Design an interactive web portal for user registration, login, and dashboard for online hotel booking.

Introduction

The Online Hotel Booking Management System is a web-based application designed to facilitate easy and convenient hotel reservations for customers. It provides a platform for users to browse through various hotels, view their details, check availability, and make reservations online. The system streamlines the booking process, making it efficient for both customers and hotel staff.

Objectives

- > To develop a user-friendly interface for hotel booking.
- > To automate the process of hotel room availability checking and reservation.
- > To provide real-time updates on room availability and pricing.
- > To enhance customer experience by offering secure online payment options.
- To enable hotel administrators to manage bookings, room details, and customer data effectively.

❖ Features

- ➤ User Registration and Login: Customers can create accounts and log in securely to access the booking system.
- ➤ Hotel Search: Users can search for hotels based on location, dates, and other preferences.
- **Room Availability:** The system displays real-time information about room availability and pricing.
- **Booking Management:** Customers can make, modify, or cancel bookings through the platform.
- **Payment Integration:** Secure payment gateways are integrated to facilitate online transactions.
- Admin Panel: Hotel administrators can manage hotel details, room inventory, bookings, and customer data.

* Technologies Used

> Frontend: HTML, CSS, JavaScript

Backend: PHP, MySQL

Frameworks: Bootstrap for responsive design

> Web Server: Apache Server

System Architecture

The system follows a client-server architecture where the client (web browser) interacts with the server hosting the application. The server processes user requests, retrieves data from the database, and sends responses back to the client.

Implementation

The system is implemented using a combination of frontend and backend technologies. The frontend is developed using HTML, CSS, and JavaScript to create an intuitive user interface. PHP is used for server-side scripting, while MySQL database stores hotel and booking-related data.

🖶 Home Page Design

The home page serves as the initial point of interaction for users visiting the Online Hotel Booking Management System. It provides essential information about the system and allows users to navigate to various sections such as About, Room Information, Sign In, and Register.

Index.php

```
<?php
ob_start();
session_start();
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <meta name="msapplication-TileColor" content="#da532c">
    <meta name="theme-color" content="#ffffff">
    <link rel="apple-touch-icon" sizes="180x180" href="image/favicon/apple-touch-icon.png">
    <link rel="icon" type="image/png" sizes="32x32" href="image/favicon/favicon-32x32.png">
    <link rel="icon" type="image/png" sizes="16x16" href="image/favicon/favicon-16x16.png">
    <link rel="manifest" href="image/favicon/site.webmanifest">
    <link rel="mask-icon" href="image/favicon/safari-pinned-tab.svg" color="#5bbad5">
    <link rel="stylesheet" href="node_modules/bootstrap/dist/css/bootstrap.min.css">
    <link rel="stylesheet"</pre>
href="https://cdn.datatables.net/1.10.16/css/jquery.dataTables.min.css">
    <link rel="stylesheet"</pre>
href="https://cdn.datatables.net/select/1.2.5/css/select.dataTables.min.css">
    <link rel="stylesheet" href="css/main.css">
    <?php
    require 'lib/phpPasswordHashing/passwordLib.php';
    require 'app/DB.php';
    require 'app/Util.php';
    require 'app/dao/CustomerDAO.php';
    require 'app/dao/BookingDetailDAO.php';
    require 'app/models/RequirementEnum.php';
    require 'app/models/Customer.php';
    require 'app/models/Booking.php';
    require 'app/models/Reservation.php';
```

```
require 'app/handlers/CustomerHandler.php';
   require 'app/handlers/BookingDetailHandler.php';
   $username = $cHandler = $bdHandler = $cBookings = null;
   $isSessionExists = false;
   $isAdmin = [];
   if (isset($_SESSION["username"])) {
       $username = $ SESSION["username"];
       $cHandler = new CustomerHandler();
       $cHandler = $cHandler->getCustomerObj($_SESSION["accountEmail"]);
       $cAdmin = new Customer();
       $cAdmin->setEmail($cHandler->getEmail());
       $bdHandler = new BookingDetailHandler();
       $cBookings = $bdHandler->getCustomerBookings($cHandler);
       $isSessionExists = true;
       $isAdmin = $ SESSION["authenticated"];
   }
   if (isset($_SESSION["isAdmin"]) && isset($_SESSION["username"])) {
       $isSessionExists = true;
       $username = $_SESSION["username"];
       $isAdmin = $_SESSION["isAdmin"];
   }
   // if (isset($_COOKIE['is_admin'])) {
          echo $ COOKIE['is admin'];
   //
   //
          var_dump($isAdmin);
   // }
   ?>
   <title>Home</title>
   <?php //echo '<title>Home isAdmin=' . $isAdmin . ' $isSessionExists=' . $isSessionExists
. '</title>'?>
</head>
<body>
<header>
   <div class="bg-dark collapse" id="navbarHeader" style="">
       <div class="container">
           <div class="row">
               <div class="col-sm-8 col-md-7 py-4">
                   <h4 class="text-white">About</h4>
                   Add some information about hotel booking.
               </div>
               <div class="col-sm-4 offset-md-1 py-4 text-right">
                   <?php if ($isSessionExists) { ?>
                   <h4 class="text-white"><?php echo $username; ?></h4>
```

```
<?php if ($isAdmin[1] == "true" && isset($_COOKIE['is_admin']) &&</pre>
$ COOKIE['is admin'] == "true") { ?>
                      <a href="admin.php" class="text-white">Manage customer</a>
reservation(s)<i class="far fa-address-book ml-2"></i></a>
                      <?php } else { ?>
                      <a href="#" class="text-white my-reservations">View my bookings<i</pre>
class="far fa-address-book ml-2"></i></a>
                      <1i>>
                          <a href="#" class="text-white" data-toggle="modal" data-</pre>
target="#myProfileModal">Update profile<i class="fas fa-user ml-2"></i></a>
                      <?php } ?>
                      <a href="#" id="sign-out-link" class="text-white">Sign out<i</a>
class="fas fa-sign-out-alt ml-2"></i></a>
                   <?php } else { ?>
                   <h4>>
                      <a class="text-white" href="sign-in.php">Sign in</a> <span</pre>
class="text-white">or</span>
                      <a href="register.php" class="text-white">Register </a>
                   </h4>
                   Log in so you can take advantage with our hotel
room prices.
                  <?php } ?>
               </div>
           </div>
       </div>
   </div>
   <div class="navbar navbar-dark bg-dark box-shadow">
       <div class="container d-flex justify-content-between">
           <a href="#" class="navbar-brand d-flex align-items-center">
               <i class="fas fa-h-square mr-2"></i></i>
               <strong>Hotel Booking</strong>
           </a>
           <button class="navbar-toggler collapsed" type="button" data-toggle="collapse"</pre>
data-target="#navbarHeader" aria-controls="navbarHeader" aria-expanded="false" aria-
label="Toggle navigation">
               <span class="navbar-toggler-icon"></span>
           </button>
       </div>
   </div>
   <div class="container my-3" id="my-reservations-div">
       <h4>Reservations</h4>
       <table id="myReservationsTbl" class="table table-striped table-bordered"
cellspacing="0" width="100%">
           <thead>
           #
               12
               Start date
```

```
End date
            Room type
            Requirements
            Adults
            Children
            Requests
            Timestamp
            Status
         </thead>
         <?php if (!empty($cBookings) && $bdHandler->getExecutionFeedback() == 1) { ?>
            <?php
                  foreach ($cBookings as $k => $v) { ?>
               <?php echo ($k + 1); ?>
                  <?php echo $v["id"]; ?>
                  <?php echo $v["start"]; ?>
                  <?php echo $v["end"]; ?>
                  <?php echo $v["type"]; ?>
                  <?php echo $v["requirement"]; ?>
                  <?php echo $v["adults"]; ?>
                  <?php echo $v["children"]; ?>
                  <?php echo $v["requests"]; ?>
                  <?php echo $v["timestamp"]; ?>
                  <?php echo $v["status"]; ?>
               <?php } ?>
         <?php } ?>
         </div>
</header>
<main role="main">
   <section class="jumbotron text-center">
      <div class="container pt-lg-5 pl-5 px-5">
         <h1 class="display-3">A brand new hotel beyond ordinary</h1>
         Book your summer holidays with us now.
         >
            <?php if ($isSessionExists) { ?>
            <a href="#" class="btn btn-success my-2" data-toggle="modal" data-</pre>
target=".book-now-modal-lg">Book now<i class="fas fa-angle-double-right ml-1"></i></a>
            <?php } else { ?>
            <a href="#" class="btn btn-success my-2" data-toggle="modal" data-</pre>
target=".sign-in-to-book-modal">Book now<i class="fas fa-angle-double-right ml-1"></i></a>
            <?php } ?>
         </div>
   </section>
```

```
<div class="container">
        <div class="pricing-header px-3 py-3 pt-md-5 pb-md-4 mx-auto text-center">
            <h1 class="display-4">Pricing</h1>
            Quickly build an effective pricing table for your potential
customers with this Bootstrap example. It's built with default Bootstrap components and
utilities with little customization.
        </div>
    </div>
    <div class="album py-5 bg-light">
        <div class="container">
           <div class="row">
                <div class="col-md-4">
                    <div class="card mb-4 box-shadow">
                        <div class="card-header">
                           <h5 class="my-0 font-weight-normal">Deluxe Room</h5>
                        </div>
                        <img class="card-img-top" data-</pre>
src="holder.js/100px225?theme=thumb&bg=55595c&fg=eceeef&text=Thumbnail"
alt="Thumbnail [100%x225]" style="height: 225px; width: 100%; display: block;"
src="image/deluxe.jpg" data-holder-rendered="true">
                       <div class="card-body">
                            The ultimate sanctuary to recharge the
senses, the beautifully-appointed 24sqm Deluxe Room exudes sheer sophistication and elegance.
Located on the higher floors, each Deluxe Room is characterised by elevated ceilings and full
length bay windows, transforming your living space into an atmospheric abode.
                            <div class="d-flex justify-content-between align-items-center">
                               <div class="btn-group">
                                   <?php if ($isSessionExists) { ?>
                                   <button type="button" class="btn btn-sm btn-outline-</pre>
success" data-rtype="Deluxe" data-toggle="modal" data-target=".book-now-modal-lg">
                                       Book
                                   </button>
                                   <?php } else { ?>
                                   <button type="button" class="btn btn-sm btn-outline-
success" data-toggle="modal" data-target=".sign-in-to-book-modal">
                                       Book
                                   </button>
                                   <?php } ?>
                               </div>
                               <small class="text-muted">$250 / night</small>
                           </div>
                       </div>
                   </div>
                </div>
                <div class="col-md-4">
                   <div class="card mb-4 box-shadow">
                       <div class="card-header">
                            <h5 class="my-0 font-weight-normal">Double Room</h5>
```

```
</div>
                       <img class="card-img-top" data-</pre>
src="holder.js/100px225?theme=thumb&bg=55595c&fg=eceeef&text=Thumbnail"
alt="Thumbnail [100%x225]" src="image/double.jpg" data-holder-rendered="true" style="height:
225px; width: 100%; display: block;">
                       <div class="card-body">
                            The standard twin room is equipped with two
single beds to house two people. An enticing set of top notch facilities to the optimum
security level, a fully air conditioned twin room remains the perfect choice for your needs.
Book hotel rooms with us and enjoy your trip with full fervor.
                           <div class="d-flex justify-content-between align-items-center">
                                <?php if ($isSessionExists) { ?>
                                <button type="button" class="btn btn-sm btn-outline-success"</pre>
data-rtype="Double" data-toggle="modal" data-target=".book-now-modal-lg">
                                   Book
                                </button>
                                <?php } else { ?>
                                <button type="button" class="btn btn-sm btn-outline-success"</pre>
data-toggle="modal" data-target=".sign-in-to-book-modal">
                                   Book
                                </button>
                                <?php } ?>
                                <small class="text-muted">$180 / night</small>
                            </div>
                       </div>
                   </div>
                </div>
                <div class="col-md-4">
                    <div class="card mb-4 box-shadow">
                       <div class="card-header">
                            <h5 class="my-0 font-weight-normal">Single Room</h5>
                       </div>
                       <img class="card-img-top" data-</pre>
src="holder.js/100px225?theme=thumb&bg=55595c&fg=eceeef&text=Thumbnail"
alt="Thumbnail [100%x225]" src="image/single.jpg" data-holder-rendered="true" style="height:
225px; width: 100%; display: block;">
                       <div class="card-body">
                            A modestly sized single room with en suite
bathroom with shower and/or bathtub, a hairdryer and complimentary toiletries. Amenities
include free WiFi, a telephone, a minibar, and a flat-screen TV with a variety of channels
and films.
                           <div class="d-flex justify-content-between align-items-center">
                                <?php if ($isSessionExists) { ?>
                                <button type="button" class="btn btn-sm btn-outline-success"</pre>
data-toggle="modal" data-rtype="Single" data-target=".book-now-modal-lg">
                                   Book
                                </button>
                                <?php } else { ?>
                                <button type="button" class="btn btn-sm btn-outline-success"</pre>
data-toggle="modal" data-target=".sign-in-to-book-modal">
```

```
Book
                                </button>
                                <?php } ?>
                                <small class="text-muted">$130 / night</small>
                            </div>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>
    <div class="modal sign-in-to-book-modal" tabindex="-1" role="dialog" aria-</pre>
labelledby="signInToBookModal" aria-hidden="true">
        <div class="modal-dialog modal-dialog-centered" role="document">
            <div class="modal-content">
                <div class="modal-header">
                    <h5 class="modal-title" id="exampleModalLongTitle">Sign in required</h5>
                    <button type="button" class="close" data-dismiss="modal" aria-</pre>
label="Close">
                        <span aria-hidden="true">&times;</span>
                    </button>
                </div>
                <div class="modal-body">
                    <h4>You have to <a href="sign-in.php">sign in</a> in order to reserve a
room.</h4>
                </div>
            </div>
        </div>
    </div>
</main>
<footer class="container">
    © Company 2017-2018
</footer>
<script src="js/utilityFunctions.js"></script>
<script src="node_modules/jquery/dist/jquery.min.js"></script>
<script src="node_modules/bootstrap/dist/js/bootstrap.bundle.min.js"></script>
<script defer src="https://use.fontawesome.com/releases/v5.0.10/js/all.js"</pre>
        integrity="sha384-s1N8GvtUJGnv6ca26v8EzVaR9DC58QEwsIk9q1QXdCU8Yu8ck/tL/5szY1BbqmS+"
        crossorigin="anonymous"></script>
<script src="https://cdn.datatables.net/1.10.16/js/jquery.dataTables.min.js"></script>
<script src="https://cdn.datatables.net/select/1.2.5/js/dataTables.select.min.js"></script>
<script src="js/animatejscx.js"></script>
<script src="js/form-submission.js"></script>
<script>
    $(document).ready(function () {
      let reservationDiv = $("#my-reservations-div");
      reservationDiv.hide();
```

```
$(".my-reservations").click(function () {
         reservationDiv.slideToggle("slow");
       });
       $('#myReservationsTbl').DataTable();
       // dynamically entered room type value on show modal
       $('.book-now-modal-lg').on('show.bs.modal', function (event) {
         let button = $(event.relatedTarget);
         let roomType = button.data('rtype');
         let modal = $(this);
         modal.find('.modal-body select[name=roomType]').val(roomType);
       });
       // check-in policies popover
       $('[data-toggle="popover"]').popover();
    });
</script>
<script src="js/multiStepsRsvn.js"></script>
</body>
</html>
                                                                         Sign in or Register
                                     A brand new hotel beyond
                                                  ordinary
                                                     Pricing
                               Quickly build an effective pricing table for your potential customers with this Bootstrap example. It's built with default Bootstrap
                                              components and utilities with little customization
```

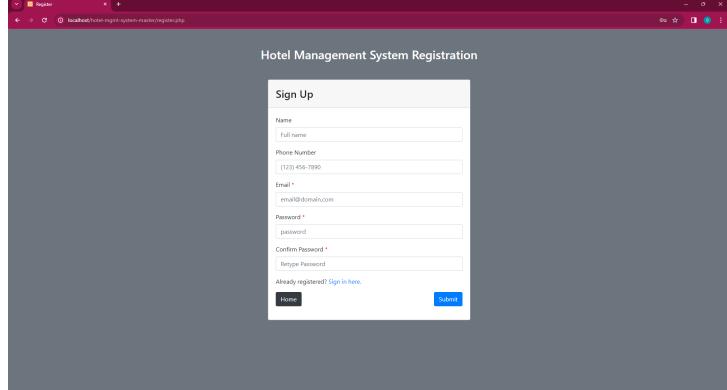
Register Page

The Register page serves as a gateway for new users to create accounts within the Online Hotel Booking Management System. It is designed to collect essential information from users, including their name, phone number, email address, and password. Additionally, users are prompted to confirm their password to ensure accuracy and security.

Register.php

```
<?php
ob_start();
session_start();
if (isset($_SESSION["authenticated"]))
    if ($_SESSION["authenticated"] == "1")
    {
        header("Location: index.php");
}
?>
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <link rel="stylesheet" href="node_modules/bootstrap/dist/css/bootstrap.min.css">
    <link rel="stylesheet" href="css/main.css">
    <title>Register</title>
</head>
<body class="bg-secondary">
<div class="container py-5">
    <div class="row">
        <div class="col-md-12">
            <h2 class="text-center mb-5">Hotel Management System Registration</h2>
            <div class="row">
                <div class="col-md-6 mx-auto card-holder">
                    <div class="card border-secondary">
                        <div class="card-header">
                            <h3 class="mb-0 my-2">Sign Up</h3>
                        </div>
                        <div class="card-body">
                            <form class="form" role="form" autocomplete="off"</pre>
id="registration-form" method="post">
                                 <div class="form-group">
                                     <label for="registrationFullName">Name</label>
```

```
<input type="text" class="form-control"</pre>
                                            id="registrationFullName"
                                            name="registrationFullName"
                                            placeholder="Full name">
                                 </div>
                                 <div class="form-group">
                                     <label for="registrationPhoneNumber">Phone Number</label>
                                     <input type="text" class="form-control"</pre>
                                            id="registrationPhoneNumber"
                                            name="registrationPhoneNumber"
                                            placeholder="(123) 456-7890">
                                 </div>
                                 <div class="form-group">
                                     <label for="registrationEmail">Email</label>
                                     <span class="red-asterisk"> *</span>
                                     <input type="email" class="form-control"</pre>
                                            id="registrationEmail"
                                            name="registrationEmail"
                                             placeholder="email@domain.com" required="">
                                 </div>
                                 <div class="form-group">
                                     <label for="registrationPassword">Password</label>
                                     <span class="red-asterisk"> *</span>
                                     <input type="password" class="form-control"</pre>
                                            id="registrationPassword"
                                            name="registrationPassword"
                                            placeholder="password"
                                            title="At least 4 characters with letters and
numbers"
                                            required="">
                                 </div>
                                 <div class="form-group">
                                     <label for="registrationPassword2">Confirm
Password</label>
                                     <span class="red-asterisk"> *</span>
                                     <input type="password" class="form-control"</pre>
                                            id="registrationPassword2"
                                            name="registrationPassword2"
                                            placeholder="Retype Password" required="">
                                 </div>
                                 <div class="form-group">
                                     Already registered? <a href="sign-in.php">Sign in
here.</a>
                                 </div>
                                 <div class="form-group">
                                     <a href="index.php" class="btn btn-dark">Home</a>
                                     <input type="submit" class="btn btn-primary btn-md float-</pre>
right"
                                             name="registerSubmitBtn" value="Submit">
                                 </div>
```



Login Page

The Login page of the Online Hotel Booking Management System allows registered users to securely access their accounts by providing their email address and password.

Login.php

```
<?php
ob_start();
session_start();</pre>
```

```
if (isset($_SESSION["authenticated"]))
    if ($ SESSION["authenticated"] == "1")
    {
        header("Location: index.php");
}
?>
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <link rel="stylesheet" href="node modules/bootstrap/dist/css/bootstrap.min.css">
    <link rel="stylesheet" href="css/main.css">
    <title>Sign in</title>
</head>
<body class="bg-secondary">
<div class="container py-5">
    <div class="row">
        <div class="col-md-12">
            <h2 class="text-center mb-5">Hotel Management System Login</h2>
            <div class="row">
                <div class="col-md-6 mx-auto">
                    <div class="card border-secondary">
                         <div class="card-header">
                             <h3 class="mb-0 my-2">Login</h3>
                         </div>
                         <div class="card-body">
                             <form class="form" role="form" autocomplete="off" id="login-form"</pre>
method="post">
                                 <div class="form-group">
                                     <label for="loginEmail">Email</label>
                                     <span class="red-asterisk"> *</span>
                                     <input type="text" class="form-control"</pre>
                                            id="loginEmail"
                                            name="loginEmail"
                                            placeholder="email address"
                                            required>
                                 </div>
                                 <div class="form-group">
                                     <label for="loginPassword">Password</label>
                                     <span class="red-asterisk"> *</span>
                                     <input type="password" class="form-control"</pre>
                                            id="loginPassword"
                                            name="loginPassword"
                                            placeholder="password"
```

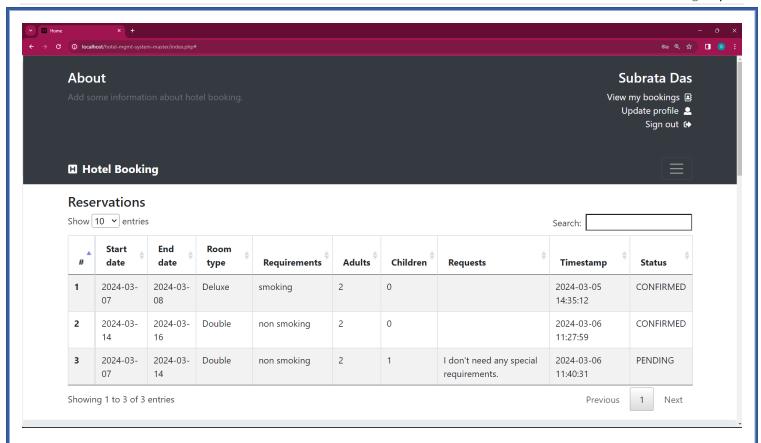
```
required>
                                   </div>
                                   <div class="form-group">
                                       Not registered? <a href="register.php">Register</a>
here.</a>
                                   </div>
                                   <div class="form-group">
                                       <a href="index.php" class="btn btn-dark">Home</a>
                                       <input type="submit" class="btn btn-primary btn-md float-</pre>
right"
                                               value="Sign in" name="loginSubmitBtn">
                                   </div>
                              </form>
                          </div>
                     </div>
                 </div>
             </div>
        </div>
    </div>
</div>
<script src="js/utilityFunctions.js"></script>
<script src="node modules/jquery/dist/jquery.min.js"></script>
<script src="node_modules/popper.js/dist/popper.min.js"></script>
<script src="node_modules/bootstrap/dist/js/bootstrap.min.js"></script>
<script src="js/form-submission.js"></script>
</body>
</html>
                                      Hotel Management System Login
                                      Login
                                      email address
                                      Password *
                                      password
                                      Not registered? Register here.
```

Dashboard

Dashboard.php

```
<header>
    <div class="bg-dark collapse" id="navbarHeader" style="">
       <div class="container">
           <div class="row">
               <div class="col-sm-8 col-md-7 py-4">
                   <h4 class="text-white">About</h4>
                   Add some information about hotel booking.
               </div>
               <div class="col-sm-4 offset-md-1 py-4 text-right">
                   <?php if ($isSessionExists) { ?>
                   <h4 class="text-white"><?php echo $username; ?></h4>
                   <?php if ($isAdmin[1] == "true" && isset($_COOKIE['is_admin']) &&</pre>
$ COOKIE['is admin'] == "true") { ?>
                       <a href="admin.php" class="text-white">Manage customer</a>
reservation(s)<i class="far fa-address-book ml-2"></i></a>
                       <?php } else { ?>
                       <a href="#" class="text-white my-reservations">View my bookings<i</pre>
class="far fa-address-book ml-2"></i></a>
                       <
                           <a href="#" class="text-white" data-toggle="modal" data-</pre>
target="#myProfileModal">Update profile<i class="fas fa-user ml-2"></i></a>
                       <?php } ?>
                       <a href="#" id="sign-out-link" class="text-white">Sign out<i</a>
class="fas fa-sign-out-alt ml-2"></i></a>
                   <?php } else { ?>
                   <h4>>
                       <a class="text-white" href="sign-in.php">Sign in</a> <span</pre>
class="text-white">or</span>
                       <a href="register.php" class="text-white">Register </a>
                   </h4>
                   Log in so you can take advantage with our hotel
room prices.
                   <?php } ?>
               </div>
           </div>
       </div>
    </div>
    <div class="navbar navbar-dark bg-dark box-shadow">
       <div class="container d-flex justify-content-between">
           <a href="#" class="navbar-brand d-flex align-items-center">
               <i class="fas fa-h-square mr-2"></i></i>
               <strong>Hotel Booking</strong>
           </a>
```

```
<button class="navbar-toggler collapsed" type="button" data-toggle="collapse"</pre>
data-target="#navbarHeader" aria-controls="navbarHeader" aria-expanded="false" aria-
label="Toggle navigation">
           <span class="navbar-toggler-icon"></span>
        </button>
     </div>
  </div>
  <div class="container my-3" id="my-reservations-div">
     <h4>Reservations</h4>
     <table id="myReservationsTbl" class="table table-striped table-bordered"
cellspacing="0" width="100%">
        <thead>
        #
           12
           Start date
           End date
           Room type
           Requirements
           Adults
           Children
           Requests
           Timestamp
           Status
        </thead>
        <?php if (!empty($cBookings) && $bdHandler->getExecutionFeedback() == 1) { ?>
                 foreach ($cBookings as $k => $v) { ?>
           <?php
              <?php echo ($k + 1); ?>
                 <?php echo $v["id"]; ?>
                 <?php echo $v["start"]; ?>
                 <?php echo $v["end"]; ?>
                 <?php echo $v["type"]; ?>
                 <?php echo $v["requirement"]; ?>
                 <?php echo $v["adults"]; ?>
                 <?php echo $v["children"]; ?>
                 <?php echo $v["requests"]; ?>
                 <?php echo $v["timestamp"]; ?>
                 <?php echo $v["status"]; ?>
              <?php } ?>
        <?php } ?>
        </div>
</header>
```



Reservation Form:

```
<?php
ob_start();
session_start();
require 'DB.php';
require 'Util.php';
require 'dao/BookingReservationDAO.php';
require 'models/Booking.php';
require 'models/Reservation.php';
require 'models/Pricing.php';
require 'models/StatusEnum.php';
require 'handlers/BookingReservationHandler.php';
if (isset($_SESSION["authenticated"]) && $_SESSION["authenticated"][1] == "false") {
    if ($_SERVER["REQUEST_METHOD"] == "POST" && isset($_POST["readySubmit"])) {
        $startDate = $endDate = null;
        $errors_ = null;
        if (empty($_POST["start"])) {
            $errors_ .= Util::displayAlertV1("Please select a start date.", "info");
        }
        if (empty($_POST["end"])) {
            $errors_ .= Util::displayAlertV1("Please select an end date.", "info");
        if (!DateTime::createFromFormat('Y-m-d', $_POST["start"])) {
```

```
$errors_ .= Util::displayAlertV1("Invalid start date.", "info");
        }
        if (!DateTime::createFromFormat('Y-m-d', $ POST["end"])) {
            $errors .= Util::displayAlertV1("Invalid end date.", "info");
        }
        if (empty($_POST["type"])) {
            $errors .= Util::displayAlertV1("Please select a room type.", "info");
        }
        if (empty($_POST["adults"])) {
            $errors .= Util::displayAlertV1("Please enter a number of adults.", "info");
        }
        try {
            $startDate = new DateTime($_POST["start"]);
            $endDate = new DateTime($ POST["end"]);
            if ($endDate <= $startDate) {</pre>
                $errors_ .= Util::displayAlertV1("End date cannot be less or equal to start
date.", "info");
        } catch (Exception $e) {
            $errors_ .= Util::displayAlertV1("Invalid date type!", "info");
        }
        if (!empty($errors_)) {
            echo $errors;
        } else {
            $r = new Reservation();
            $r->setCid(Util::sanitize_xss($_POST["cid"]));
            $r->setStatus(\models\StatusEnum::PENDING STR);
            $r->setNotes(null);
            $r->setStart(Util::sanitize xss($ POST["start"]));
            $r->setEnd(Util::sanitize_xss($_POST["end"]));
            $r->setType(Util::sanitize_xss($_POST["type"]));
            $r->setRequirement(Util::sanitize_xss($_POST["requirement"]));
            $r->setAdults(Util::sanitize xss($ POST["adults"]));
            $r->setChildren(Util::sanitize xss($ POST["children"]));
            $r->setRequests(Util::sanitize_xss($_POST["requests"]));
            $unique = uniqid();
            $r->setHash($unique);
            $p = new Pricing();
            $p->setBookedDate(Util::sanitize xss($ POST['bookedDate']));
            $p->setNights(Util::sanitize_xss($_POST['numNights']));
            $p->setTotalPrice(Util::sanitize xss($ POST['totalPrice']));
            $brh = new BookingReservationHandler($r, $p);
            $temp = $brh->create();
            $out = array(
                "success" => "true",
                "response" => Util::displayAlertV2($brh->getExecutionFeedback(), $temp)
```

```
);
                echo json_encode($out, JSON_PRETTY_PRINT);
           }
     }
} else {
     echo "failed";
}
 * validation:
 * if end date is less than start date -> invalid
 * if start date, end date, room type, adults are empty -> invalid
                                                                                                                     © Q ☆ 🔲 🕔
                                Reservation form
                                Check-in *
                                                  mm/dd/yyyy
                                                                                                Check-out *
                                                  mm/dd/yyyy
                                                                                                ■ Hotel Booking
                                Room type *
                                Room requirements
                                                  No preference
                                Adults *
                                Children
                                Special requirements
                                                               .
                                                                                                      Subrata Das
                                Reservation form
                                Booked Date
                                                 Wed Mar 06 2024
                                Room Price
                                                 $900
                 ☐ Hotel Booking
                                5 nights
                                                 $180 avg. / night
                                                 2024-3-15 to 2024-3-20
                                From - to
                                Total
                                                 $900
                                                               . .
                                                                                     Previous Submit
```

Logout System

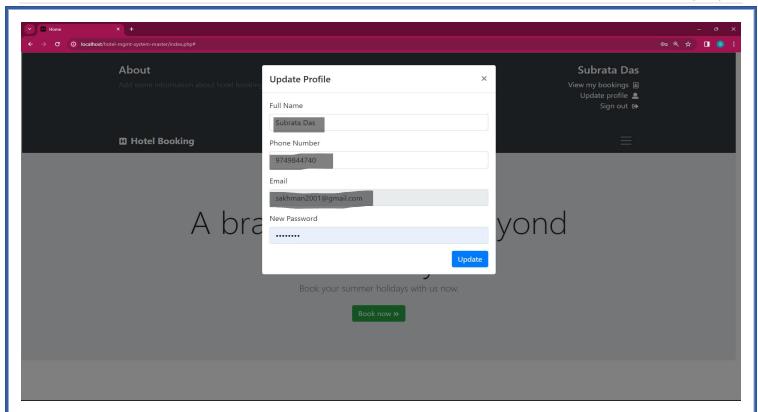
```
<?php
session start();
if ($ SERVER["REQUEST METHOD"] == "GET") {
    // Unset all of the session variables.
    $_SESSION = array();
    // If it's desired to kill the session, also delete the session cookie.
    // Note: This will destroy the session, and not just the session data!
    if (ini_get("session.use_cookies")) {
        $params = session_get_cookie_params();
        setcookie(
            session_name(),
            time() - 42000,
            $params["path"],
            $params["domain"],
            $params["secure"],
            $params["httponly"]
        );
    }
    // Finally, destroy the session.
    session destroy();
    $sessionsDeleted = 1;
    echo $sessionsDeleted;
}
   DB Connection
<?php
class DB
{
    private static $instance = null;
    private function __construct()
    {
    }
    public static function getInstance()
        if (empty(self::$instance)) {
            $db_info = array(
                "host" => "localhost",
                "port" => "3306",
```

```
"user" => "root",
                "pass" => "",
                "name" => "hotel",
                "charset" => "UTF-8"
            );
            try {
                self::$instance = new PDO(
                    "mysql:host=" . $db_info['host'] . ';port=' . $db_info['port'] .
';dbname=' . $db_info['name'],
                    $db_info['user'],
                    $db_info['pass']
                );
                self::$instance->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_SILENT);
                self::$instance->query('SET NAMES utf8');
                self::$instance->query('SET CHARACTER SET utf8');
            } catch (PDOException $error) {
                echo $error->getMessage();
            }
        }
        return self::$instance;
    }
}
```

Profile Update

User can also update their profile details includes name, phone number, password.

```
if (strlen($_POST["newPassword"]) < 4) {</pre>
                $errors_ .= Util::displayAlertV1("At least 4 characters is required.",
"info");
            } else {
                $pwd = $_POST["newPassword"];
            }
        } else {
            if (isset($ SESSION["password"])) {
                $pwd = $_SESSION["password"];
            }
        }
        if (!empty($errors )) {
            echo $errors_;
        } else {
            $c = new Customer();
            $c->setId(Util::sanitize_xss($_POST["cid"]));
            $c->setFullName(Util::sanitize xss($ POST["fullName"]));
            $c->setPhone(Util::sanitize_xss($_POST["phone"]));
            $c->setEmail(Util::sanitize xss($ POST["email"]));
            $c->setPassword(Util::sanitize_xss($pwd));
            if (isset($_SESSION["authenticated"]) && $_SESSION["authenticated"][1] == "false"
&&
                isset($ COOKIE['is admin']) && $ COOKIE['is admin'] == "false") {
                $cHandler = new CustomerHandler();
                $cHandler->updateCustomer($c);
                echo Util::displayAlertV1($cHandler->getExecutionFeedback(), "success");
            }
            if (isset($ SESSION["username"])) {
                $_SESSION["username"] = $cHandler->getUsername($_POST["email"]);
            if (isset($ SESSION["phoneNumber"])) {
                $_SESSION["phoneNumber"] = $_POST["phone"];
            }
        }
    }
} else {
    echo "failed";
}
// if (isset($ COOKIE['is admin'])) {
//
       echo $_COOKIE['is_admin'];
// }
// if (isset($_SESSION["authenticated"])) {
       var_dump($_SESSION["authenticated"]);
//
// }
```



Admin Panel

```
<?php
ob_start();
session_start();
?>
<!doctype html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
    <link rel="stylesheet" href="node_modules/bootstrap/dist/css/bootstrap.min.css">
    <link rel="stylesheet"</pre>
href="https://cdn.datatables.net/1.10.16/css/jquery.dataTables.min.css">
    <link rel="stylesheet"</pre>
href="https://cdn.datatables.net/select/1.2.5/css/select.dataTables.min.css">
    <link rel="stylesheet" href="css/main.css">
    <?php
    require 'lib/phpPasswordHashing/passwordLib.php';
    require 'app/DB.php';
    require 'app/Util.php';
    require 'app/models/StatusEnum.php';
    require 'app/models/RequirementEnum.php';
    require 'app/dao/CustomerDAO.php';
    require 'app/dao/BookingDetailDAO.php';
    require 'app/models/Customer.php';
    require 'app/models/Booking.php';
```

```
require 'app/models/Reservation.php';
    require 'app/handlers/CustomerHandler.php';
    require 'app/handlers/BookingDetailHandler.php';
    $username = null;
    $isSessionExists = $isAdmin = false;
    $pendingReservation = $confirmedReservation = $totalCustomers = $totalReservations =
null;
    $allBookings = $cCommon = $allCustomer = null;
    if (isset($_SESSION["username"]))
    {
        $username = $_SESSION["username"];
        $isSessionExists = true;
        $cHandler = new CustomerHandler();
        $cHandler = $cHandler->getCustomerObj($_SESSION["accountEmail"]);
        $cAdmin = new Customer();
        $cAdmin->setEmail($cHandler->getEmail());
        // display all reservations
        $bdHandler = new BookingDetailHandler();
        $allBookings = $bdHandler->getAllBookings();
        $cCommon = new CustomerHandler();
        $allCustomer = $cCommon->getAllCustomer();
        // reservation stats
        $pendingReservation = $bdHandler->getPending();
        $confirmedReservation = $bdHandler->getConfirmed();
        $totalCustomers = $cCommon->totalCustomersCount();
        $totalReservations = count($bdHandler->getAllBookings());
    if (isset($_SESSION["isAdmin"]) && isset($_SESSION["username"])) {
        $isSessionExists = true;
        $username = $ SESSION["username"];
        $isAdmin = $_SESSION["isAdmin"];
    }
    ?>
    <title>Manage Booking</title>
</head>
<body>
<header>
    <div class="bg-dark collapse" id="navbarHeader" style="">
        <div class="container">
            <div class="row">
                <div class="col-sm-8 col-md-7 py-4">
                    <h4 class="text-white">About</h4>
```

```
Add some information about hotel booking.
               </div>
               <div class="col-sm-4 offset-md-1 py-4 text-right">
                   <!-- User full name or email if logged in -->
                   <?php if ($isSessionExists) { ?>
                   <h4 class="text-white"><?php echo $username; ?></h4>
                   <a href="index.php" class="text-white">Home</a><i class="fas fa-
home m1-2"></i></a>
                       <a href="#" id="sign-out-link" class="text-white">Sign out<i</a>
class="fas fa-sign-out-alt ml-2"></i></a>
                   <?php } else { ?>
                   <h4>>
                       <a class="text-white" href="sign-in.php">Sign in</a> <span</pre>
class="text-white">or</span>
                       <a href="register.php" class="text-white">Register </a>
                   </h4>
                   Log in so you can take advantage with our hotel
room prices.
                   <?php } ?>
               </div>
           </div>
       </div>
    </div>
    <div class="navbar navbar-dark bg-dark box-shadow">
       <div class="container d-flex justify-content-between">
           <a href="#" class="navbar-brand d-flex align-items-center">
               <i class="fas fa-h-square mr-2"></i></i>
               <strong>Hotel Booking</strong>
           </a>
           <button class="navbar-toggler collapsed" type="button" data-toggle="collapse"</pre>
data-target="#navbarHeader" aria-controls="navbarHeader" aria-expanded="false" aria-
label="Toggle navigation">
               <span class="navbar-toggler-icon"></span>
           </button>
       </div>
   </div>
</header>
<main role="main">
    <?php if ($isSessionExists && $isAdmin) { ?>
    <div class="container my-3">
       <div class="row">
           <div class="col-xl-3 col-sm-6 mb-3">
               <div class="card text-white bg-primary o-hidden h-100">
                   <div class="card-body">
                       <div class="card-body-icon">
                           <i class="fas fa-address-book"></i></i>
```

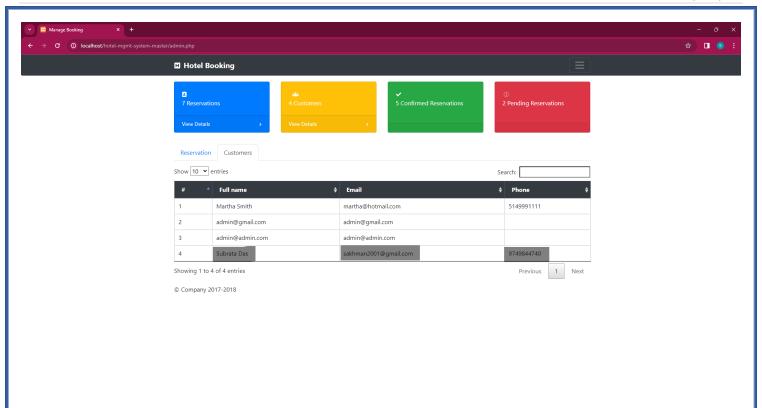
```
</div>
                        <div class="mr-5"><?php echo $totalReservations; ?>
Reservations</div>
                    </div>
                    <a class="card-footer text-white clearfix small z-1" href="#reservation">
                         <span class="float-left">View Details</span>
                         <span class="float-right"><i class="fa fa-angle-right"></i></span>
                    </a>
                </div>
            </div>
            <div class="col-xl-3 col-sm-6 mb-3">
                <div class="card text-white bg-warning o-hidden h-100">
                    <div class="card-body">
                        <div class="card-body-icon">
                             <i class="fas fa-users ml-2"></i></i></or>
                        </div>
                        <div class="mr-5"><?php echo $totalCustomers; ?> Customers</div>
                    </div>
                    <a class="card-footer text-white clearfix small z-1" href="#customers">
                         <span class="float-left">View Details</span>
                         <span class="float-right"><i class="fa fa-angle-right"></i></span>
                    </a>
                </div>
            </div>
            <div class="col-xl-3 col-sm-6 mb-3">
                <div class="card text-white bg-success o-hidden h-100">
                    <div class="card-body">
                        <div class="card-body-icon">
                             <i class="fas fa-check"></i></i>
                        </div>
                         <div class="mr-4"><?php echo $confirmedReservation; ?> Confirmed
Reservations</div>
                    </div>
                    <div class="card-footer text-white clearfix small z-1"></div>
                </div>
            </div>
            <div class="col-xl-3 col-sm-6 mb-3">
                <div class="card text-white bg-danger o-hidden h-100">
                    <div class="card-body">
                        <div class="card-body-icon">
                             <i class="fa fa-fw fa-support"></i></i>
                        <div class="mr-5"><?php echo $pendingReservation; ?> Pending
Reservations</div>
                    </div>
                    <div class="card-footer text-white clearfix small z-1"></div>
                </div>
            </div>
        </div>
    </div>
```

```
<div class="container" id="tableContainer">
     <a class="nav-link active" id="reservation-tab" data-toggle="tab"</pre>
href="#reservation" role="tab"
             aria-controls="reservation" aria-selected="true">Reservation</a>
        <a class="nav-link" id="customers-tab" data-toggle="tab" href="#customers"</pre>
role="tab"
             aria-controls="customers" aria-selected="false">Customers</a>
        <div class="tab-content py-3" id="adminTabContent">
        <div class="tab-pane fade show active" id="reservation" role="tabpanel" aria-</pre>
labelledby="reservation-tab">
           <table id="reservationDataTable" class="table table-striped table-bordered"
cellspacing="0" width="100%">
              <thead>
              #
                12
                Email
                Start
                End
                Room type
                Timestamp
                Status
                Notes
              </thead>
              <?php if (!empty($allBookings)) { ?>
                <?php
                      foreach ($allBookings as $k => $v) { ?>
                   <?php echo ($k + 1); ?>
                      ">
                         <?php echo $v["id"]; ?>
                      <?php $cid = $v["cid"]; ?>
                      <?php echo $cCommon->getCustomerObjByCid($cid)-
>getEmail(); ?>
                      <?php echo $v["start"]; ?>
                      <?php echo $v["end"]; ?>
                      <?php echo $v["type"]; ?>
                      <?php echo $v["timestamp"]; ?>
                      <?php echo $v["status"]; ?>
                      <?php echo $v["notes"]; ?>
```

```
<?php } ?>
                <?php } ?>
                <div class="my-3">
                <div class="row">
                    <div class="col-6">
                       <label class="text-secondary font-weight-bold">With
selected:</label>
                       <button type="button" id="confirm-booking" class="btn btn-</pre>
outline-success btn-sm">Confirm
                       </button>
                       <button type="button" id="cancel-booking" class="btn btn-outline-</pre>
danger btn-sm">Cancel
                       </button>
                    </div>
                    <div class="col-6 text-right">
                       View:
                       <input type="radio" name="viewOption"</pre>
value="confirmed"> Confirmed 
                       <input type="radio" name="viewOption"</pre>
value="pending"> Pending
                       <input type="radio" name="viewOption" value="all">&nbsp;All
                    </div>
                </div>
             </div>
          </div>
          <div class="tab-pane fade" id="customers" role="tabpanel" aria-</pre>
labelledby="customers-tab">
             <thead class="thead-dark">
                >
                    #
                    Full name
                    Email
                    Phone
                </thead>
                <?php if (!empty($allCustomer)) { ?>
                    <?php foreach ($cCommon->getAllCustomer() as $key => $value) { ?>
                    <?php echo ($key + 1); ?>
                       <?php echo $value->getFullName(); ?>
                       <?php echo $value->getEmail(); ?>
                       <?php echo $value->getPhone(); ?>
                    <?php } ?>
                <?php } ?>
```

```
</div>
        </div>
    </div>
    <div class="modal fade" id="confirmModal" tabindex="-1" role="dialog">
        <div class="modal-dialog" role="document">
            <div class="modal-content">
                <div class="modal-header">
                    <h5 class="modal-title">Confirm selected reservation(s)</h5>
                    <button type="button" class="close" data-dismiss="modal" aria-</pre>
label="Close">
                        <span aria-hidden="true">&times;</span>
                    </button>
                </div>
                <div class="modal-body">
                    Are you sure you want to proceed with this action?
                </div>
                <div class="modal-footer">
                    <button type="button" class="btn btn-primary"</pre>
id="confirmTrue">Yes</button>
                    <button type="button" class="btn btn-secondary" data-</pre>
dismiss="modal">No</button>
                </div>
            </div>
        </div>
    </div>
    <div class="modal fade" id="cancelModal" tabindex="-1" role="dialog">
        <div class="modal-dialog" role="document">
            <div class="modal-content">
                <div class="modal-header">
                    <h5 class="modal-title">Cancel selected reservation(s)</h5>
                    <button type="button" class="close" data-dismiss="modal" aria-</pre>
label="Close">
                        <span aria-hidden="true">&times;</span>
                    </button>
                </div>
                <div class="modal-body">
                    Are you sure you want to proceed with this action?
                <div class="modal-footer">
                    <button type="button" class="btn btn-primary"</pre>
id="cancelTrue">Yes</button>
                    <button type="button" class="btn btn-secondary" data-</pre>
dismiss="modal">No</button>
                </div>
            </div>
        </div>
```

```
</div>
     <?php } ?>
</main>
<footer class="container">
     © Company 2017-2018
</footer>
<!-- jQuery first, then Popper.js, then Bootstrap JS -->
<script src="node_modules/jquery/dist/jquery.min.js"></script>
<script src="node modules/popper.js/dist/popper.min.js"></script>
<script src="node_modules/bootstrap/dist/js/bootstrap.min.js"></script>
<script defer src="https://use.fontawesome.com/releases/v5.0.10/js/all.js"</pre>
           integrity="sha384-s1N8GvtUJGnv6ca26v8EzVaR9DC58QEwsIk9q1QXdCU8Yu8ck/tL/5szYlBbqmS+"
           crossorigin="anonymous"></script>
<script src="https://cdn.datatables.net/1.10.16/js/jquery.dataTables.min.js"></script>
<script src="https://cdn.datatables.net/select/1.2.5/js/dataTables.select.min.js"></script>
<script src="js/form-submission.js"></script>
<script src="js/admin.js"></script>
</body>
</html>
                                                                                                                      ☆ □ §
                           ☐ Hotel Booking
                            Reservation Customers
                           Show entries
                                             Start
                                                          type
                                                                  Timestamp
                                                                             Status
                               martha@hotmail.com
                                             2018-05-
                                                   2018-05-
                                             2018-04-
                                                                            CONFIRMED
                               martha@hotmail.com
                                                   2018-04-
                                             2018-04-
                                                                  2018-04-24
                               martha@hotmail.com
                                                   2018-04-
                                                                            CONFIRMED
                                                                  10:57:13
                               sakhman2001@gmail.com 2024-03-
                                                                  2024-03-05
                                                   2024-03-
                                                          Deluxe
                                                                            CONFIRMED
                                                                  14:35:12
                                                                  2024-03-06
                               sakhman2001@gmail.com
                                            2024-03-
                                                   2024-03-
                                                          Double
                                                                            CONFIRMED I need the room clean and wifi 24/7
                                                                 2024-03-06
                               sakhman2001@gmail.com 2024-03-
                                                   2024-03-
                                                                            PENDING
                           Showing 1 to 6 of 7 entries
                                                                                           1 2
                           With selected: Confirm Cancel
                                                                                    {\it View:} \bigcirc {\it Confirmed} \ \bigcirc {\it Pending} \bigcirc {\it All}
                           © Company 2017-2018
```

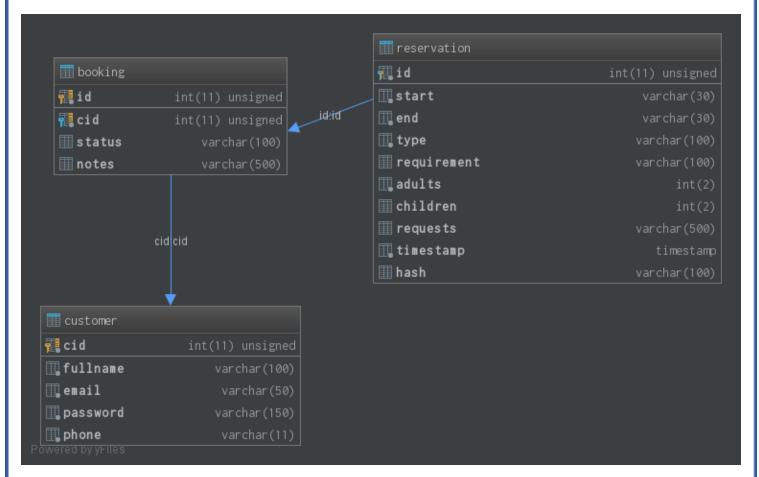


Used CSS except bootstrap in this project:

```
/* required fields marked in red */
.red-asterisk {
    color: #ff0000;
    font-weight: 500;
}
label.error {
    color: rgba(255, 0, 0, 0.69);
}
.border-secondary {
    border-color: rgba(108, 117, 125, 0.50) !important;
}
.container h2.text-center {
    color: #ffffff;
}
.svg-inline--fa {
    padding-top: 2px !important;
}
#brick {
    width: 40px;
    height: 20px;
    background: #28a745;
```

```
position: relative;
    cursor: pointer;
}
#path {
    outline: 1px solid #E8C48E;
    width: 100%;
    height: 20px;
}
textarea#specialRequests {
    resize: none;
}
/* rsvn multi steps */
.rsvnTab {
    display: none;
}
/* Make circles that indicate the steps of the form: */
.step {
    height: 15px;
    width: 15px;
    margin: 0 2px;
    background-color: #bbbbbb;
    border: none;
    border-radius: 50%;
    display: inline-block;
    opacity: 0.5;
}
/* Mark the active step: */
.step.active {
    opacity: 1;
}
/* Mark the steps that are finished and valid: */
.step.finish {
    background-color: #4CAF50;
}
input.invalid, select.invalid {
    background-color: #ffdddd;
}
```

Diagram of MySQL Database:



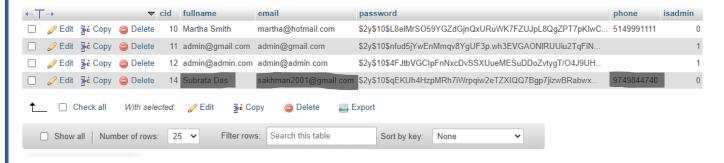
Booking Table:



Customer Table:

- cid: An integer (int(11) unsigned) data type, which likely acts as the primary key for the table.
- fullname: A varchar(100) data type, which indicates it can store variable character lengths up to 100 characters. This column likely stores the customer's full name.
- email: A varchar(50) data type, which indicates it can store variable character lengths up to 50 characters. This column likely stores the customer's email address.

- password: A varchar(150) data type, which indicates it can store variable character lengths up to 150 characters. This column likely stores the customer's password.
- phone: A varchar(11) data type, which indicates it can store variable character lengths up to 11 characters. This column likely stores the customer's phone number.



Reservation Table:

- id: An integer (int(11) unsigned) that likely acts as the primary key for the table.
- start: A varchar(30) data type, which indicates it can store variable character lengths up to 30 characters. This column likely stores the booking start time.
- end: A varchar(30) data type, which indicates it can store variable character lengths up to 30 characters. This column likely stores the booking end time.
- status: A varchar(100) data type, which indicates it can store variable character lengths up to 100 characters. This column likely stores the booking status.
- notes: A varchar(500) data type, which indicates it can store variable character lengths up to 500 characters. This column likely stores notes about the booking.
- adults: An integer (int(2)) data type, which can store integer values up to 2. This column likely stores the number of adults in the booking.
- children: An integer (int(2)) data type, which can store integer values up to 2. This column likely stores the number of children in the booking.
- requests: A varchar(500) data type, which indicates it can store variable character lengths up to 500 characters. This column likely stores any requests associated with the booking.
- timestamp: A timestamp data type, which likely stores the date and time the booking was created or modified.
- hash: A varchar(100) data type, which indicates it can store variable character lengths up to 100 characters. This column likely stores a unique identifier for the booking.



4Conclusion

The Online Hotel Booking Management System simplifies the process of hotel reservations for both customers and hotel administrators. It offers a user-friendly interface, real-time updates, and secure payment options, enhancing the overall booking experience. With further enhancements and improvements, the system aims to become a comprehensive solution for online hotel bookings.

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