

# "HOTELNZA"

### A MINI PROJECT REPORT

Submitted by

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Under the guidance of,

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In partial fulfillment for the award of the degree of

**BACHELOR OF ENGINEERING** 

IN

INFORMATION SCIENCE AND ENGINEERING

**FOR** 

**COURSE NAME: MINI PROJECT** 

**COURSE CODE: 20ISE59** 



# **CERTIFICATE**

Certified that the project work entitled "Hotelenza" carried out by Mr. AYUSH MIHARIA, bearing USN 1NH18IS018, a Bonafide student of 5<sup>th</sup> semester in partial fulfillment for the award of Bachelor of Engineering in Information Science & Engineering of the Visveswaraiah Technological University, Belagavi during the year 2020-21. It is certified that all corrections / suggestions indicated for Internal Assessment have been incorporated. The project report has been approved as it satisfies the academic requirements in respect of Mini Project work prescribed for the said Degree.

Name & Signature of Guide Name & Signature of HOD Name & Signature of Principal

Mrs. K M Bilvika	Dr. Anandhi R J	Dr. Manjunatha
Examiners:		
Name		Signature
1		
2		

# **ABSTRACT**

The term reservation is defined as 'blocking a particular room type for a guest, for a definite period of time, for a particular guest'. To ensure a safe and secure place to stay during their visit to another town, guests generally prefer to make advance reservations in hotels and other types of accommodation units.

Thus, this project will help users/customers to book a room of their choice for the date they choose. The website will be capable of doing the following:

- i. Login for different level of users (admin, customer)
- ii. Add new rooms and accommodations
- iii. Add new users and edit their info
- iv. View all reservations
- v. View all users

This project will be implemented using HTML5, CSS3, PHP and Xampp server.

**ACKNOWLEDGEMENT** 

Any project is a task of great enormity and it cannot be accomplished by an individual without support

and guidance. I am grateful to a number of individuals whose professional guidance and

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1NH18IS018

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# **CHAPTER 1**

### INTRODUCTION

The term reservation is defined as 'blocking a particular room type for a guest, for a definite period of time, for a particular guest'. To ensure a safe and secure place to stay during their visit to another town, guests generally prefer to make advance reservations in hotels and other types of accommodation units.

Thus, this project will help users/customers to book a room of their choice for the date they choose.

This project aims at creating on Hotel Management System which can be used by Admin and Customers. The admin to advise/publish the availability of rooms in different hotels and customers are checking the availability of room in required hotel. Customers should be able to know the availability of the rooms on a particular date to reserve in hotel. They should be able to reserve the available rooms according to their need in advance to make their stay comfortable.

The users can register and log into the system. The administrator will know the details of reservation and daily income. The hotel department maintain the seat availability and booking details in certain database.

# 1.1 Motivation of the project

- > Every sort of work is done on paper.
- > Burden to store information for long period of time.
- Work is Laborious.
- ➤ Nearly 2000 paperwork are maintained in large records.
- > It is very difficult to notify what are the goods need to be ordered.

To overcome the disadvantages discussed above the application hotelenza is developed. This software allows the admin to add, modify and delete particular room data from the database.

### 1.2 Problem statement

To develop an application for managing different types of rooms and accommodations in a database. This application should identify customers uniquely by (valuable customer), name and address, each room should have unique id, name, type, quantity left, cost, purpose, location and booking date.

A hotel system manages information about rooms, reservations, customers. A customer can make reservations, change, or cancel reservations through the hotel website.

# 1.3 Methodology

Hotelenza is a software developed to provide customers with trustworthy reservation and booking of hotel rooms. Firstly, the rooms are first added to the database by the admin giving details like name, purpose, cost and date. The admin can modify the data. This concept is implemented using PHP and SQL acting as front end and back end.

The project is compiled of two parts:

- Frontend: Coded in html and php and takes input from the user using GUI and retrieves the information from the Database and displays in GUI.
- Backend: It is usually the database on to which the data is collected and stored. Sql in used in case of our project to collect information and store in structure format.

The software after being created using the database and python programming takes input from the user using GUI which consists of labels, widgets, buttons that are bind and packed together to form a proper interface. The python program invokes the Sql database whenever values are entered for the corresponding schemas created.

# **CHAPTER 2**

# SYSTEM REQUIREMENTS SPECIFICATION

A Software Requirement Specification is the description of the software to be developed. In order to understand the project, it is very important to list out the requirements. The given below hardware system requirements and software system requirements are enough to implement this code without any problems or errors. The web application source code can be easily implemented with these system configurations.

# 2.1 Hardware requirements:

Processor: Intel core i3 and above

Speed : 3.20GHz to 3.60GHz

RAM : 512 MB and above

Hard disk: 256 GB and above

# 2.2 Software requirements:

Operating System: Windows 7 or more

XAMPP server

• Browser (google chrome)

Notepad

SQL plus Database

# 2.3 About the language

#### 2.1 What is Web Development?

Web growth, or web programming, is the creation of interactive web apps. Online Production primar ily consists of two parts:

a. Production

Front-end

(also called client-side development)

b. Production

Back-end (also) called server-side development)

Front End Creation refers to what a customer experiences when a website is loaded: inormation, architecture, engagement.Php, CSS, and Javascript are the key frontend languages used. HTML (Hyper Text Markup Language) is a markup language used to create Web sites. It is the cornerstone of all web apps. Cascading Style Sheets (CSS) is language used in style sheets to apply special styling to web pages that are created using markup languages such as HTML. The code used to render web pages usable is

Javascript.Back End Development refers to what goes behind the scenes of a web application. Generally back end uses a database to generate the front end.In this project I have used HTML, CSS, javascript, Bootstrap and Django.

#### **2.2 HTML**

HTML stands for Hypertext Markup Language. For building web sites and web apps, HTML is used. The term Hypertext refers to "Text in Text." Hypertext refers to a text with a connection in it. A hypertext is a connection that redirects you to a new webpage. Hypertext is a tool for connecting two or more sites to one another (HTML documents).

A programming language called Markup Language is used to apply style and formatting conventions to a text document. Using markup code, the text is made more complex and interactive. Using markup code, the text can be translated into pictures, tables, links, etc.

A document that is generally written in HTML and translated by a web browser is called a web page. A web page is identified using a URL. A Web page can be either of type static or dynamic.

An example of a HTML document is:

```
<!DOCTYPE>
<html>
<head>
<title>Title of the Sample Web Page</title>
</head>
<body>
<h1> First Heading Here</h1>
First Paragraph Here
</body>
</html>
```

Feature of HTML is as follows:

- 1. HTML is a language which can be easily understood, modified and is simple.
- 2. With the help of a lot of formatting tags, HTML can be easily used to make an effective presentation.
- 3. HTML is platform independent.
- 4. HTML facilitates the programmer to make the web pages interactive by the inclusion of graphics, images, videos, and sounds.
- 5. HTML is a case insensitive language.
- HTML can be used to link web pages.

#### 2.3 PHP

PHP refers to a scripting language which can be executed on the server side. Web development can be done using PHP. It can, thus, be used to build web applications. PHP stands for H ypertext Preprocessor, which is an interpretive language. PHPperforms better at scripting than other languages. PHP is also an easy language tolearn. PHP is used for the development of MySQL databas es and fordevelopment of complex web applications.

#### Features of PHP are as follows:

- 1. PHP has an excellent performance rate.
- 2. PHP is open source.
- 3. Familiarity with syntax making PHP easy to use.
- 4. PHP can be embedded with HTML script and tags.
- 5. PHP is platform-independent.
- PHP provides database support.
- 7. PHP has predefined error reporting components.
- 8. PHP is a loosely typed language.
- 9. PHP has multiple web servers' support.
- 10. PHP has good security features.
- 11. There exists a very helpful PHP community.

### 2.4 CSS

CSS stands for Cascading Style Sheet. CSS can be used to design HTML tags. CSS is one of the most widely used languages on the web.

#### Features of CSS:

- 1. CSS helps save time.
- 2. With CSS pages load faster as the CSS rule can be applied to all occurrences of the tag and less code indicates faster downloading time.
- 3. CSS is easy maintenance.
- 4. CSS has a much wider array of attributes than HTML.
- 5. CSS has multiple device compatibility.

### 2.7 JavaScript

JavaScript is a lightweight, interpreted programming language. JavaScript is designed for creating network-centric applications. JavaScript is open and cross-platform.

### Feature of JavaScript:

- 1. JavaScript is a structured programming language that follows the syntax and structure of the C programming language.
- 2. JavaScript is a weakly typed, object-oriented, and case sensitive language.
- 3. JavaScript is supported by several operating systems.
- 4. JavaScript provides less server interaction.
- 5. JavaScript provides increased interactivity.

### SQL

SQL stands for Structured Query Language. It's a computer language used for managing the relational database and manipulation of data. It is used to do all the operation in database like creation of schema, table, inserting, updating, deleting and also to retrieve particular data. SQL is used as a medium to communicate with the database. SQL is used by various database management system like: MySQL, oracle, Vertica, Sybase, etc.

Some of the commands used in SQL are:

#### 1. DDL commands:

DDL are Data Definition Language used to define the structure of the schema and these commands can manipulate only the table definition but not the contents inside the table.

Example of DDL commands are:

#### 1. CREATE:

This command is used to create a table in a database, generate assertions and triggers in database design. The example of create command implemented in this project is shown below:

Create table med (sl\_no int primary key, name text, type text, qty\_left int, cost int, purpose text, loc text, mfg text);

### 2. DROP:

This command is used to delete table or the objects from the database. Ex. Drop table med;

### 3. ALTER:

This command is used to alter the table structure like table definitions, constraints, delete columns, add columns, modify constraints. It has various options like ADD, MODIFY, CHANGE, DELETE.

Ex. Alter table med change purpose side\_effects text; Alter table cus drop column vc\_address;

#### 4. TRUNCATE:

This command is used to delete the contents of the table including all the spaces. Ex. Truncate table log;

### 2. DQL commands

DQL stands for Data Query Language for performing database queries. These commands are used to perform specific queries on the existing database using the select statement.

#### 1. SELECT:

This command is used to retrieve the data from the database. It is one of the widely used command and is complex.

Ex: select \*from med;

#### 3. DML commands:

DML stands for Data Manipulation Language and is used to manipulate the rows in the table. The rows in the table can be updated, deleted, inserted, etc.

### > INSERT:

Insert command is used to insert the tuples into the table.

Ex: insert into log values (admin, name);

### > UPDATE:

Update command is used to update the existing values of the tuple. Tuple values can be modified for further access using the update command.

Ex: update med set type='blood pressure' where name='targit';

# > DELETE:

Delete command is used to delete the tuples from the tables.

Ex: delete from med where type='drowsy';

### 4. TCL command:

TCL stands for Transaction Control Language which deals with the transaction within the database.

#### > COMMIT:

This command is used to commit the transaction so that the previous transaction will be successfully saved into the database. Once commit is done it is not possible to rollback. Syntax: COMMIT;

### > ROLLBACK:

This command is used to rollback undo the transaction if any error occurs. Syntax: ROLLBACK;

# **CHAPTER 3**

### SYSTEM DESIGN

System design is the process of defining any project in terms of architecture, modules, interfaces, and data of any system to satisfy the system requirements. It is a collection of methods or procedures used to construct a code.

### 3.1 ER Diagram

An ER diagram is entity relationship diagram which shows the relationships of entity sets stored in a database. An entity in this context is a component of data. In other words, ER diagrams illustrate the logical structure of databases.

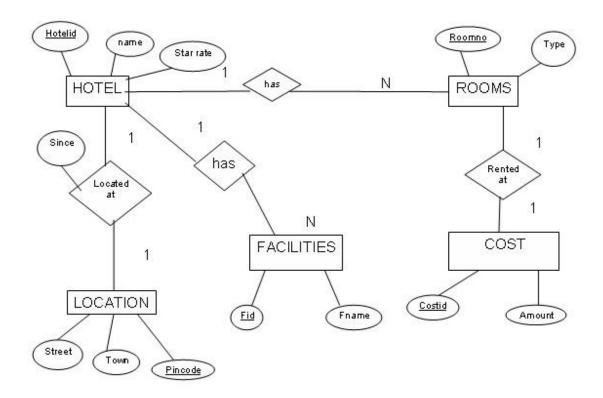


Fig: 3.1 ER diagram of the system

# 3.2 Algorithm

An algorithm is a step by step method of solving a problem. It is commonly used for data processing, calculation and other related computer and mathematical operations. An algorithm is also used to manipulate data in various ways, such as inserting a new data item, searching for a particular item or sorting an item.

Step1: Start

Step2: Login page

Step3: Enter username and password

Step4: If username and password matches go to step 5

Else go to step 2

Step5: hotel dashboard

Step6: select room

Step7: add room type and other preferences

Step8: search from the availability

Step9: do payment

Step10: Stop

# 3.3 Code and Implementation

In computer science, an implementation is often used to describe the interactions of elements in programming languages used in tech world. The code given below is the code that gives the output of this medicine database management system.

```
<!DOCTYPE>
<html>
     <head>
            <title>
                    Carpe Diem
            </title>
     </head>
     <style>
            body {
                    margin: 0px;
            }
            }
            .border {
                    border: 1px solid #ccc;
                    border-radius: 5px;
                    margin: 10px 5px;
                    padding: 4px;
            }
            ul
            {
                    list-style-type: none;
                    background-color: rgba(09,41,98,0.9);
```

```
margin-bottom: 10px;
       color: white;
       margin-top: -38px;
       padding: 0px;
       overflow: hidden;
       margin-left: -10px;
       margin-right: -10px;
       z-index: 1;
       position: sticky;
       top: 0px;
}
li
{
       display: inline;
       float: left;
}
h1
{
       background-color: rgba(09,41,98,0.9);
       color: white;
       border: 10px;
       margin-left: -10px;
       margin-right: -10px;
       margin-top: -10px;
       padding: 15px;
       font-size: 60px;
       text-align: center;
       font-family: "Times New Roman";
```

```
h2
{
       border: 10px;
       padding: 5px;
       font-size: 35px;
       text-align: center;
}
a:link, a:visited
{
       color: white;
       padding: 14px 25px;
       text-align: center;
       text-decoration: none;
       display: block;
}
a:hover, a:active
{
       background-color: white;
       color: #094198;
}
.reserve_room
{
       color: #000;
       border: 10px;
       padding: 5px;
       font-size: 35px;
       text-align: center;
       text-shadow: 2px 2px black;
```

```
background-color: rgba(09,41,98,0.99);
       width: 500px;
       margin: auto;
       border-radius: 50px;
}
.headings
{
       color: black;
       font-family: "Times New Roman";
       text-decoration: none;
}
.welcome1
{
       color: black;
       font-family: "Courier New, monospace";
       font-size: 28px;
}
.welcome2
{
       color: black;
       font-family: Snell Roundhand, cursive;
       font-size: 24px;
       color: teal;
}
.basic_box {
       border: 1px solid #ccc;
       border-radius: 5px;
```

```
margin: 10px 220px;
       padding: 50px;
       box-shadow: 0 10px 20px rgba(0,0,0,0.19);
}
.r_room
{
       color: #FFF;
       border: 10px;
       padding: 10px;
       font-size: 35px;
       text-align: center;
       text-shadow: 2px 2px black;
       background-color: rgba(09,41,98,0.99);
       width: 500px;
       margin: auto;
       border-radius: 40px;
}
.row {
       display: flex;
}
.column {
       flex: 33.33%;
       padding: 5px;
}
.footer {
       background-color: rgba(09,41,98,0.99);
       bottom: 0px;
       margin: 0px;
```

```
margin-bottom: 0px;
       padding: 10px,0;
}
.foot-text {
       color: #D6FEFF;
       text-align: left;
}
* {box-sizing: border-box;}
body {font-family: Verdana, sans-serif;}
.mySlides {display: none;}
img {
       vertical-align: middle;
       background-size: cover;
}
.reserve_room:hover
{
       color: #000;
       border: 10px;
       padding: 14px;
       font-size: 35px;
       text-align: center;
       text-shadow: 2px 2px black;
       background-color: #4AB8F9;
       width: 500px;
       margin: auto;
       border-radius: 50px;
}
/* Slideshow container */
```

Page 23

```
.slideshow-container {
 max-width: 10000px;
 position: relative;
 margin: auto;
 padding: 0px;
/* Caption text */
.text {
 color: #f2f2f2;
 font-size: 30px;
 padding: 8px 12px;
 position: absolute;
 bottom: 8px;
 width: 100%;
 text-shadow: 4px 4px black;
 text-align: center;
}
/* Number text (1/3 etc) */
.numbertext {
 color: #f2f2f2;
 font-size: 12px;
 padding: 8px 12px;
 position: absolute;
 top: 0;
}
```

/\* The dots/bullets/indicators \*/

```
.dot {
 height: 15px;
 width: 15px;
 margin: 0 2px;
 background-color: white;
 border-radius: 50%;
 display: inline-block;
 transition: background-color 0.6s ease;
}
.active {
 background-color: #717171;
}
/* Fading animation */
.fade {
 -webkit-animation-name: fade;
 -webkit-animation-duration: 1.5s;
 animation-name: fade;
 animation-duration: 1.5s;
}
@-webkit-keyframes fade {
 from {opacity: .4}
 to {opacity: 1}
}
@keyframes fade {
 from {opacity: .4}
```

Page 25

```
to {opacity: 1}
     }
</style>
<body style="background: #f2f2f2;">
     <h1>THE DELUXE HOTEL</h1>
     <a href="index.php">HOME</a>
           <a href="admin_login.php">ADMIN LOGIN</a>
           <a href="user_login.php">USER LOGIN</a>
           <a href="#rooms_and_rates">ROOM GALLERY</a>
           <a href="image_gallery.php">IMAGE GALLERY</a>
           style="float: right;"><a href="#contact">Contact Details</a>
     <div class="slideshow-container">
     <div class="mySlides fade">
      <img id="1" src="Images/1.jpg" style="width:100%">
      <div class="text">ENJOY THE DREAM EXPERIENCE</div>
     </div>
     </div>
     <br>
```

```
<script>
var slideIndex = 0;
showSlides();
function showSlides() {
 var i;
 var slides = document.getElementsByClassName("mySlides");
 var dots = document.getElementsByClassName("dot");
 for (i = 0; i < slides.length; i++) {
  slides[i].style.display = "none";
 }
 slideIndex++;
 if (slideIndex > slides.length) {slideIndex = 1}
 for (i = 0; i < dots.length; i++) {
  dots[i].className = dots[i].className.replace(" active", "");
 slides[slideIndex-1].style.display = "block";
 dots[slideIndex-1].className += " active";
 setTimeout(showSlides, 4500); // Change image every 4.5 seconds
}
</script>
<br>>cbr><br>>
<a class="reserve_room" href="user_login.php">RESERVE A ROOM</a><br>
<h2 class="r room">OUR ROOMS</h2><br>
       <div class="row">
               <div class="column">
```

<

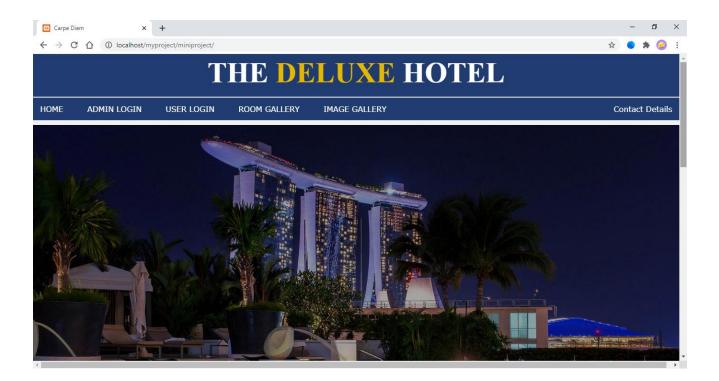
```
img src="images/1.jpg" alt="Snow" style="width:100%">
                          </div>
                          <div class="column">
                          <img src="images/2.jpg" alt="Forest" style="width:100%">
                          </div>
                          <div class="column">
                          <img src="images/3.jpg" alt="Mountains" style="width:100%">
                          </div>
                   </div>
                   <div class="row">
                          <div class="column">
                          <h3>Deluxe Room</h3>
                          </div>
                          <div class="column">
                          <h3>Executive Room</h3>
                          </div>
                          <div class="column">
                          <h3>Standard Room</h3>
                          </div>
                   </div>
            </div><br>
            <div id="contact" class="footer">
                   <hr>
                   <h2 class="foot-text">Contact Us!</h2>
                   <h3 class="foot-text">Developer: Ayush Miharia
                          <br/><br>1NH18IS018</h3><br>
            </div>
     </body>
</html>
```

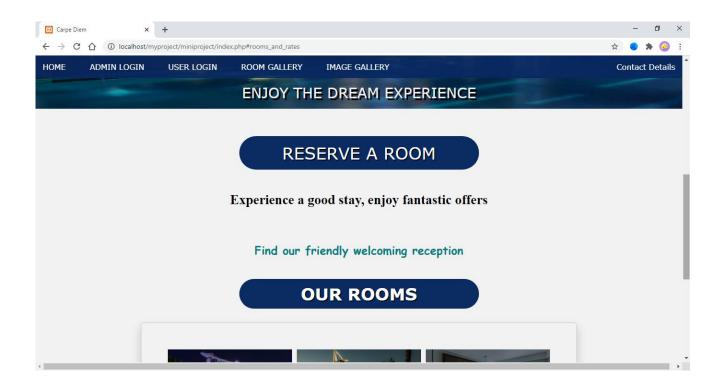
# **CHAPTER 4**

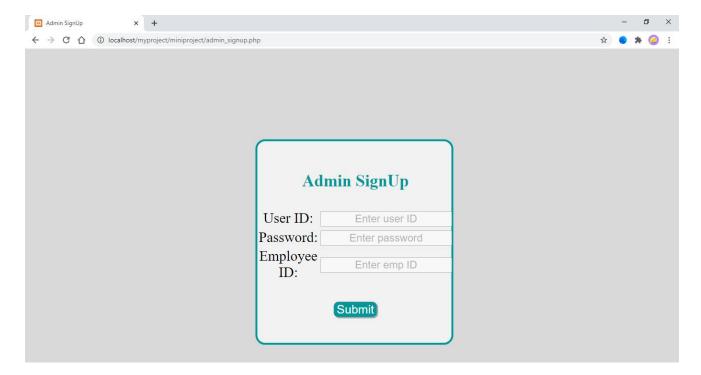
# **Results and Discussion**

Results provides the outcome of the project wherein the result or the data from the project is described in the discussion. Tables and figures appear here. It helps in process and analysis of the project.

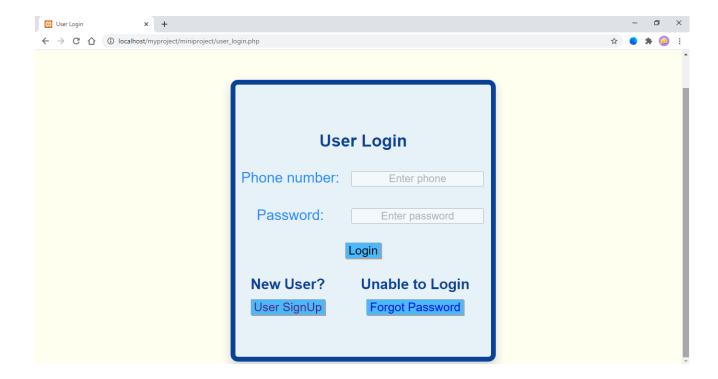
# 4.1 Output(snapshots)

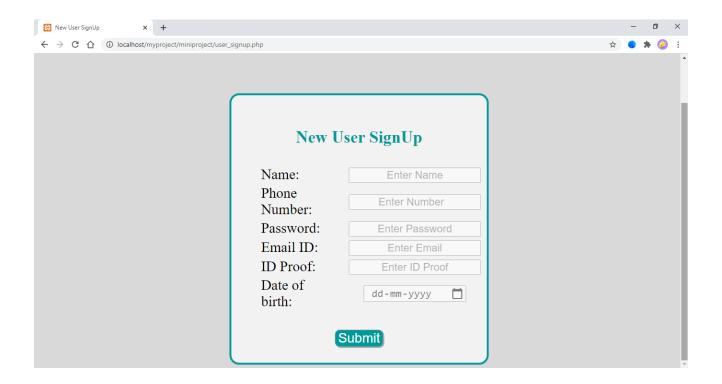


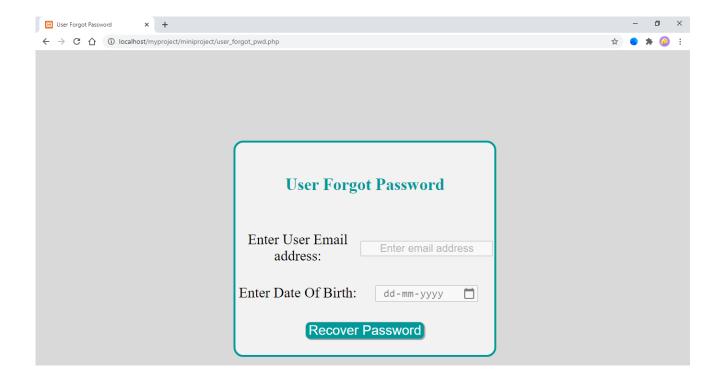












# **CHAPTER 5**

### **CONCLUSION**

The main objective of Hotelenza is to provide customers with quality and efficiency. With increasing online reservation concerns among people demands for efficient online websites. The project as a whole function in achieving this by providing customers with required website. The hotelenza takes care of handling the rooms by adding new rooms, modifying, checking for availability and keeping track of the rooms being allotted to the customers.

The interface developed meets up to the requirements of the owner to achieve profit also to satisfy the needs of the customer, the software developed handles cash flows and billing. The software also saves time and money.

The future scope of the project can be extended by adding other functionalities like plotting graphs for customers preferences and their choices and working on the project accordingly to maximize the profit.

# **References**

### Websites used:

- <a href="https://www.tutorialsspoint.com/">https://www.tutorialsspoint.com/</a>
- <a href="https://www.opensource.com/">https://www.opensource.com/</a>
- https://www.geeksforgeeks.org/