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HOTEL BOOKING MANAGEMENT SYSTEM

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1.0. Introduction

1.1. Purpose

This document provides a definition of the website system for booking hotels and hotel units as well as events

These are according to geographical distribution in the cities of Saudi Arabia

1.2. Scope of Project

This system will provide 3 scopes:

1- for the customer to add his booking

2- the admin for website to manage booking

3- the admin for hotel to confirm the booking

1.3. Glossary

Term	Definition
Rooms	This the product that the hotel will give to the customer And also event
admin	Who is the manager for website to manage hotel
Database	Collection of all the information monitored by this system.
Hotel admin	This the person that he add rooms and events and manage products from his control panel
Field	A cell within a form.
Historical Society Database	The existing membership database (also HS database).
Member	A member of the Historical Society listed in the HS database.
Reader	Anyone visiting the site to read articles.
Review	A written recommendation about the appropriateness of an room or event for publication; may include suggestions for improvement.
customer	A person that he book the product room or event .
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.
User	HOTEL ADMIN OR CUSTOMER OR AMDIN

1.4. References

IEEE. *IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications.* IEEE Computer Society, 1998.

1.5. Overview of Document

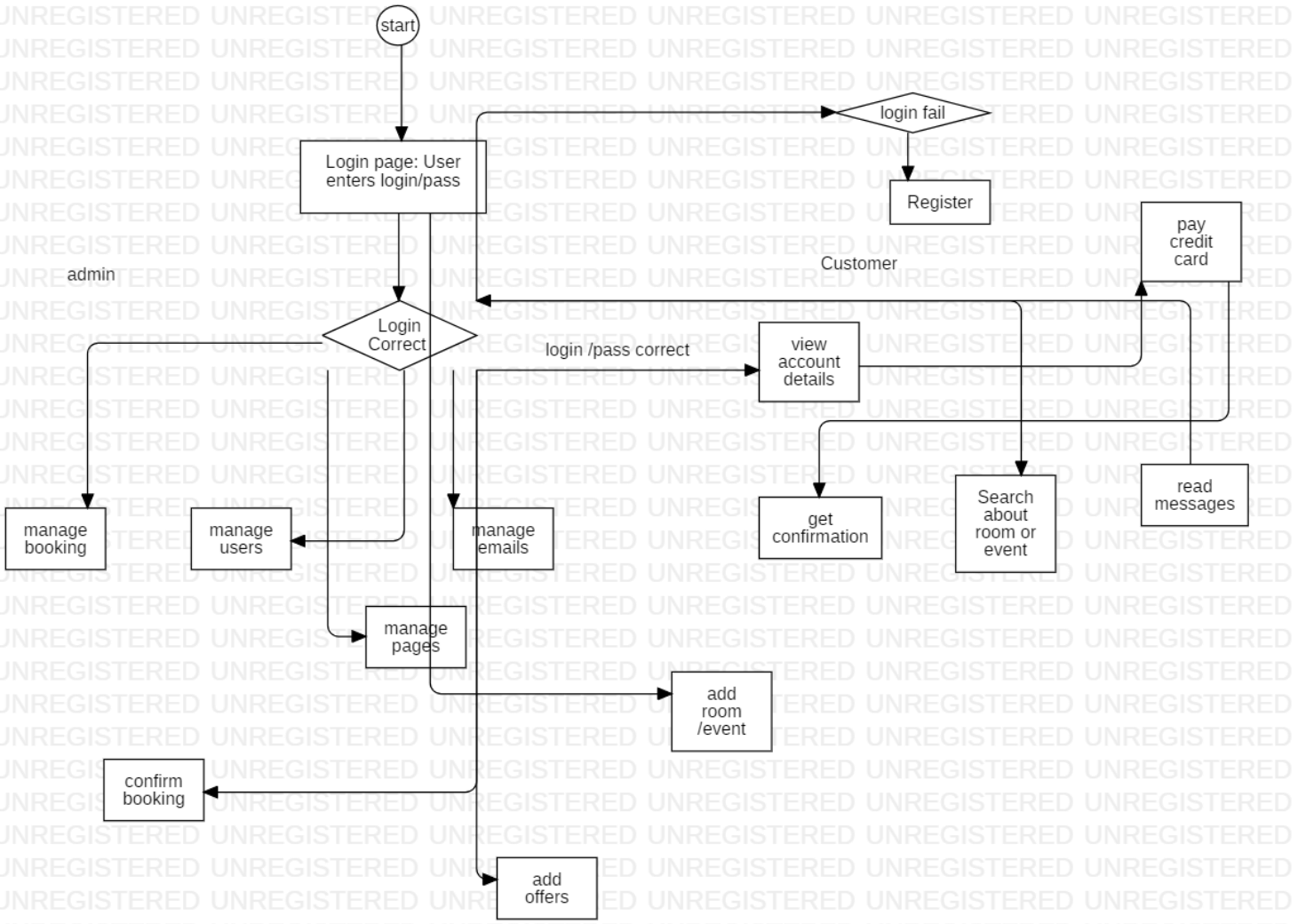
The next chapter, the Overall Description section, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third chapter, Requirements Specification section, of this document is written primarily for the developers and describes in technical terms the details of the functionality of the product.

Both sections of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.

2.0. Overall Description

Figure 1 - Flow chart



2.1 Flow chart

The booking System has three active actors and one cooperating system. The customer, admin, or hotel admin accesses the online booking through the Internet. Any admin communication with the system is through control panel. The customer accesses the entire system directly.

2.2 Functional Requirements Specification

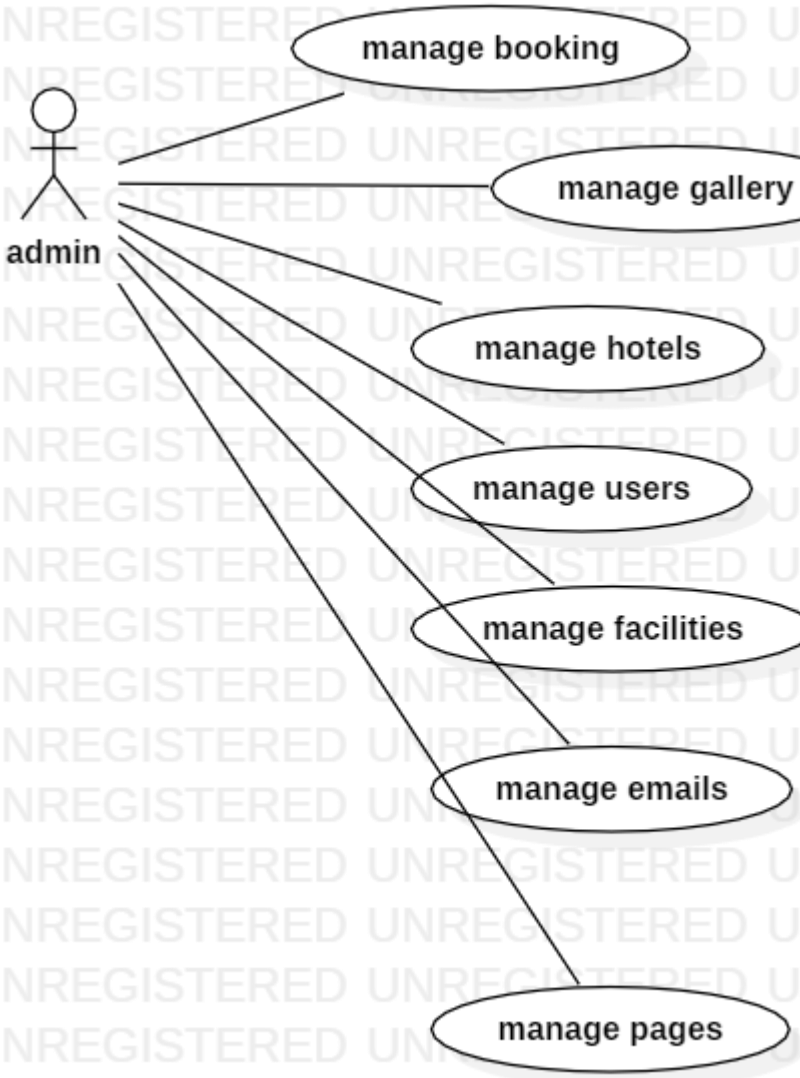
This section outlines the use cases for each of the active readers separately. The reader, the author and the reviewer have only one use case apiece while the editor is main actor in this system.

2.2.1 admin Use Case

In case of multiple admin, this term refers to the *principal admin*, with whom all communication is made.

Use case: admin use case

Diagram:



Brief Description

The admin confirms the booking.

Initial Step-By-Step Description

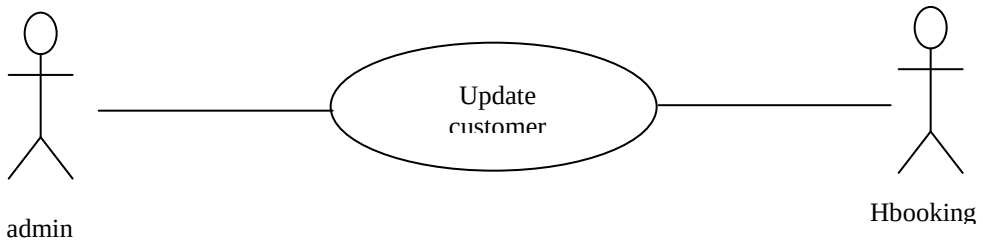
Before this use case can be initiated, the admin has already connected to the Online Booking System.

1. The admin chooses the *reservation to confirm it*.
2. The admin click on confirm the email will send to customer that your room confirmed.
3. The System generates and sends an email acknowledgement.

Xref: Section 3.2.2, admin hotel

Xref: Section 3.2.3, Add customer; Section 3.2.5 Update Person

Use case: Update cusomter
Diagram:



Brief Description
The admin enters a new customer or updates information about a current customer.

Initial Step-By-Step Description
Before this use case can be initiated, the admin has already accessed the main page of the web Manager.

1. The admin selects to *Add/Update customer*.
2. The system presents a choice of adding or updating.
3. The admin chooses to add or to update.
4. The system links to the online booking Database.
5. If the admin is updating a customer, the system and presents a grid with the information about the customer; else the system presents list of members for the admin to select a customer and presents a grid for the person selected.
6. The admin fills in the information and submits the form.
7. The system verifies the information and returns the admin to the Manager main page.

Xref: Section 3.2.4, Add customer; Section 3.2.5, Update Person

Brief Description
The admin hotel enters information about an existing room.

Initial Step-By-Step Description
Before this use case can be initiated, the admin hotel has already accessed the main page of the Manager.

1. The admin hotel selects to *Update room.*
2. The system presents s list of active rooms.
3. The system presents the information about the chosen rooms.
4. The admin hotel updates and submits the form.
5. The system verifies the information and returns the admin hotel to the Manager main page.

Xref: Section 3.2.6, Update room Status

Brief Description
The admin hotel enters a new or revised room into the system.

Initial Step-By-Step Description
Before this use case can be initiated, the admin hotel has already accessed the main page of the room Manager and has a file containing the article available.

1. The admin hotel selects to *publish room*.
2. The system presents a choice of entering a new room or updating an existing room.
3. The admin hotel chooses to add or to update.
4. If the admin hotel is updating an room, the system presents a list of rooms to choose from and presents a grid for filling with the information; else the system presents a blank grid.
5. The admin hotel fills in the information and submits the form.
6. The system verifies the information and returns the admin hotel to the Manager main page.

Xref: Section 3.2.7, Enter Communication

Initial Step-By-Step Description
Before this use case can be initiated, the admin hotel has already accessed the room using the *Update room* use case.

1. The admin hotel selects to *Assign room*.
2. The system presents a list of rooms with their status (see data description is section 3.3 below).
3. The admin hotel selects a room.
4. The system verifies that the person is still an active member using the hotel booking Database.
5. The system returns the admin hotel to the *Update room* use case.

2.3 User Characteristics

The customer is expected to be Internet literate and be able to use a search engine. The main screen of the Booking online system will have the search function and a link to "room details Information."

The customer and admin hotel are expected to be Internet literate and to be able to use chat.

The admin is expected to be Windows literate and to be able to use button, pull-down menus, and similar tools.

The detailed look of these pages is discussed in section 3.2 below.

2.4 Non-Functional Requirements

- The system must ensure that all the transferable data as for examples customers credit or debit card number, CVV Code, e-payment should be done in secured connection.

- The system must be able to handle multiple transactions a time.
- The system must provide customers 24*7 hours online booking service.
- The system should support almost all the browsers (Internet Explorer, Safari, Chrome, and Firefox).
- The system should be able to convert the price from R.S to USD.
- System should send the newsletter about ongoing promotions or deal to registered customers.
- Customers need to cancel the booking before 24 hrs. Otherwise their credit card will be charged for one day.
- In promotion time the system will charge credit card promptly.

3.0. Requirements Specification

3.1 External Interface Requirements

The only link to an external system is the link to the Hotel Booking (HB) Database to verify the membership of a customer. The admin believes that a admin hotel has to confirm the booking. The HB Database fields of interest to the Hotel Booking System are member's name, membership (ID) number, and email address (an optional field for the HB Database).

3.2 Functional Requirements

- The system supports customers booking and able to modify them
- Customers can search based on hotel, apartment, inns (ex. KSA)
- When a customer search for hotels, apartment, and the search result must contain hotel or apartment information (Address, Ratings, and Price) and also its availability within choosing check in and checkout date.
- Customers able to cancel their booking from their account.
- Staffs able to edit customers booking information (updating check in, check out, room preferences, bed preferences and also cancelling booking).
- Customers can book online and pay with credit or debit card.
- The system must send booking confirmation email after successful payment.
- Customers can write reviews about hotels and apartment and also rate them.
- Customers able to check their booking status from their individual account.
- Customers can send feedback or call the company for booking purposes.
- Customers can check for latest promotion or deal.

3.2.1 Search room

Use Case Name	Search room
XRef	Section 2.2.1, Search room SDD, Section 7.1
Trigger	The customer assesses the hotel booking Website.
Precondition	The Web is displayed with grids for searching.
Basic Path	1. The customer chooses how to search the Web site. The choices are by price, by Category, by location, and by Keyword.

	2. If the search is by Keyword , the system creates and presents an alphabetical list of all Keyword in the database. In the case of a hotel with multiple rooms, each is contained in the list. 3. The customer selects an room. 4. The system creates and presents a list of all room by that location in the database. 5. The customer selects an room. 6. The system displays the details for the room. 7. The customer selects to book the room or to return to the room list or to the previous list.
Alternative Paths	In step 2, if the customer selects to search by category, the system creates and presents a list of all categories in the database. 3. The customer selects a category. 4. The system creates and presents a list of all rooms in that category in the database. Return to step 5. In step 2, if the customer selects to search by keyword, the system presents a dialog box to enter the keyword or phrase. 3. The customer enters a keyword. 4. The system searches the details of rooms with that keyword and creates and presents a list of all such rooms in the database. Return to step 5.
Postcondition	The selected room is reserved.
Exception Paths	The customer may abandon the search at any time.
Other	The categories list is generated admin .

4- UML DESIGN

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.

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

5- 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.

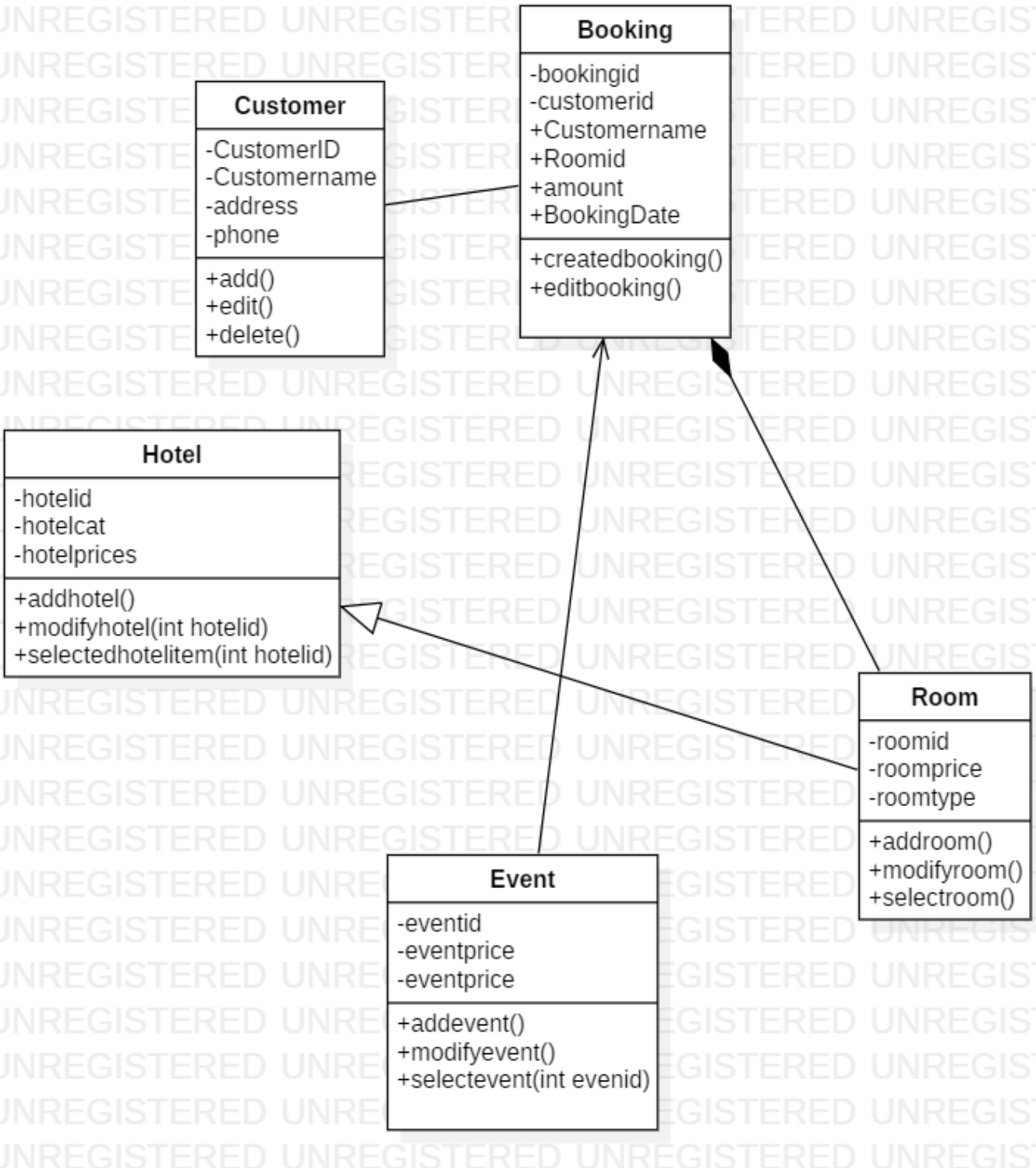
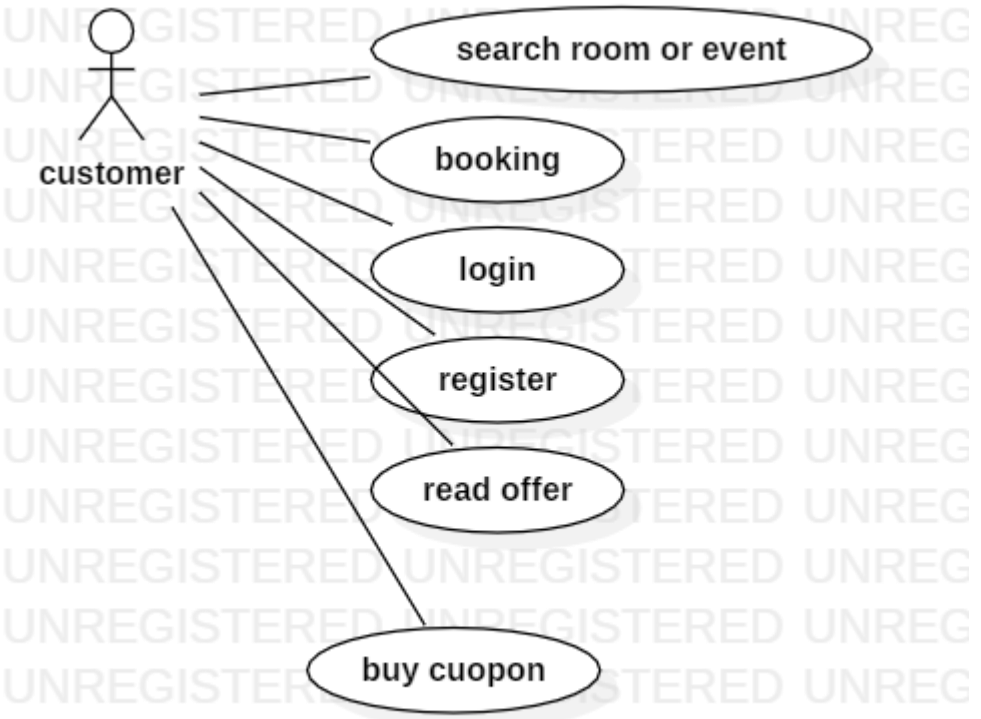


FIGURE 2: CLASS DIAGRAM

6 Customer

Use case: **Customer** Diagram:



Brief Description
The customer accesses the Online Booking Website, searches for an room and reserve it.

Initial Step-By-Step Description
Before this use case can be initiated, the customer has already accessed the Online booking system.

8. The customer chooses to search by price, location, or keyword.
9. The system displays the choices to the Customer.
10. The customer selects the room or event desired.
11. The system presents the details of the order to the customer.

6.1 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.

FIGURE 1: USE CASE DIAGRAM

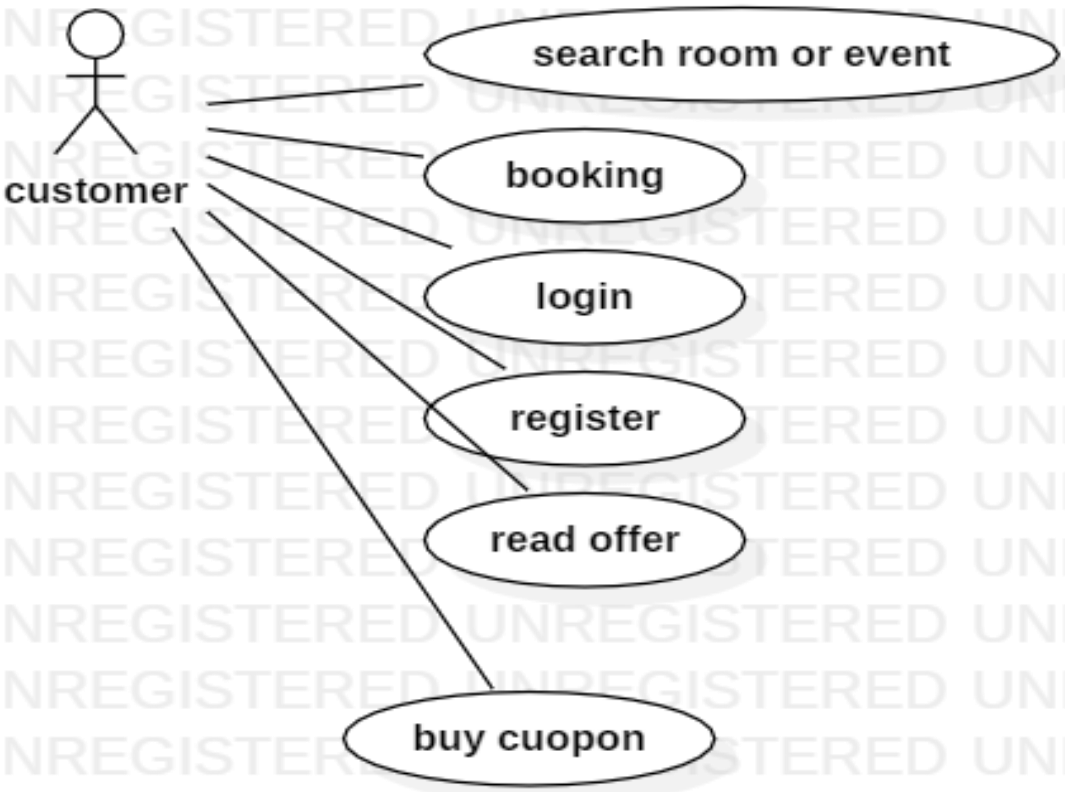


FIGURE 2: Activity Diagram

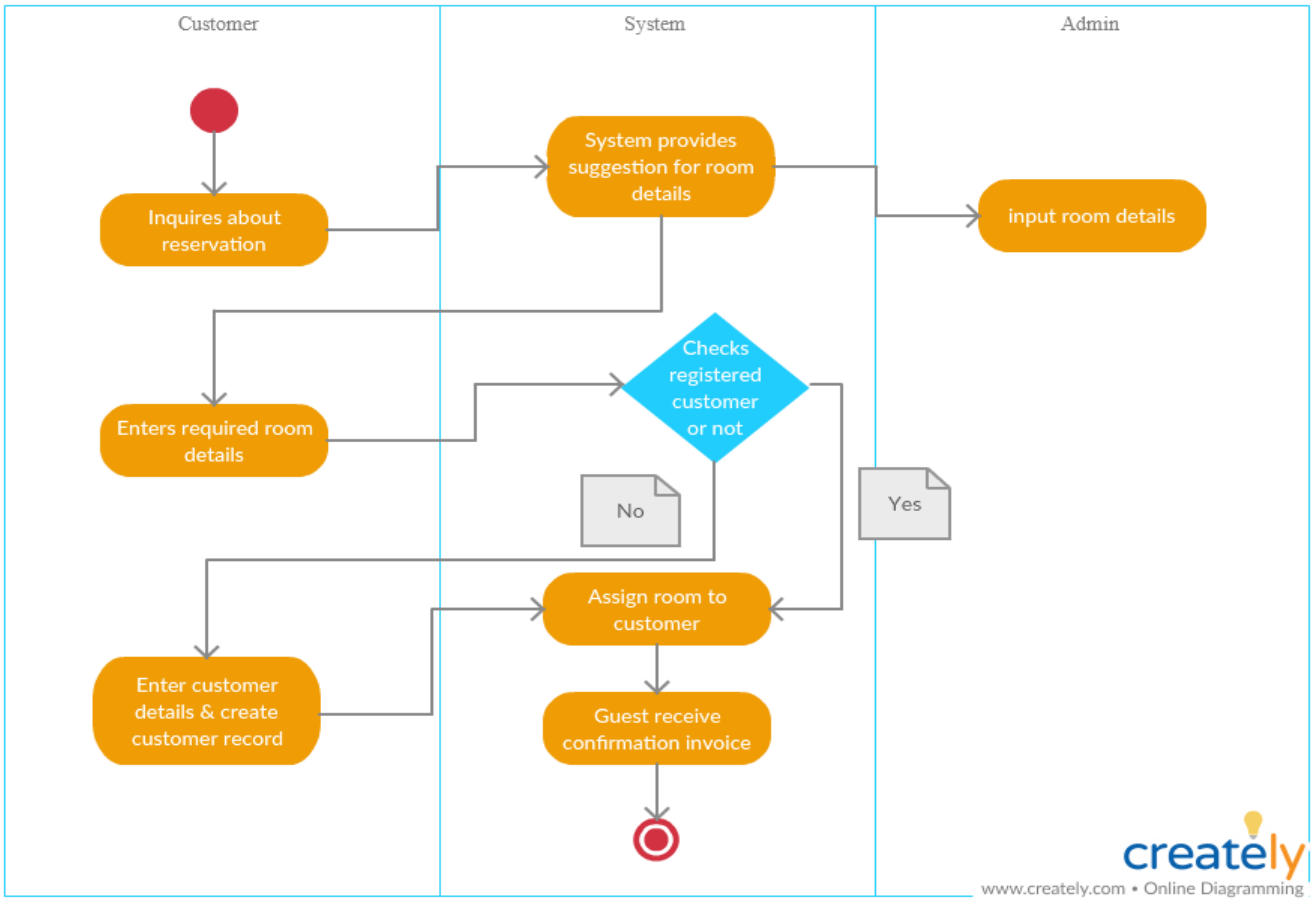
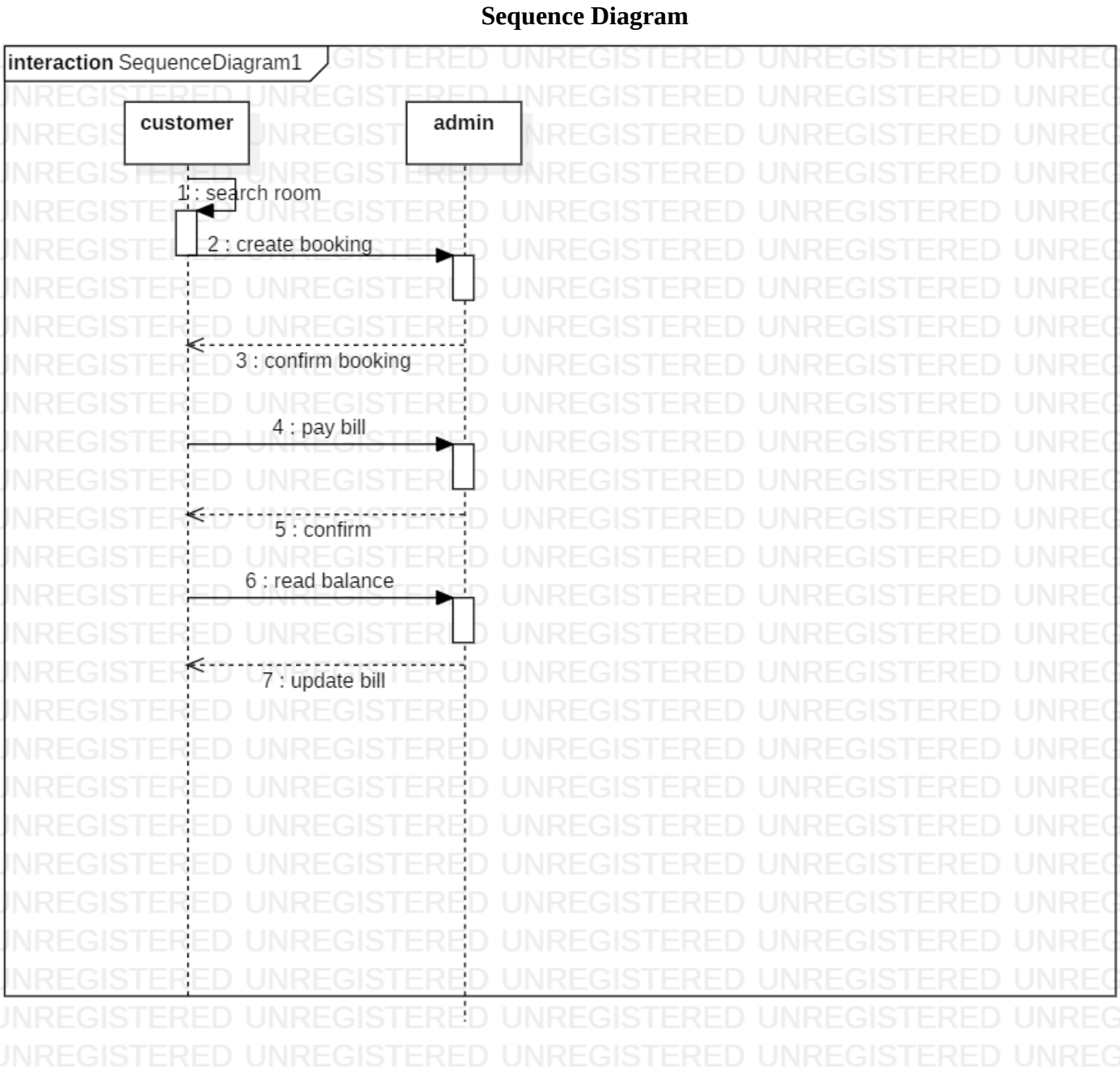
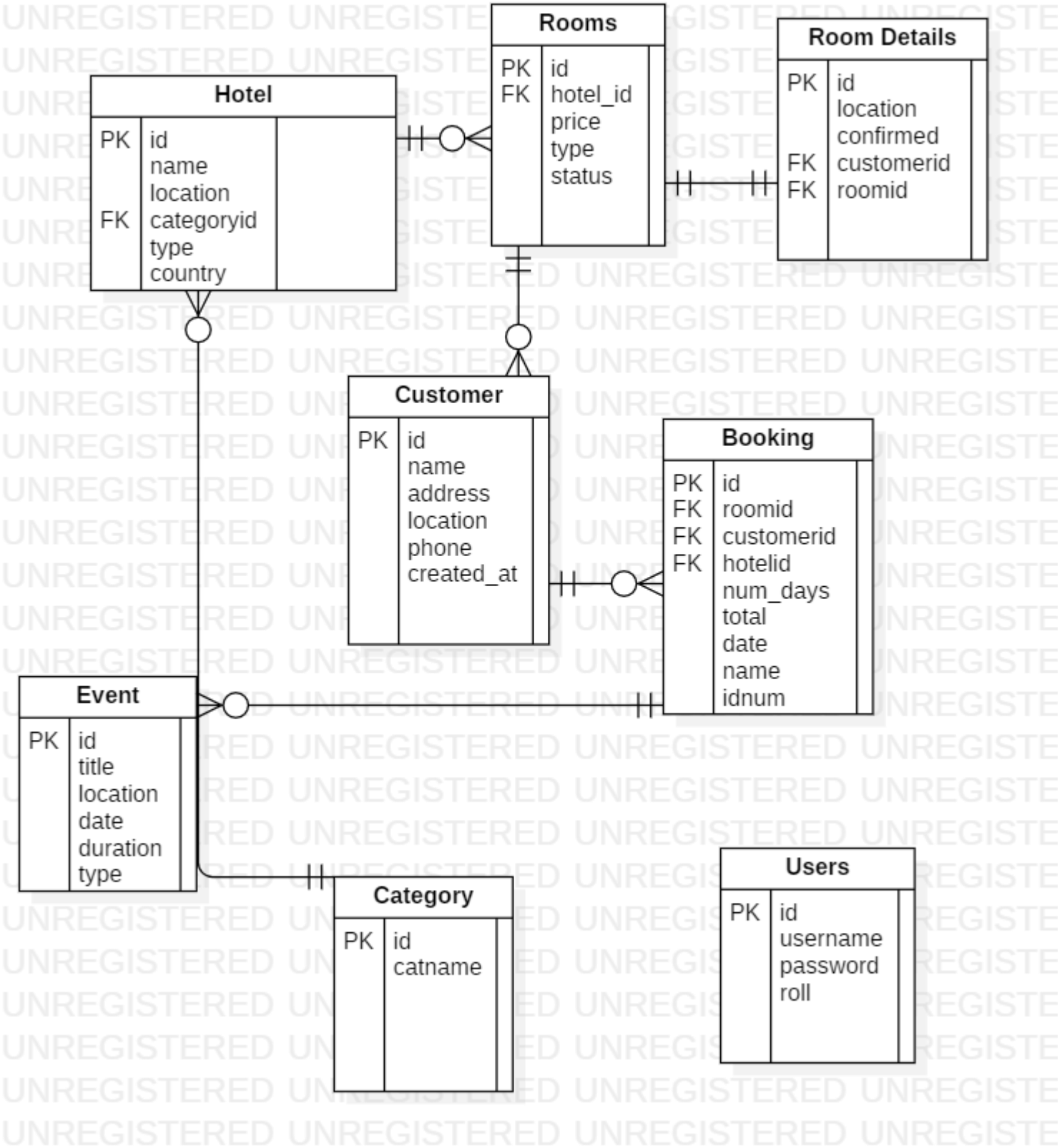


FIGURE 3: Sequence DIAGRAM



E-R Diagrams:


Rooms
PK id
FK hotel_id
price
type
status
Room Details
PK id
location
confirmed
FK customerid
FK roomid
Hotel
PK id
name
location
FK categoryid
type
country
Customer
PK id
name
address
location
phone
created_at
Booking
PK id
FK roomid
FK customerid
FK hotelid
num_days
total
date
name
idnum
Event
PK id
title
location
date
duration
type
Category
PK id
catname
Users
PK id
username
password
roll

Modules

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.

FUTURE ENHANCEMENTS:

This application avoids the manual work and the problems concern with it. It is an easy way to obtain the information regarding the various products information that is present in the hotel.

Well I and my team members have worked hard in order to present an improved website better than the existing one's regarding the information about the various activities. Still, we found out that the project can be done in a better way. Primarily, when we request information about a particular order it just shows the hotel name, room no, event no... So, after getting the information we can get access to the reservation just by a click on the room link.

We can directly search to the particular hotel from this site. These are the two enhancements that we could think of at present.

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

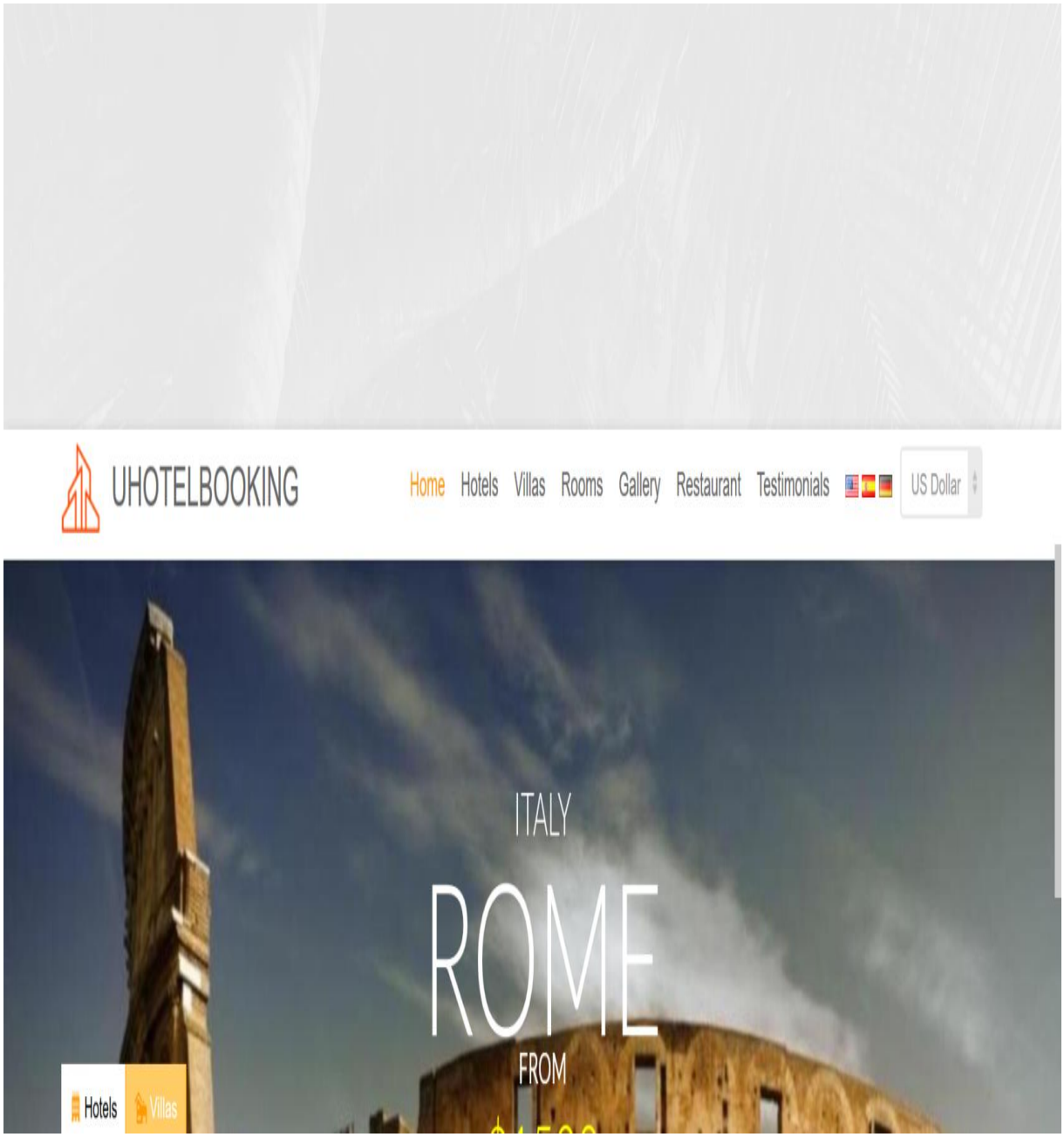
Post condition :	Room is booked by customer
Assumption :	None
Name :	Update Room Availability
Actor :	Staff
Description :	Can update the availability of hotel's room
Successful Completion :	1. New availability for hotel's room 2. Staffs enter the available room details into the database
Alternative :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

11. PHYSICAL DESIGN



Park Lany Hotel

★★★★★ viewed 2 times

0 reviews

All Reviews

+ CONTACT US

✓ BOOK NOW

Reservation

Destination / Hotel Name:

e.g. hotel, landmark or location

Check In:

10/04/2018

Check Out:

10/05/2018

Adults: 1 **Children:** 0 **Sort by:** Default

Ages 18+ 0-3

Minimum Number of Beds:

CHECK AVAILABILITY

Booking Status

Enter your booking number:

CHECK STATUS

Information

- Installation
- Test Page

Authentication

Username:

Password:

News & Events

- New version 2.2.6 of uHotelBooking has been released
  Read more »

Payment Methods

PayPal VISA MasterCard

Selected Rooms | Booking Details | Reservation | Payment

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

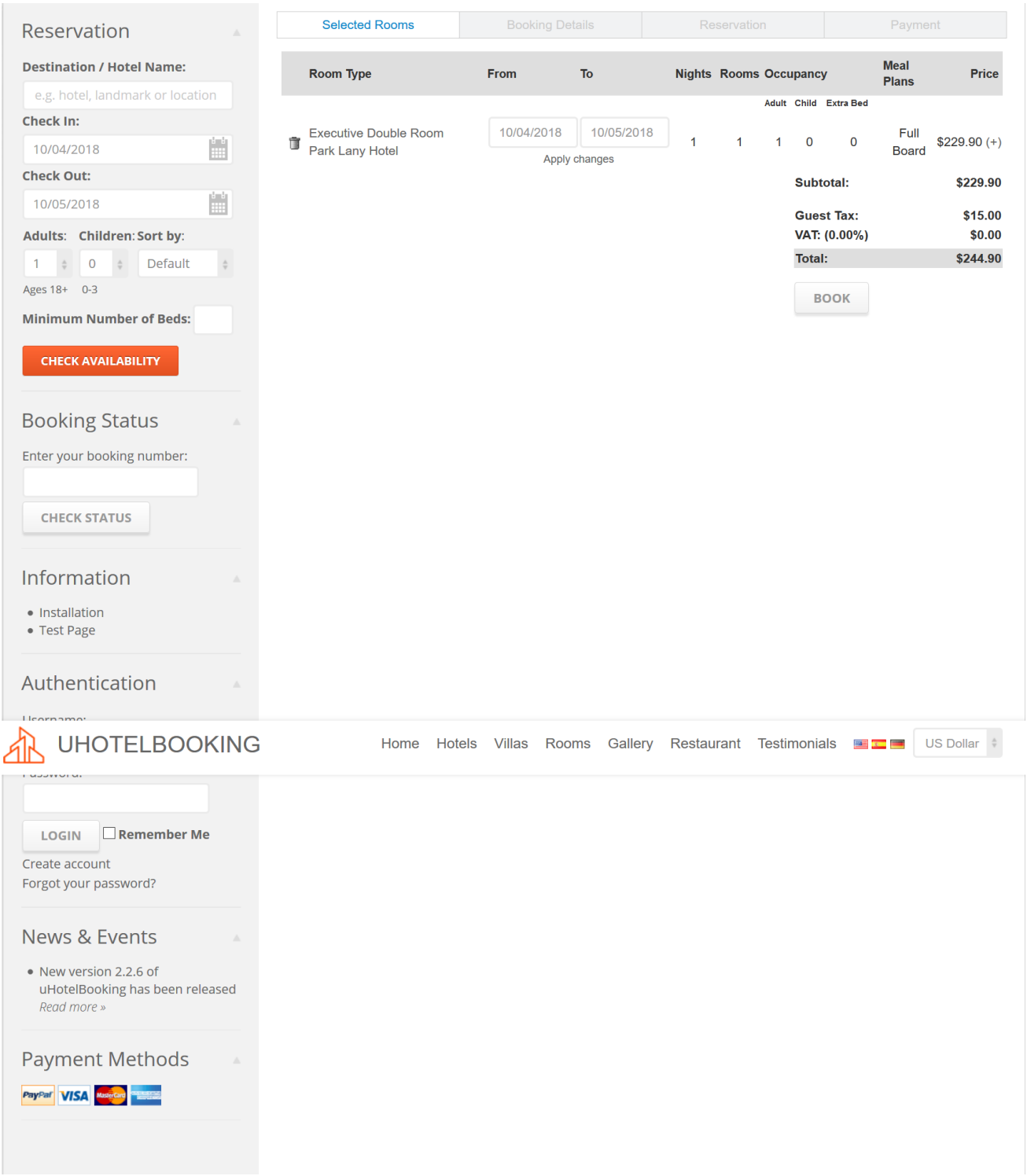
Type the characters you see in the picture

UHOTELBOOKING

Home Hotels Villas Rooms Gallery Restaurant Testimonials US Dollar

I have read and AGREE with Terms & Conditions

SUBMIT


Reservation
Destination / Hotel Name:
e.g. hotel, landmark or location
Check In:
10/04/2018
Check Out:
10/05/2018
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
Installation
Test Page
Authentication
Selected Rooms
Booking Details
Reservation
Payment
Room Type
From
To
Nights
Rooms
Occupancy
Adult
Child
Extra Bed
Meal Plans
Price
Executive Double Room
Park Lany Hotel
10/04/2018
10/05/2018
Apply changes
1
1
1
0
0
Full Board
$229.90 (+)
Subtotal:
$229.90
Guest Tax:
$15.00
VAT: (0.00%)
$0.00
Total:
$244.90
BOOK
UHOTELBOOKING
Home
Hotels
Villas
Rooms
Gallery
Restaurant
Testimonials
US Dollar
LOGIN
Remember Me
Create account
Forgot your password?
News & Events
New version 2.2.6 of uHotelBooking has been released
Read more »
Payment Methods

Found Hotels: **1**
Total Rooms: **2**
Starting **$140.00** /Day

Reservation

Destination / Hotel Name:
Park Lany Hotel, New York City
Check In:
10/04/2018
Check Out:
10/05/2018
Adults: **Children:** **Sort by:**
1 | 0 | 5 stars to 1
Ages 18+ 0-3
Minimum Number of Beds:
CHECK AVAILABILITY

Filter by

Ratings
- ★★★★★ 5 Stars
- ★★★★☆ 4 Stars
- ★★★☆☆ 3 Stars
- ★★☆☆☆ 2 Stars
- ★☆☆☆☆ 1 Star

Price range/per day
1 $ — 5,000 $

Preferences
- Bar (1)
- Washing (1)
- Pets allowed (1)
- Pool (1)
- Grill (1)
- Internet (1)
- Family/Kid Friendly (1)
- Wireless Internet (1)
- Suitable for Events (1)
- Playground (1)
- Breakfast (1)

APPLY THE FILTERS

Booking Status

Enter your booking number:
CHECK STATUS

Information

- Installation
- Test Page

Authentication

Username:
Password:
Forgot your password?

News & Events

- New version 2.2.6 of uHotelBooking has been released
Read more »

Payment Methods

PayPal VISA MasterCard American Express

Filter by: Visitors Rating **Sort by:** 5 stars to 1 star

Available Rooms

From: October 04, 2018 To: October 05, 2018 (1 Night)

Park Lany Hotel

New York City (viewed 2 times)

The Park Lany Hotel is a deluxe hotel with a European atmosphere, providing views of Central Park and the New York skyline. It is only a 2-minute walk from the elegant shops of 5th Avenue and the 59th Street N,Q,R subway station. Spacious and bright, the rooms at the Park Lany Hotel are fitted...

★★★★★
0 reviews
$140.00
from per night

Days to cancel reservation for FREE - 12 Days

Junior Suite (3 rooms left)

RESERVE!

Our spacious Junior hotel Suites are 460 square feet (43 square meters) featuring floor-to-ceiling windows overlooking Manhattan from our New York City hotel suites. Junior Suites offer luxurious king beds, 55-inch flat-panel HDTV with Blu-ray player and iPod docking station, marble baths, and a large walk-in closet.

Cancellation policy for the room:
Days to cancel reservation for FREE - 12 days
The money return is made in amount of a first night

Max Adults: 1, Max Children: 0

Rate per night:	$140.00
Adults:	1
Rooms:	1 ($140.00
Meal Plans: * Person/Per Night	Full Board
Extra Beds: * Per Night	0
Prices (+)	

Executive Double Room (3 rooms left)

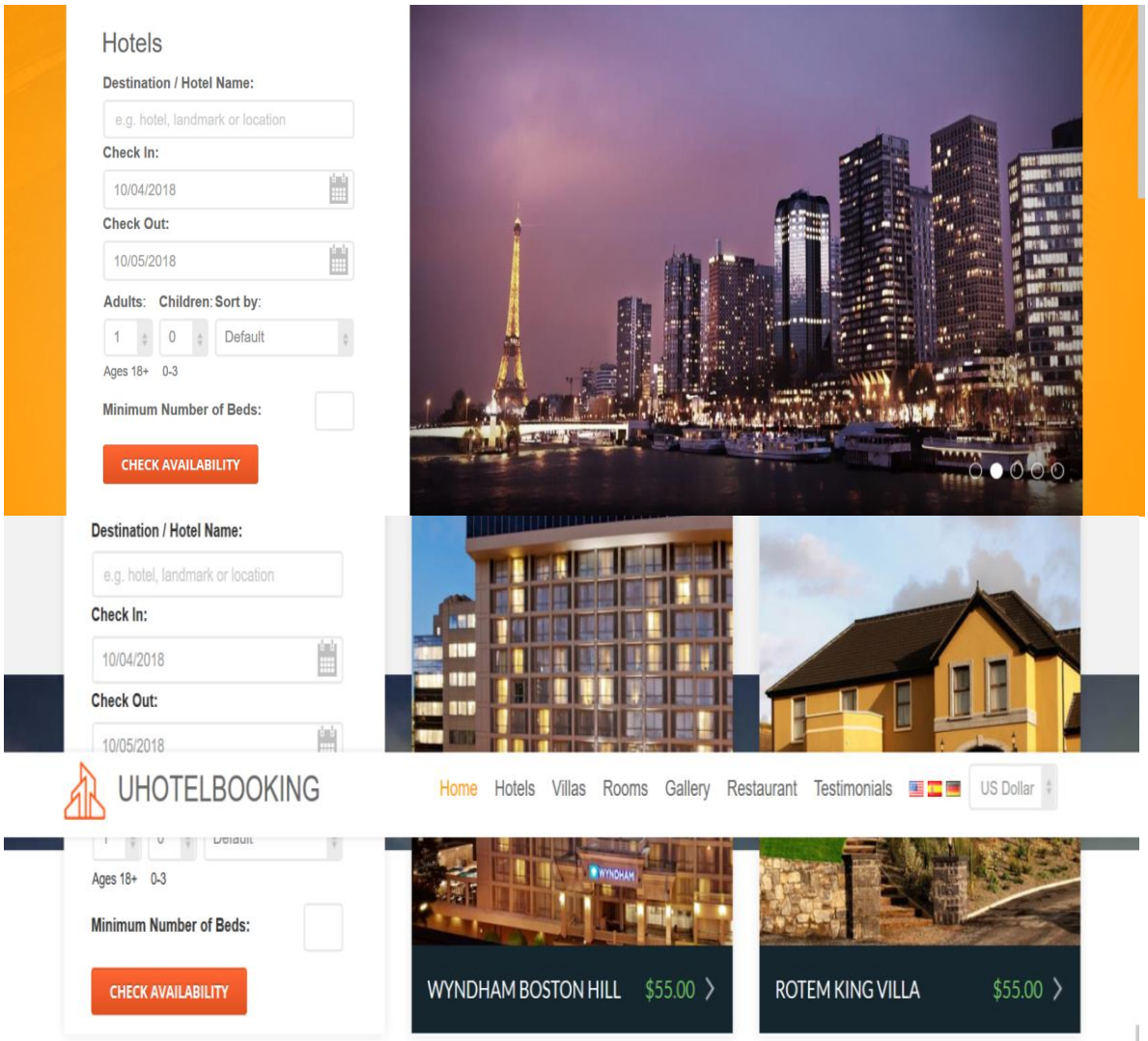
RESERVE!

Stunning Executive Double bedrooms provide the perfect setting in the heart of NY. Exclusive features you won't find in Double Cumberland Guest rooms include luxurious bathrobes and slippers, complimentary mineral water and full access to the Guoman Club Lounge with complimentary newspapers and refreshments available all day.

Cancellation policy for the room:
Days to cancel reservation for FREE - 12 days
The money return is made in amount of a first night

Max Adults: 3, Max Children: 1

Rate per night:	$190.00
Adults:	1
Rooms:	1 ($190.00
Meal Plans: * Person/Per Night	Full Board
Extra Beds: * Per Night	0
Prices (+)	



LAST MINUTE

Park Lany Hotel
★★★★★ New York City

from $140.00
per night

12. 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:

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

7. 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

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