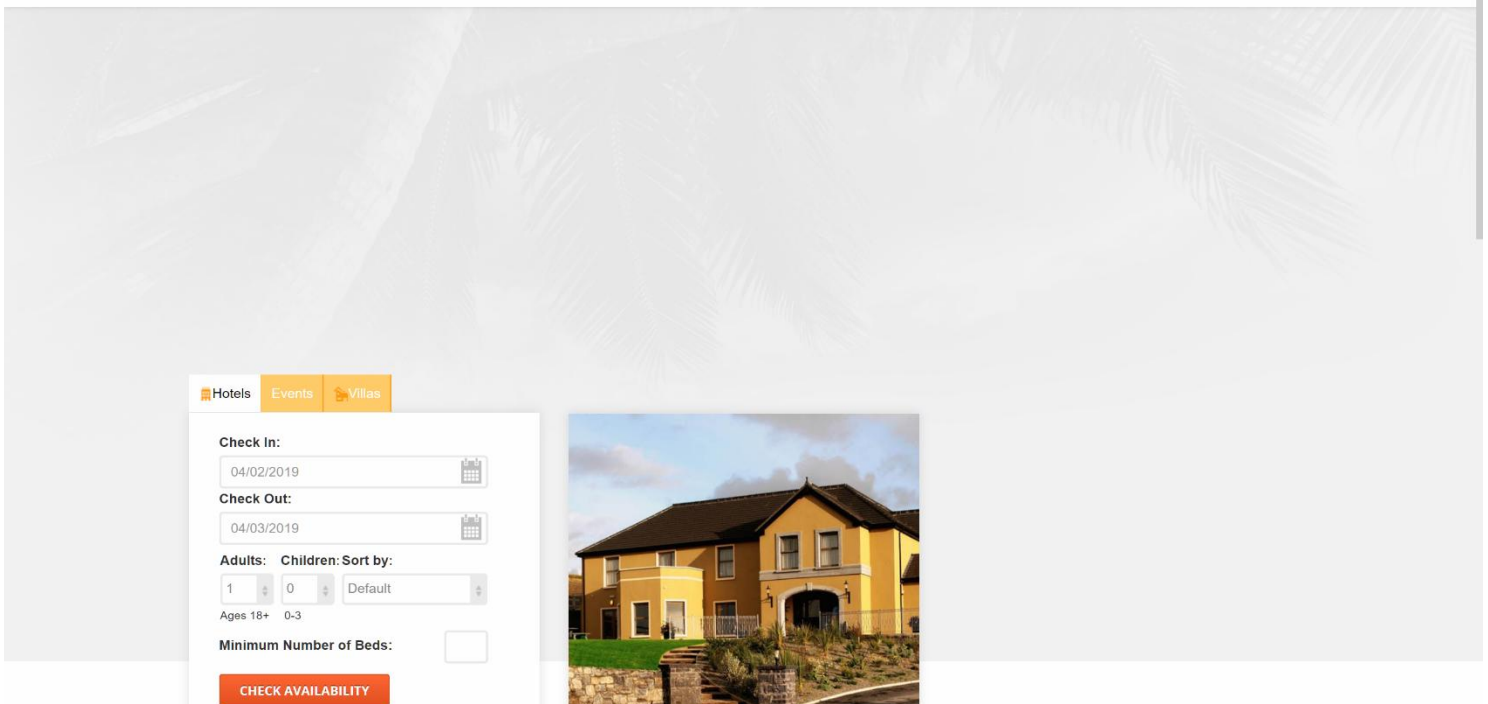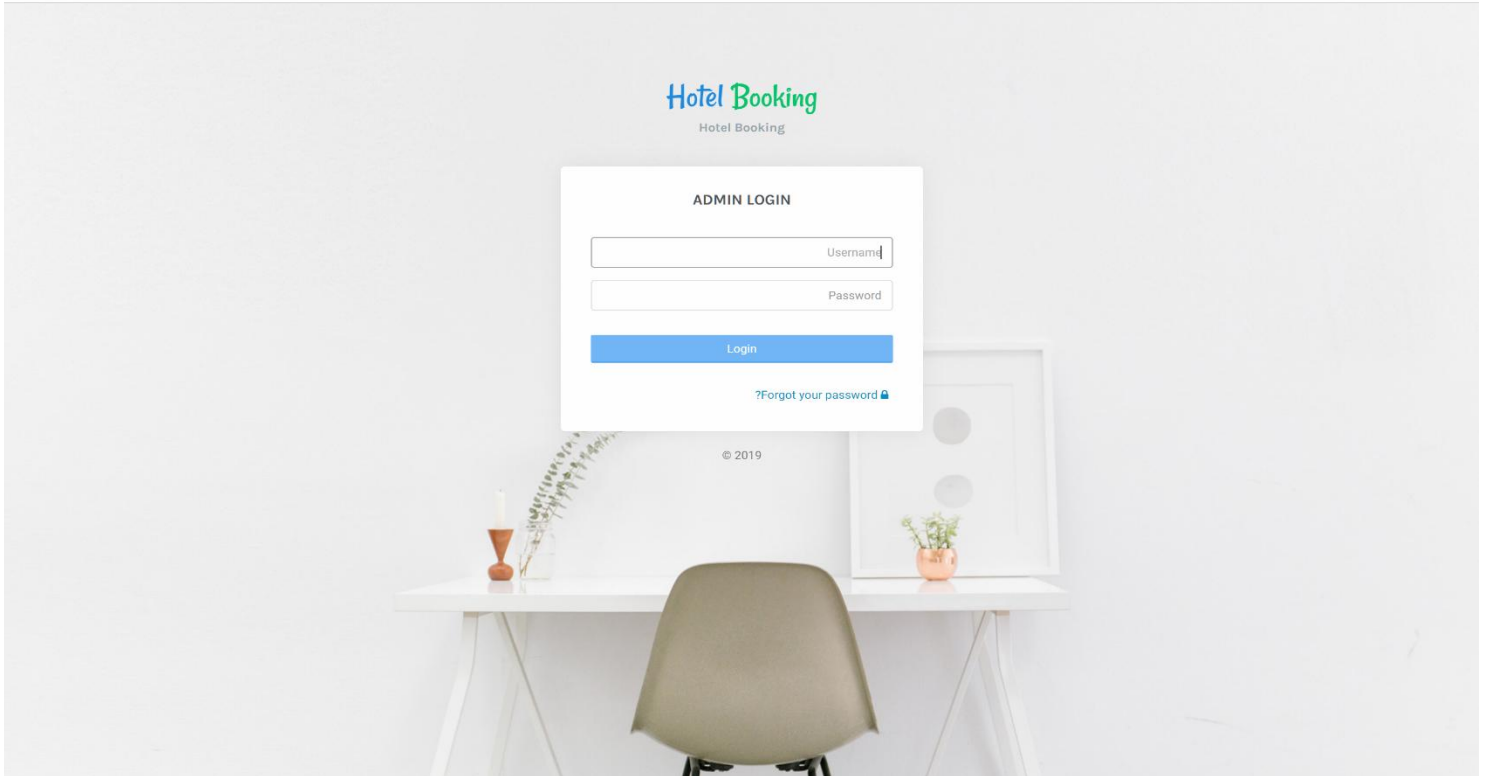
Creating new account

Already have an account? Login here

Items marked with an asterisk (*) are required

Personal Details

First Name *

Last Name *

Birth Date   Month   Day   Year

Company

Billing Address

Address *

Address (line 2)

City *

Zip/Postal code

Country *   United States

State/Province   Alabama

Contact Information

Phone *

Fax

(Please enter ONLY real email address)

E-mail address *

Image verification

Type the characters you see in the picture

BMZda

HOTEL BOOKING

🏠 Home / Gallery

search keywords...

Reservation ▲

Check In:

04/02/2019 📅

Check Out:

04/03/2019 📅

Adults: Children: Sort by:

1 ▾ 0 ▾ Default ▾

Ages 18+ 0-3

Minimum Number of Beds:

CHECK AVAILABILITY

Booking Status ▲

Enter your booking number:

CHECK STATUS

Information ▲

• Test Page

Events ▲

Gallery

General Images (1)   Single Rooms (3)   Double Rooms (3)   Superior Rooms (3)

Luxury Rooms (3)

Hotel Booking

Admin Panel

Home | My Account | Logout

admin

- **General** ›
- **Accounts** ˅
  - · My Account
  - · Statistics
  - · Roles & Privileges
- Admins Management
  - · Admins
  - · Hotel Owners
  - · Regional Managers
- Customers Management
  - · Customer Groups
  - · Customers
  - · Travel Agencies
- **Hotels Management** ›
- **Bookings** ›
- **Menus and Pages** ›
- **Languages Settings** ›
- **Mass Mail & Templates** ›

Accounts » My Account

Items marked with an asterisk (*) are required

General Info

Account type:	Owner
Username:	admin
Preferred Language *:	English ▾

Change

Personal Information

First Name *:	Ahmad
Last Name *:	Al homidi
E-mail address *:	creative1292@gmail.com
Photo:	لم يتم اختيار اي ملف اختيار ملف

Change

Change your password

Password *:	
Retype Password *:	

Change Password

2019 ©

3.5 Reports layouts

4 Chapter 6: Conclusion and Future Work

Conclusion

This is to conclude that the project that I undertook was worked upon with a sincere effort. Most of the requirements have been fulfilled up to the mark and the requirements which have been remaining, can be completed with a short extension.

The project made here is just to ensure that this product could be valid in today real challenging world. Here all the facilities are made and tested.

Currently the system works for limited number of administrators to work. In near future it will be extended for many types of insurance policies so that efficiency can be improved.

References

The following books were referred during the analysis and execution phase of the project:

The Joy of PHP Programming: A Beginner's Guide – by Alan Forbes
Head First PHP & MySQL – by Lynn Begley & Michael Morrison
Learning PHP, Myself, JavaScript, and CSS: A Step-by-Step Guide to Creating Dynamic Websites – by Robin Nixon
PHP & Myself Web Development – by Luke Welling & Laura Thompson
PHP & Myself: The Missing Manual – by Brett McLaughlin
PHP: A Beginner's Guide – by Vicar Aswan

PHP Overview - Overview of all things PHP
PHP IDE 1 - looks at what Eclipse and Zend have brewed together
PHP IDE 2- Dreamweaver CS4 beta adds LiveView and some other PHP features
PHP IDE 3 - Borland/CodeGear's Delphi for PHP has the most complete PHP IDE
PHP Meetup- new an example of the community support that makes PHP so popular
GUI Revolution- could PHP, JSP and all the rest be replaced by multi-touch RAIA ?
PHP Basics - the basic design of the PHP language, how it works in general
Php News - Events, calendar and news in the world of PHP
PHP Links - Links and references to other PHP tutorials sites and software vendors
PHP5 - the new PHP 5 adds a whole new OO re-engined design, SQLite, XML-processing, command line ....
PHP Arrays - tips about php array processing and functions
PHP Associative Arrays - all about associative arrays and functions which preserve associative keys
PHP Array Examples - examples of arrays used to fill Form drop down lists/select boxes
PHP Array Sorting - you have to careful with associative array, here are some safe sorting methods
PHP Content Management - PHP has a very rich set of free content management systems
PHP Colors - show how to display all the Web safe colors using nested loops and concatenation
PHP CLI - > PHP as Command Line Interpreter is a big benefit in PHP 5 => easier testing, adhoc utilities
PHP compared to JavaScript - compares syntax and architectures of PHP and JavaScript
PHP Logic & Bitwise Operations - PHP has a robust set of logic and bitwise operators
PHP Loop Syntax - PHP 5 adds to the foreach clause as we summarize flow & looping syntax

WEBSITES:
www.google.com

PHP.NET - the starting place for news, views, events, and links to all things PHP

Hotscripts - over 11,000 PHP scripts, most free, and very well classified and rated

PHPBuilder - the digested news and articles here mix well with scripts and tips.

http://www.barmaje.com/topics/56

https://en.wikipedia.org/wiki/Unified_Modeling_Language

https://creately.com/

https://www.smartsurvey.co.uk/