

# Chapter 1

## INTRODUCTION

### 1.1 Overview:

Resort Management System is a room reservation site script where site users will be able to search rooms availability with an online booking reservations system. Site users can also browse resort, view room inventory, check availability, and book reservations in real-time. Site users enter check in date and check out date then search for availability and rates. After choosing the right room in the wanted resort, all booking and reservation process is done on the site and an SMS is sent to confirm the booking.

In administrator panel,

- Administrator – Administrator can manage administrator accounts and conform the rooms.
- Room Types – Administrator can define the type of rooms in the hotels, room's prices and upload an image for each room.
- Bookings – All booking and reservations maid on the site are displayed with all booking details: arrival date, departure date, hotel name, room type, number of passengers, price.

The Main Objective of resort management system is improved by integrating service-oriented operations with project management principles. By managing each change as a project, embedded in smoothly running operations, hotels would extend their life span by continuously reinventing themselves. Due to which the customers can easily book the hotel rooms. This system will help administration to work easily.

- Data is not always reliable as it is hand written and some human errors might have occurred example wrong telephone number among other.
- Slow process of reservation. User has to find manually whether room is available ornot

## Chapter 2

### SOFTWARE REQUIREMENTS

#### 2.1 Software Used:

Operating system: Windows 98, XP, 7,8 or 10 or Linux

Languages (Front end): HTML, PHP and Bootstrap

(Back end): SQL

IDE: Notepad++, Xampp and MySQL

#### 2.2 Software Description:

##### 2.2.1 XAMPP(PhpMyAdmin)

PhpMyAdmin can manage a whole MySQL server as well as a single database. To accomplish the latter, you'll need a properly set up MySQL user who can read/write only the desired database. It's up to you to look up the appropriate part in the MySQL manual.

- browse and drop databases, tables, views, columns and indexes
- create, copy, drop, rename and alter databases, tables, columns and indexes
- maintenance server, databases and tables, with proposals on server configuration
- execute, edit and bookmark any SQL-statement, even batch-queries
- load text files into tables
- create and read dumps of tables
- export data to various formats: CSV, XML, PDF, ISO/IEC 26300 – Open Document Text and Spreadsheet, Word, and L<sup>A</sup>T<sub>E</sub>X formats
- import data and MySQL structures from Open Document spreadsheets, as well as XML, CSV, and SQL files
- administer multiple servers
- manage MySQL users and privileges
- check referential integrity in MyISAM tables

- using Query-by-example (QBE), create complex queries automatically connecting required tables
- create PDF graphics of your Database layout
- search globally in a database or a subset of it
- transform stored data into any format using a set of predefined functions, like displaying BLOB-data as image or download-link
- track changes on databases, tables and views
- support InnoDB tables and foreign keys
- support mysqli, the improved MySQL extension
- create, edit, call, export and drop stored procedures and functions
- create, edit, export and drop events and triggers
- communicate in
- synchronize two databases residing on the same as well as remote servers .

### 2.2.2 PHP:

- You need PHP 5.2.0 or newer, with session support, the Standard PHP Library (SPL) extension and JSON support.
- To support uploading of ZIP files, you need the PHP zip extension.
- For proper support of multibyte strings (eg. UTF-8, which is currently the default), you should install the mbstring and ctype extensions.
- You need GD2 support in PHP to display inline thumbnails of JPEGs ("image/jpeg: inline") with their original aspect ratio
- When using the "cookie" authenticated method, the mcrypt extension is strongly suggested for most users and is **required** for 64-bit machines. Not using mcrypt will cause phpMyAdmin to load pages significantly slower.

## Chapter 3

### SYSTEM ANALYSIS AND DESIGN

#### 3.1 System Analysis

System analysis is a detailed of the various operations performed by a system and their relationship within and outside the system. It is a systematic technique that defines goals and objectives. The goal of system development is to develop a system in line with the user requirement, and analysis of the system plays important role. One of the main aspects of analysis is the defining the boundaries of the system.

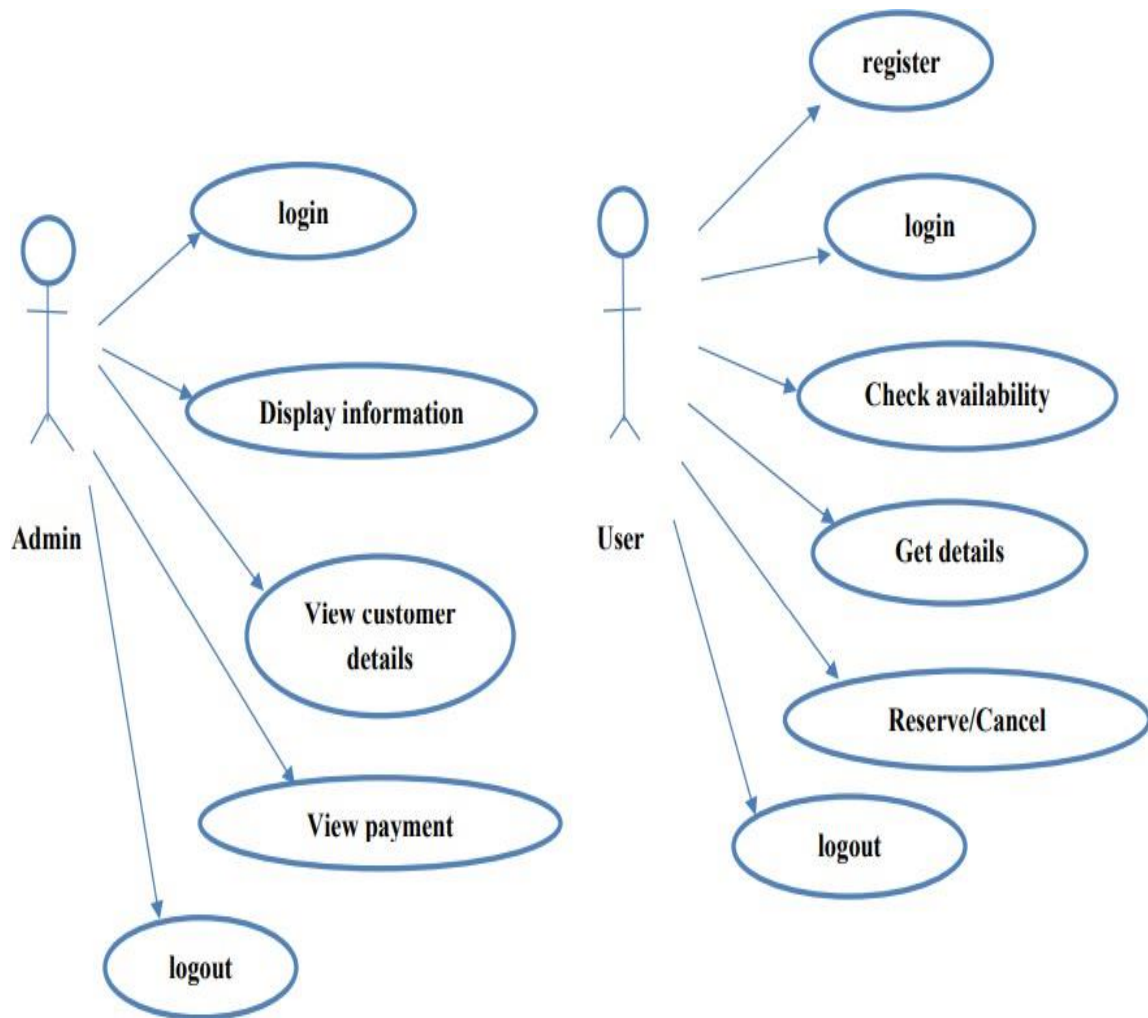
The various tools of structured analysis are:

- Entity relationship diagram
- Table
- Table description
- Flow diagram

**The structured analysis has the following attributes:**

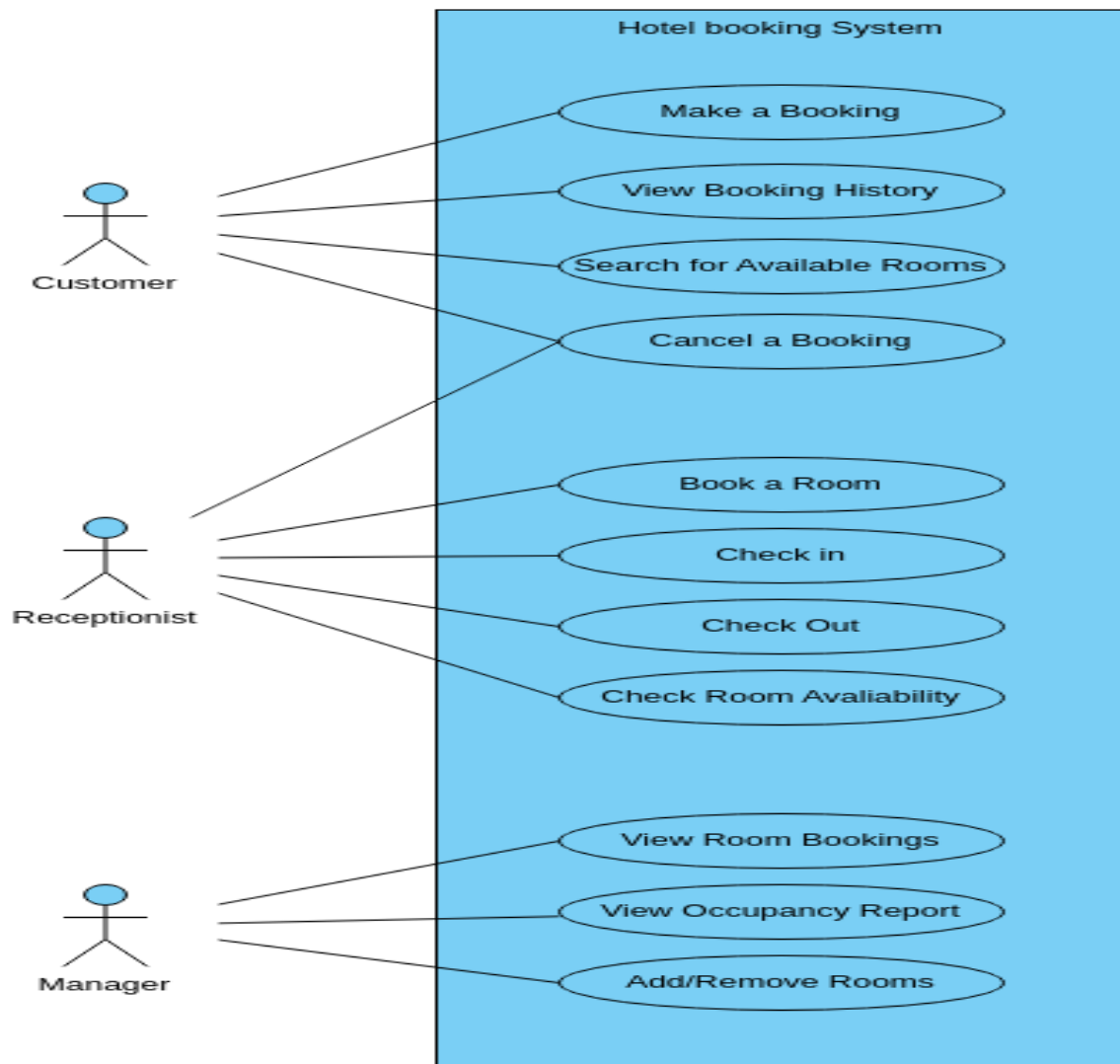
- Entity relationship diagram (ER-Diagram) is a graphical representation of entities and their relationship to each other, typically used in computing in regards to the organization of data within data base. Here, we are explaining the system, modules and their relationship using ER-Diagram.
- The Data Flow Diagram (DFD) presents a picture of what is being specified and is conceptually easy to understand presentation of the application.
- Table is the logical model of storing data with its attribute and data type.

### 3.2 USE CASE DIAGRAM



**Fig:(a) Use case diagram for admin**

**Fig:(b) Use case diagram for user**



**Fig3.2 Use case Diagram for Resort Management System**

### 3.3 DATA FLOW DIAGRAM FOR ADMIN:

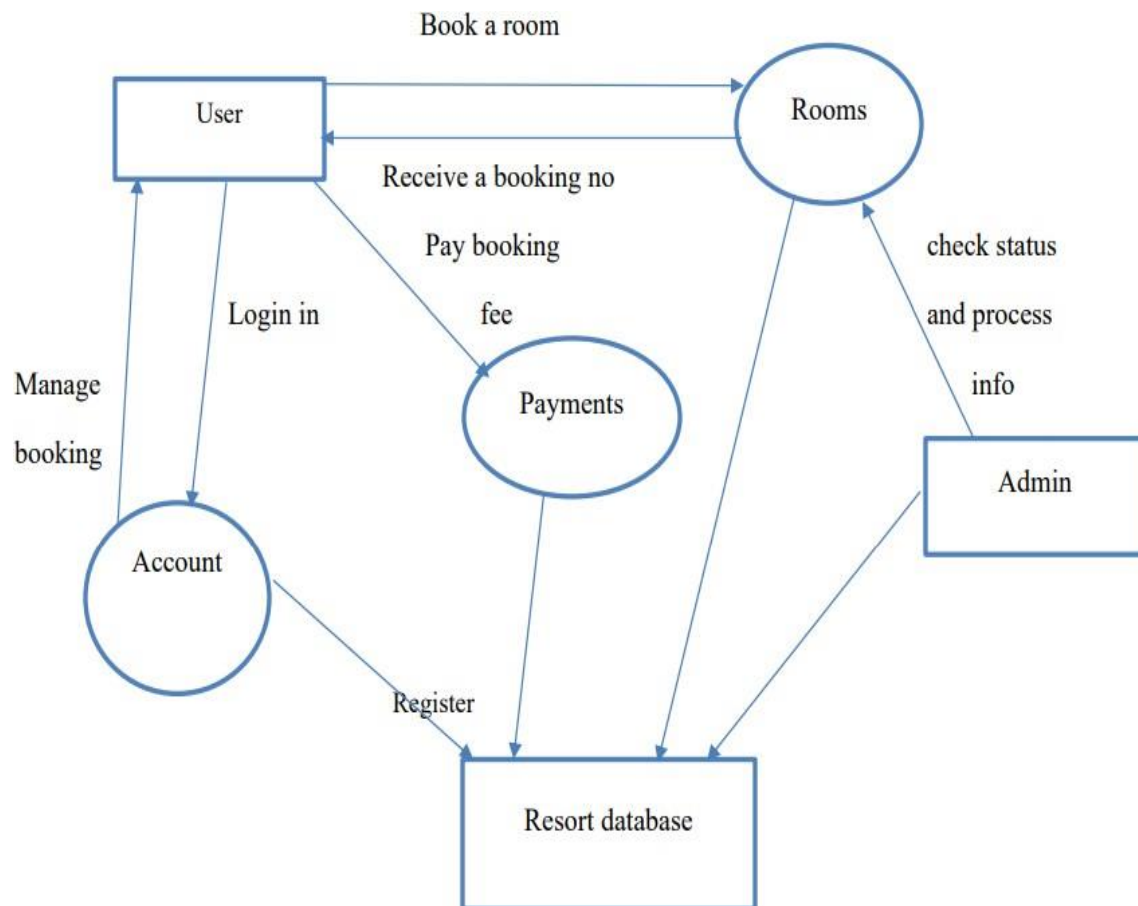


Fig 3.3: Data flow diagram for Resort Management System

### 3.4 E. R DIAGRAM:

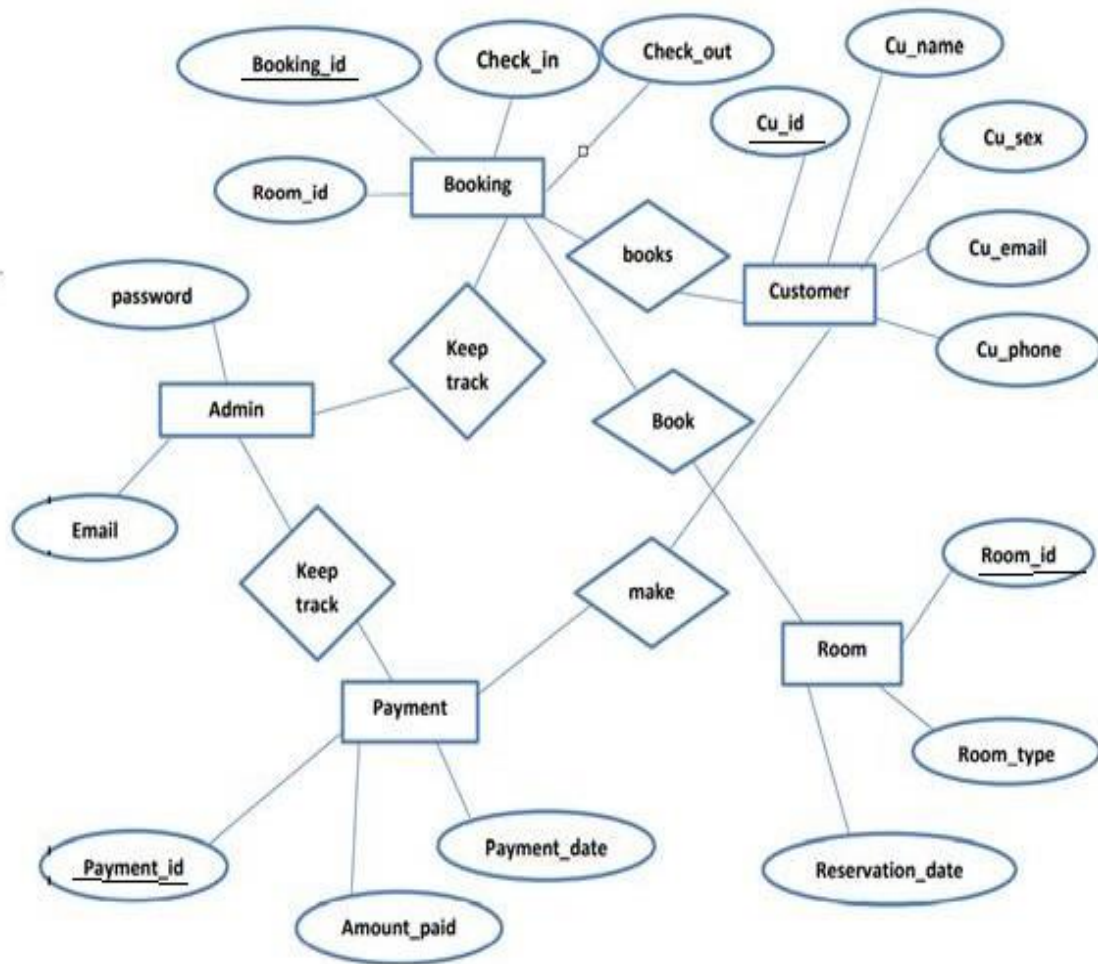
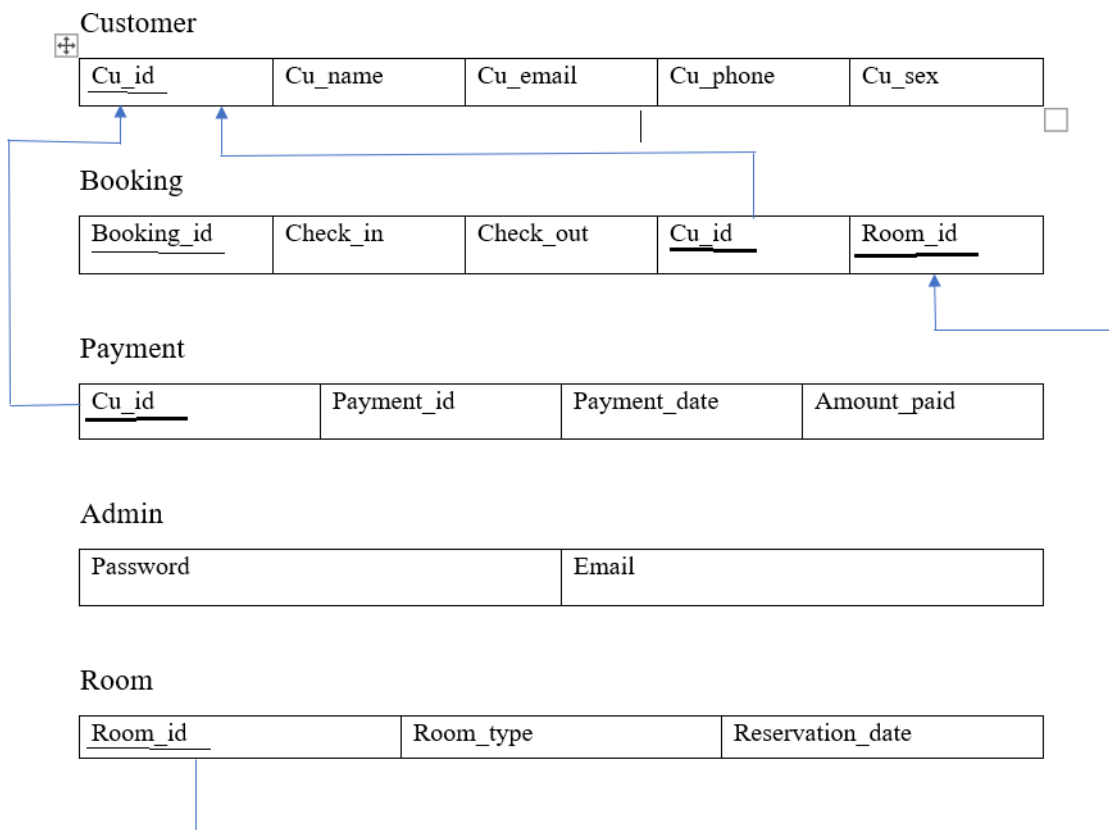


Fig 3.4: E R Diagram for Resort Management System



### 3.5 E. R Mapping to Physical Schema Diagram



**Fig 3.5: Database schema diagram for Resort Management System**

### 3.6 TABLES DESCRIPTION

- The “assigned\_room” table provides all the information about the Rooms Assigned for a Customer.

customer_id	room_id
1	701
2	1001
3	702
5	1002
6	1001
7	101

- The “login” table provides all the information about the Customers that are Login.

		mid	email	password
<input type="checkbox"/>	Edit Copy Delete	1	sherlock@sa.com	202cb962ac59075b964b07152d234b70
<input type="checkbox"/>	Edit Copy Delete	2	admin@r.com	202cb962ac59075b964b07152d234b70
<input type="checkbox"/>	Edit Copy Delete	5	ratul@gmail.com	202cb962ac59075b964b07152d234b70
<input type="checkbox"/>	Edit Copy Delete	6	taslim@gmail.com	250cf8b51c773f3f8dc8b4be867a9a02
<input type="checkbox"/>	Edit Copy Delete	11	a	202cb962ac59075b964b07152d234b70

- The “manager” table provides all the information about the Registration.

		mid	last_name	first_name	email	password
<input type="checkbox"/>	Edit Copy Delete	11	am	ma	ma12@gmail.com	fc72c7df353d82ac573e8e76a77b8674
<input type="checkbox"/>	Edit Copy Delete	10	S	Anu	anu12@gmail.com	6897b0cb198376e2fb23ef98c4e3eb16
<input type="checkbox"/>	Edit Copy Delete	8	D S	Gagana	gagana123@gmail.com	cb30796068c1592c7a2ad69550dc4151
<input type="checkbox"/>	Edit Copy Delete	9	gowda	Appu	appu12@gmail.com	76d1574c42e995d9203a459c8f579f4c

- The “request\_room” table provides all the information about the Customer.

		id	name	email	phone	a_date	d_date	people	room_type
<input type="checkbox"/>	Edit Copy Delete	1	admin	admin@gmail.com	12345	2017-12-19	2017-12-21	2	Presidential
<input type="checkbox"/>	Edit Copy Delete	4	diya	diya@gmail.com	01638915487	2017-12-13	2017-12-28	2	Presidential
<input type="checkbox"/>	Edit Copy Delete	24	Gagana D S	gagana123@gmail.com	9741329142	2023-02-12	2023-03-02	1	Single
<input type="checkbox"/>	Edit Copy Delete	25	Appu gowda	appu12@gmail.com	9632619272	2023-01-23	2023-01-24	5	Bungalow
<input type="checkbox"/>	Edit Copy Delete	26	Anu	anu12@gmail.com	9632619274	2023-01-23	2023-01-24	3	Presidential
<input type="checkbox"/>	Edit Copy Delete	27	maam	ma12@gmail.com	9876543210	2023-01-23	2023-01-24	1	Single

- The “resort\_rooms” table provides all the information about the Types of Room available in Resort.

Showing rows 0 - 4 (5 total, Query took 0.0007 seconds)

```
SELECT * FROM `room_list`
```

Number of rows: 25 Filter rows: Search this table Sort by key: None

	id	name	type	description	price	image_path	status	delete_flag	date_created	date_updated
<input type="checkbox"/>	1	Room 101	Single	&lt;p style=&quot;margin-right: 0px; margin-bottom...	1200	uploads/rooms/1.png?v=1641606821	1	0	2022-01-08 09:53:41	2022-01-08 10:12:11
<input type="checkbox"/>	2	Room 102	Double	&lt;p style=&quot;margin-right: 0px; margin-bottom...	2500	uploads/rooms/2.png?v=1641606826	1	0	2022-01-08 10:16:45	2022-01-08 10:16:46
<input type="checkbox"/>	3	Room 103	Family	&lt;p style=&quot;margin-right: 0px; margin-bottom...	3500	uploads/rooms/3.png?v=1641606823	1	0	2022-01-08 10:17:23	2022-01-08 10:17:23
<input type="checkbox"/>	4	Room 103	Double	&lt;p style=&quot;margin-right: 0px; margin-bottom...	1300	uploads/rooms/4.png?v=1641606828	1	0	2022-01-08 10:17:59	2022-01-08 10:18:00
<input type="checkbox"/>	5	Room 105	Double	&lt;p&gt;&lt;span style=&quot;text-align: justify...	1600	uploads/rooms/5.png?v=16416068319	1	0	2022-01-08 10:18:39	2022-01-08 10:18:39

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view

- The “activities” table provides all the information about types of activities are been held in Resort.

Showing rows 0 - 4 (5 total, Query took 0.0007 seconds)

```
SELECT * FROM `room_list`
```

Number of rows: 25 Filter rows: Search this table Sort by key: None

	id	name	type	description	price	image_path	status	delete_flag	date_created	date_updated
<input type="checkbox"/>	1	Room 101	Single	&lt;p style=&quot;margin-right: 0px; margin-bottom...	1200	uploads/rooms/1.png?v=1641606821	1	0	2022-01-08 09:53:41	2022-01-08 10:12:11
<input type="checkbox"/>	2	Room 102	Double	&lt;p style=&quot;margin-right: 0px; margin-bottom...	2500	uploads/rooms/2.png?v=1641606826	1	0	2022-01-08 10:16:45	2022-01-08 10:16:46
<input type="checkbox"/>	3	Room 103	Family	&lt;p style=&quot;margin-right: 0px; margin-bottom...	3500	uploads/rooms/3.png?v=1641606823	1	0	2022-01-08 10:17:23	2022-01-08 10:17:23
<input type="checkbox"/>	4	Room 103	Double	&lt;p style=&quot;margin-right: 0px; margin-bottom...	1300	uploads/rooms/4.png?v=1641606828	1	0	2022-01-08 10:17:59	2022-01-08 10:18:00
<input type="checkbox"/>	5	Room 105	Double	&lt;p&gt;&lt;span style=&quot;text-align: justify...	1600	uploads/rooms/5.png?v=16416068319	1	0	2022-01-08 10:18:39	2022-01-08 10:18:39

Query results operations: Print, Copy to clipboard, Export, Display chart, Create view

## Chapter 4

### DATABASE TECHNIQUE AND RESULTS

#### 4.1 TRIGGER:

- There is a basic trigger in this project.
- If we request room, then the TRIGGER updates the status of room book.

```
Triggers `request_room`  
--  
  
DROP TRIGGER IF EXISTS `request_delete`;  
  
DELIMITER $$  
  
CREATE TRIGGER `request_delete` BEFORE DELETE ON `request_room` FOR EACH ROW BEGIN  
  
INSERT INTO request_room_delete  
  
VALUES (old.id,old.name,old.email,old.phone,old.a_date,old.d_date,old.people,old.room_type);  
  
END  
  
$$  
  
DELIMITER ;  
  
DROP TRIGGER IF EXISTS `request_insert`;  
  
DELIMITER $$  
  
CREATE TRIGGER `request_insert` AFTER INSERT ON `request_room` FOR EACH ROW BEGIN  
  
INSERT INTO request_room_backup VALUES  
(NEW.id,NEW.name,NEW.email,NEW.phone,NEW.a_date,NEW.d_date,NEW.people,NEW.room_type);  
  
END  
  
$$  
  
DELIMITER ;
```

## 4.2 NORMALIZATION:

The complete tables of the database in the project are normalized, obeying all the rules of normalization

### 1NF:

1NF disallows relations within relations or relations as attribute values within tuples. The only attribute values permitted by 1NF are single **atomic** (or **indivisible**) values.

### 2NF:

A functional dependency  $X \rightarrow Y$  is a **full functional dependency** if removal of any attribute A from X means that the dependency does not hold any more; that is, for any attribute  $A \in X$ ,  $(X - \{A\})$  does not functionally determine Y.

### 3NF:

#### Transitive functional dependency

A functional dependency  $X \rightarrow Y$  in a relation schema  $R$  is a **transitive dependency** if there exists a set of attribute  $Z$  that are neither a primary nor a subset of any key of  $R$  (candidate key) and both  $X \rightarrow Z$  and  $Z \rightarrow Y$  holds

Definition: A relation schema  $R$  is in third normal form (3NF) if it is in 2NF *and* no non-prime attribute  $A$  in  $R$  is transitively dependent on the primary key.

### CUSTOMER

<u>Cu_id</u> (primary key)	Cu_name	Cu_email	Cu_phone	Cu_sex
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### BOOKING

<u>Booking_id</u> (primary key)	Check_in	Check_out	<u>Cu_id</u> (foreign key)	<u>Room_id</u> (foreign key)
---------------------------------	----------	-----------	----------------------------	------------------------------

### PAYMENT

<u>Payment_id</u> (primary key)	<u>Cu_id</u> (foreign key)	Payment_date	Amount_paid
---------------------------------	----------------------------	--------------	-------------

**ROOM**

<u>Room_id</u> (primary key)	Room_type	Reservation_date
------------------------------	-----------	------------------

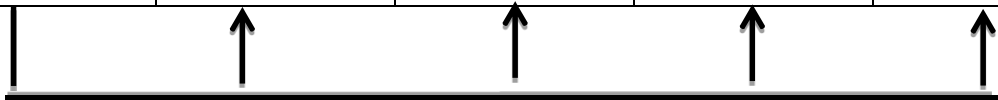
**ADMIN**

email	password
-------	----------

**CUSTOMER**

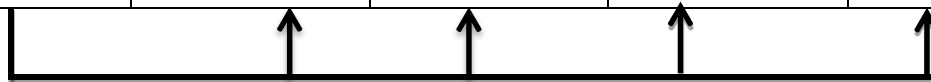
<u>Cu_id</u> (primary key)	Cu_name	Cu_email	Cu_phone	Cu_sex
----------------------------	---------	----------	----------	--------

FD1

**BOOKING**

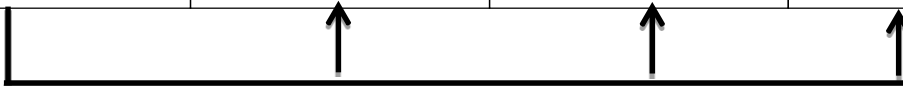
<u>Booking_id</u> (primary key)	Check_in	Check_out	<u>Cu_id</u> (foreign key)	<u>Room_id</u> (foreign key)
---------------------------------	----------	-----------	----------------------------	------------------------------

FD2

**PAYMENT**

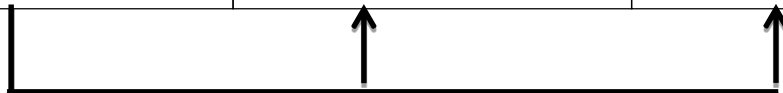
<u>Payment_id</u> (primary key)	<u>Cu_id</u> (foreign key)	Payment_date	Amount_paid
---------------------------------	----------------------------	--------------	-------------

FD3

**ROOM**

<u>Room_id</u> (primary key)	Room_type	Reservation_date
------------------------------	-----------	------------------

FD4



**1NF:** In the above table there are no multi valued attributes. Thus, the functional dependency FD1 and relation satisfies 1NF.

**2NF:** There are no partial dependencies found in the above defined functional dependencies. Thus, we can say that relation satisfies 2NF.

**3NF:** There are no transitive dependencies found in the above defined functional dependencies. Thus, we can say that relation satisfies 3NF.

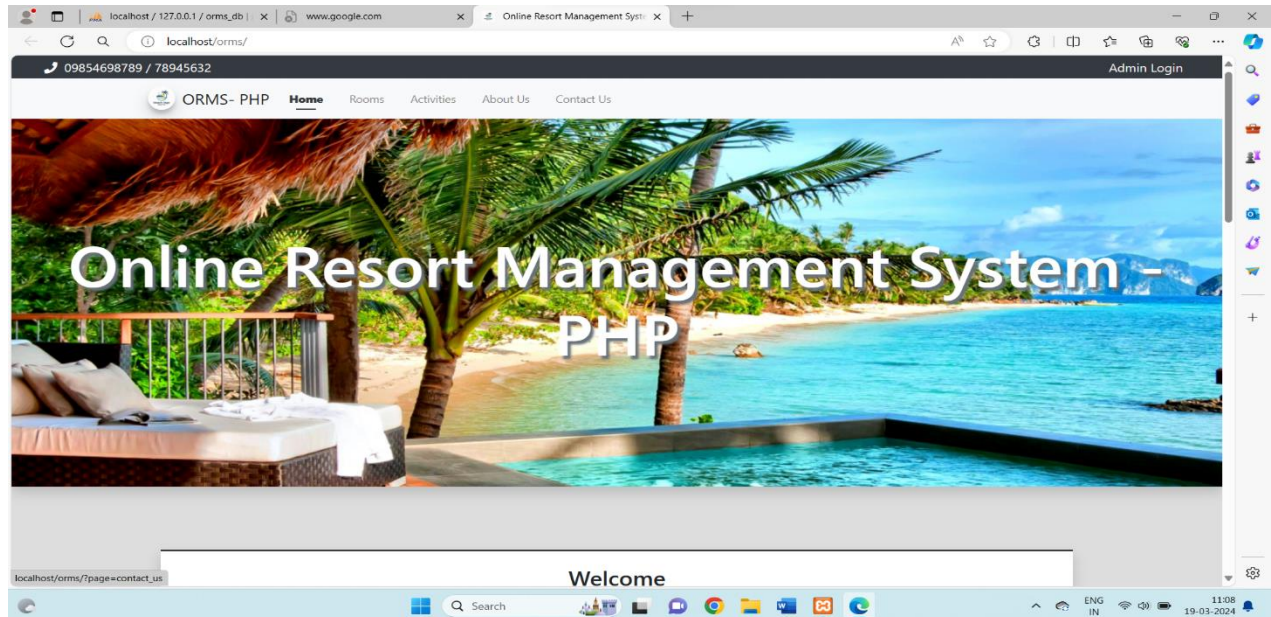
#### 4.3 TESTING:

No	Test Cases	Case Type	Expected Result	Actual Result	Pass/Fail
1	Login	1.Invalid ID	The system will not accept the invalid ID and throws message	The system will not allow to login into the system	Pass
		2.Invalid Password	The system will not accept the invalid Password and throws message	The system will not allow to login into the system	Pass
2	Validation Testcase	1.Require field validation	Field should not be empty	Users have to enter the value	Pass



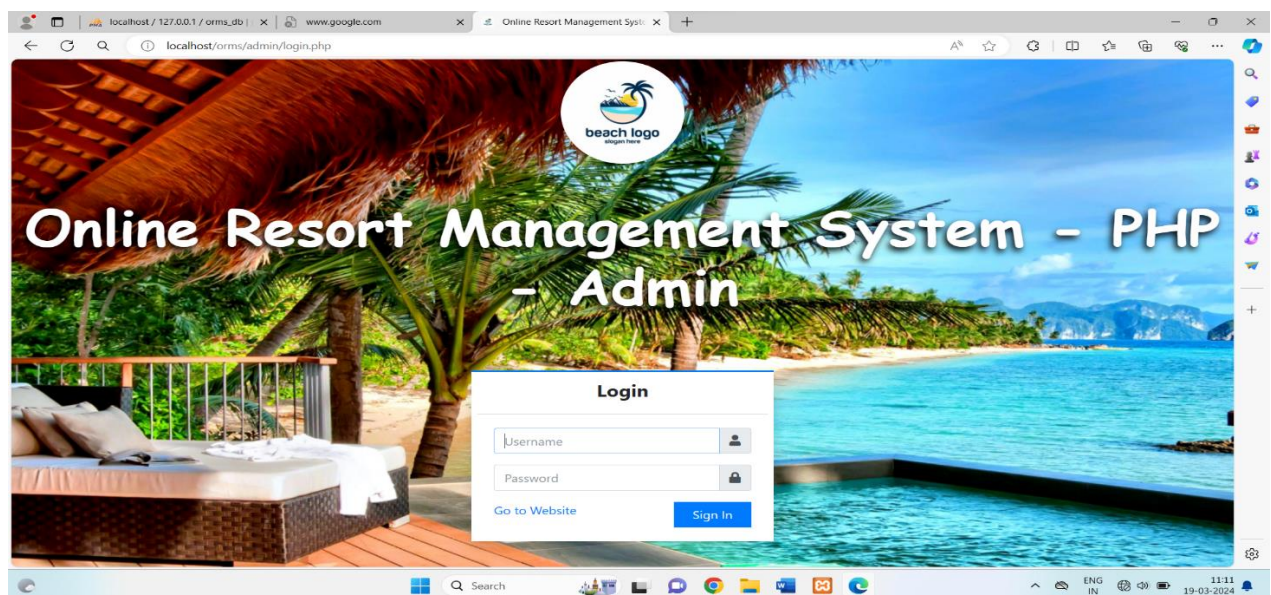
## CHAPTER 5

### SNAPSHOTS



**Fig 5.1: Home page**

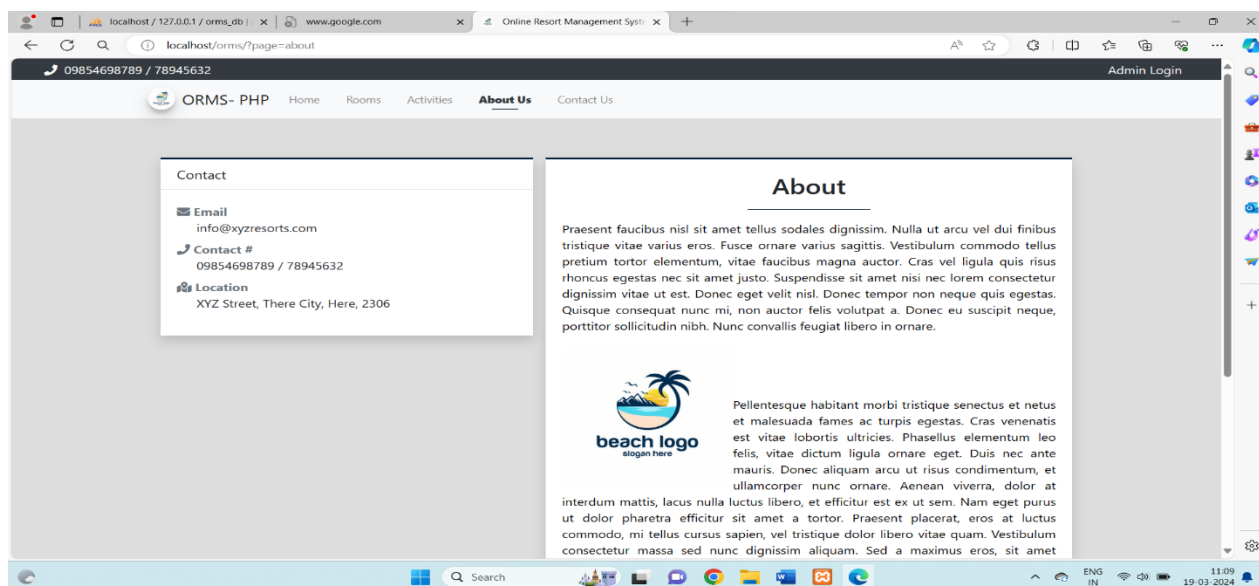
A home page is the default or front page of a site. It is the first page that visitor see when they load a URL. Web managers can control the home page as a way of directing the user experience.



**Fig 5.2: Login page**

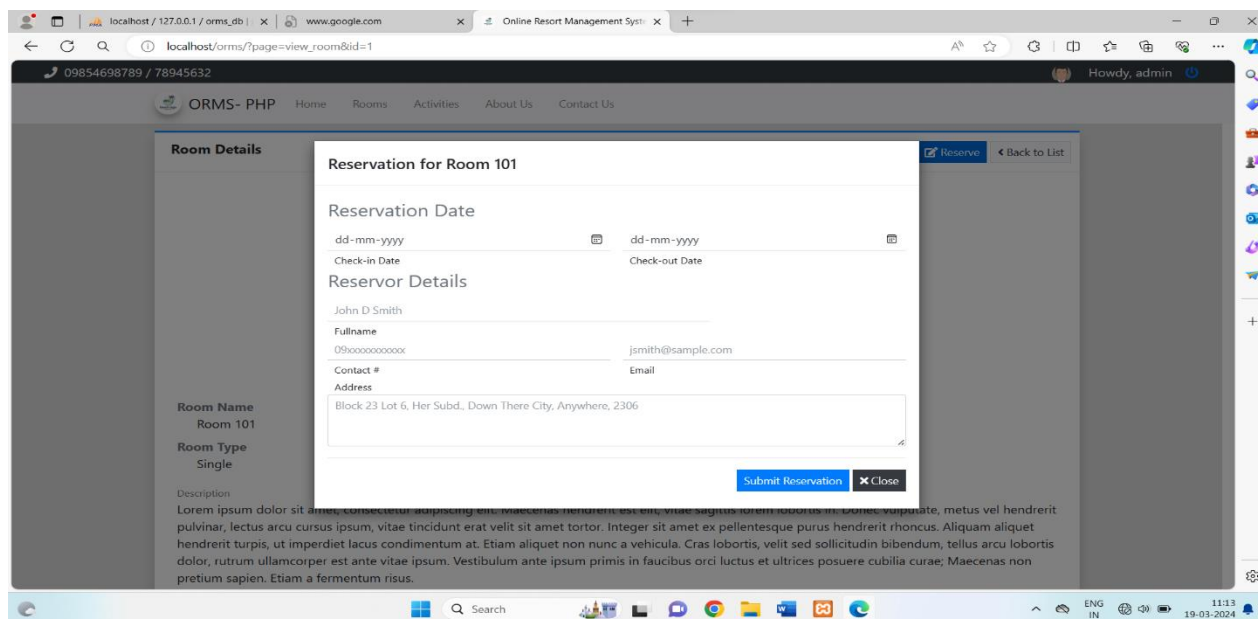
The login page allows a user to gain access to an application by entering their username and password or by authenticating using a social media login.





**Fig 5.3: Contact us form**

A contact page is common web page on a website for visitor to contact the organization providing the website. The page contains one or more of the following items: an e-mail address, name and comment.




**Fig 5.4: Booking and Contact page**

All booking and reservations made on the site are displayed with all booking details: arrival date, departure date, resort name, room type, number of passengers. A contact page is common web page on a website for visitor to contact the organization providing the website. The page contains one or more of the following items: an e-mail address, a phone number.

[Home](#) [Rooms](#) [Search Booking](#) [Contact Us](#) [Login](#)


### Rooms



**Single**

Single rooms are equipped with basic amenities. Our standard rooms are equipped with luxury furniture, functional amenities and works of art. Small independent room, closet, private bathroom, hot water, heater, flat TV, cable suscription, 20MB WiFi.


Price: 10000b [Book Now](#)



**Double**

These double rooms feature an open-plan kitchenette, spacious work desk and chair, seating area and private bathroom in one room. All rooms are non-smoking. Unlimited, complimentary hi-speed wi-fi and internet access, Electronic key card system, 24 hour reception, 24 hour room service, Bottled mineral water, Air conditioning, King sized bed, En-suite bathroom. All rooms and apartments vary with décor, views, furnishings and layout.


Price: 15000b [Book Now](#)



**Deluxe**

Experience luxury and spacious living with spectacular views. The hotel's light, airy, and tranquil deluxe rooms combine contemporary sophistication and comfort with spaciousness. Our Hotel boasts the latest in Wi-Fi technology, offering the fastest hotel speeds available in the country. In-room spa service, iron and ironing board, Laundry and dry cleaning facilities (charges apply), Evening turndown service, bathrobes and slippers, Wake-up call service.

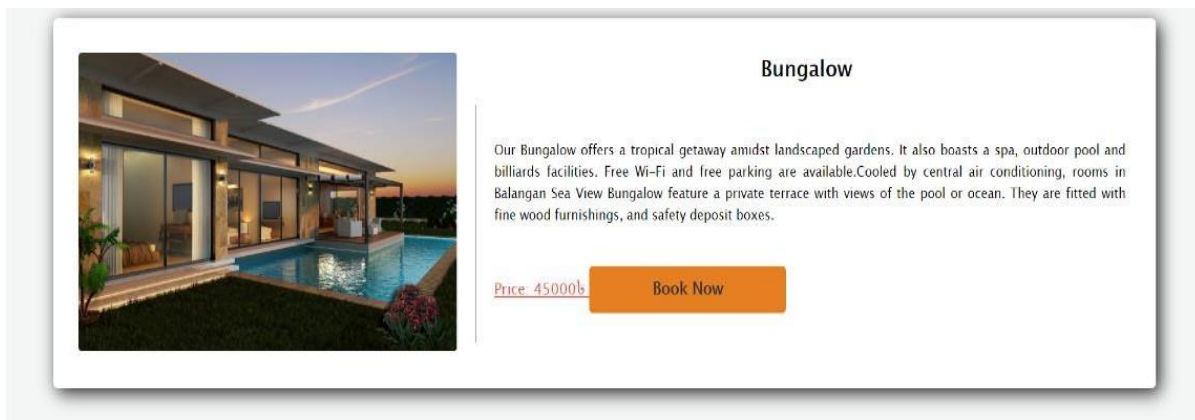
Price: 25000b [Book Now](#)



**Presidential Suite**

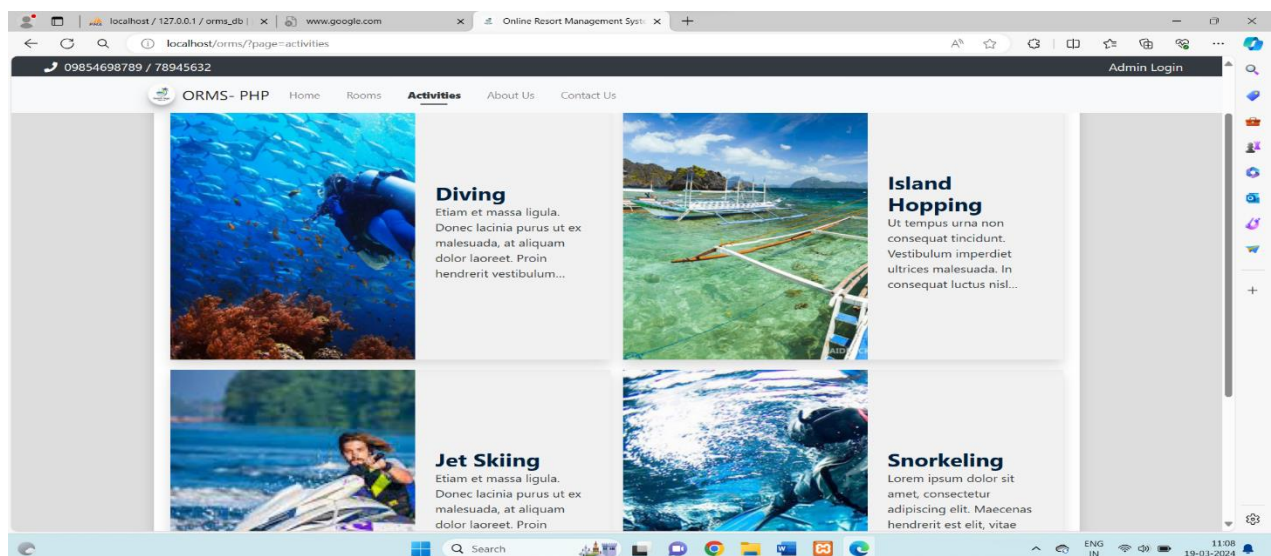
The Presidential Suite is tiled in flawless, white Thassos marble, defined by classic white columns and ornamented with a black piano and a life size bronze statue. In the dining room, a brass telescope looks out over the ocean. The Presidential Suite includes a master bedroom and a living space, a separate living room and a dining room with ocean views, a work space, a powder room, a pantry and a separate entrance for the private butler.

Price: 35000b [Book Now](#)



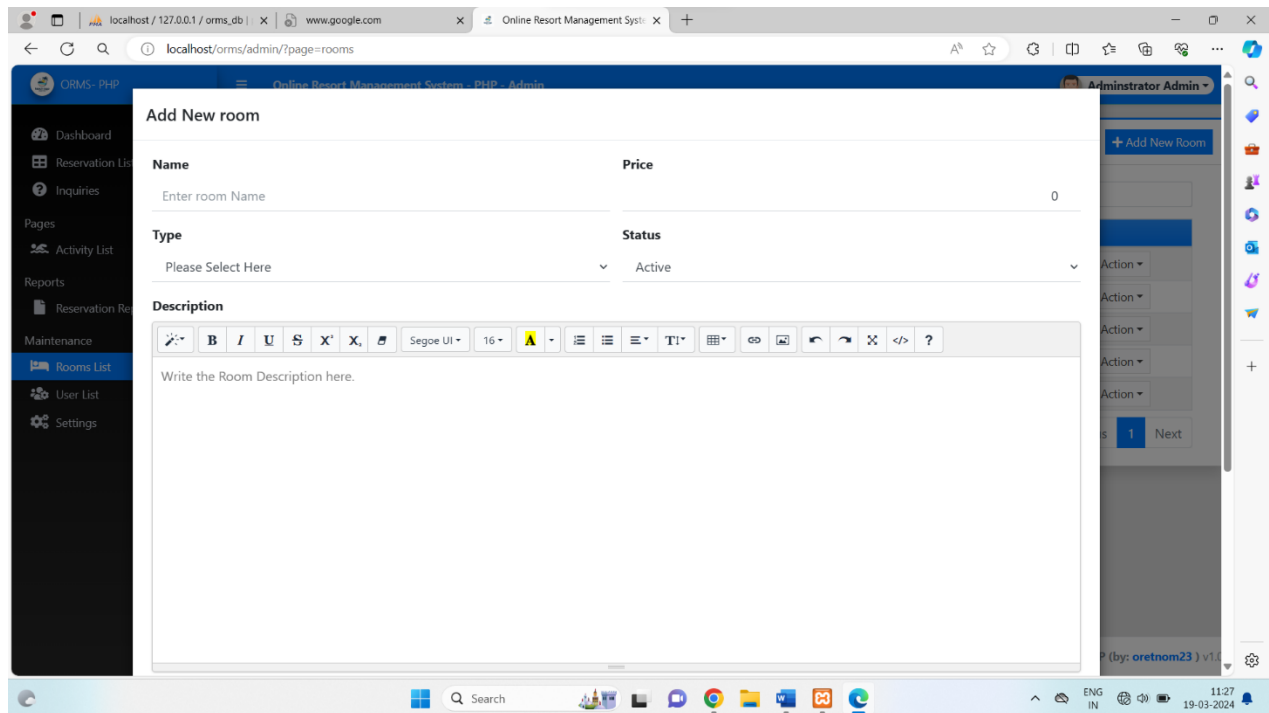
**Fig 5.6: Room page**

Resort Room means an area that is designed and constructed to be occupied by one or more persons on resort property, which is separated from others occupying the resort property. A resort room has securable entrance, and facilities for sleeping and sanitation.



**Fig 5.7: Activates page**

Resort Activates means an Area which have designed and Construction to be Childrens, Family members to been enjoyed and have Fun in this Activates



**Fig 5.8: Registration page**

A registration page enables users and organization to independently register and gain access to your system. It is common to have multiple signup pages depending on the types of people and organization you want to register.

### **Advantages:**

- Save time of customer in quickly reserving all the facility of resort.
- Provides the information about the resort facilities.
- User friendly.
- Very secure.
- Total features of resort are accessible.

## **CONCLUSION**

The advantages of booking a resort online add up long before your arrival. Our legendary customer service extends to the web. One advantage of booking with the resort directly is the use of the resort's full cancellation policy as well as not needing a deposited in most situations. Customer can read reviews and compare prices for Online Resort Booking. The most important advantage of online resort booking is convenience, you can book your rooms by simply sitting in home. Internet helps you to browse through the resorts around the world and compare the facilities and rates easily. Resort Management System is a room reservation site script where site users will be able to search rooms availability with an online booking reservations system. Site users can also browse resort, view room inventory, check availability, and book reservations in real-time. Site users enter check in date and check out date then search for availability and rates. After choosing the right room in the wanted resort, all booking and reservation process is done on the site and an SMS is sent to confirm the booking.

## **REFERENCES**

- Fundamentals of Database System, Ramez Elmasri and Shamkant Navathe, 7<sup>th</sup> Edition 2017, Pearson
- [www.mysqltutorial.org](http://www.mysqltutorial.org)
- <https://getbootstrap.com/>
- “Syntax”: <https://stackoverflow.com/>
- “tutorial”: <https://www.phppoint.com/>

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