Hotel Reservation System

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Chapter 1

Description:

The hotel reservation system is a web-based program created with PHP and MySQL with the goal of streamlining the procedure for making hotel reservations and controlling room availability. The technology offers hotel visitors a quick and easy way to reserve their rooms while also giving hotel staff access to tools for managing and maintaining room availability.

A home page that acts as the system's entry point to the reservation process is presented at the outset. The hotel's address, phone number, and directions are all provided here, along with an introduction of the establishment. In order to proceed with making reservations, consumers must have access to all pertinent information about the hotel.

Users are invited to input their preferred check-in and check-out dates, define the number of rooms needed, and indicate how many adults and kids will be traveling with them when they begin the reservation process. To make sure that user selections are accurate and valid, the system uses strong validation procedures. For instance, the system verifies that both the check-out date and the number of guests are later than the check-in date. With the help of this validation, consumers are certain to make the right choices, reducing errors and improving the reservation procedure.

The system's capacity to dynamically fetch data from the MySQL database forms its core. Users are presented with a list of available rooms by the system, which retrieves information based on the chosen check-in and check-out dates. Each room listing contains pertinent information including pictures, room types, nightly rates, and the total cost for the chosen stay time. With no need for manual updates or hardcoding of room data, this dynamic retrieval of room information guarantees that users always have access to current and correct room availability.

The system maintains the reservation data in the MySQL database after users have made their room selection and submitted the reservation request. The user is then shown a confirmation page where they can enter their personal information, including their name, address, phone number, and email address. A summary of the reservation is provided on the confirmation page, which also includes the chosen room type, length of stay, price, and a special confirmation number for future use.

The system has a web-based admin system with login and logout capabilities to make administrative work easier. The database material can be accessed and changed by authorized hotel workers using this admin system. For instance, hotel management might modify the costs for particular room types or add additional rooms to the system. Only authorized workers are able to conduct administrative duties thanks to the login/logout mechanism, which protects the system's security and integrity.

The project involves creating at least three additional pages to improve the user experience in addition to the reservation process. These pages may discuss a range of topics, including nearby points of interest, hotel food alternatives, shopping possibilities, or other pertinent services. By giving users helpful insights and resources to improve their entire hotel experience, this extra information adds value to their stay.

The system's user interface is made to be responsive, making it usable and accessible on a variety of devices with various screen sizes. The use of the well-known front-end framework Bootstrap makes it possible to create responsive views that adjust to different platforms, including computers, tablets, and smartphones.

The system enables users to look for reservations without asking them to log in, which streamlines the search procedure. To recover their reservation information, users can use their email address, last name, or confirmation number. When accessing reservation information, this search functionality improves customer convenience and offers a smooth experience.

Overall, this project serves as an example of how PHP and MySQL may be used to build a robust hotel reservation system. The system offers considerable advantages to both hotel guests and management by offering a simple and effective platform for bookings, controlling room availability, and streamlining administrative processes. The solution seeks to improve the overall hotel experience and speed up the reservation process with its adaptable views, practical search features, and extra educational sites.

Chapter 2

System Components:

Model-View-Controller (MVC) architecture was used in the design of the hotel reservation system. The system's components can be organized in a structured way using MVC, which encourages concern separation and code modularity. The Model, View, and Controller are among the parts of the system, and each is in charge of particular functionality.

Model: The Hotel Reservation System's data and business logic are represented by the Model. It manages tasks like getting hotel details, keeping reservations, and maintaining room availability while encapsulating interactions with the underlying MySQL database. In order to retrieve or change data in response to user requests, the Model connects with the Controller.

View: The system's presentation layer is taken care of by the View component. It is in charge of rendering the user interface and informing users of information. Views are produced in the hotel reservation system using HTML, CSS, and JavaScript. To receive data and present it to the user in an aesthetically pleasing and user-friendly way, the View communicates with the Controller.

Controller: The Controller serves as a bridge between the Model and View components. It receives user requests from the View, handles them, and organizes the required activities. The Controller in the hotel reservation system is in charge of duties like validating user inputs, getting data from the Model, and changing the View in response to user requests. By assigning particular responsibilities to the suitable components, it ensures the separation of concerns.

In order to fetch or update data, the Controller takes user requests and speaks with the Model. It then modifies the View to show the requested data or take the required actions. This division of duties enables the hotel reservation system's code to be reused, maintained, and scaled.

The system's components integrate flawlessly to create a structured and well-organized architecture thanks to the use of the MVC design pattern. This method makes it simpler to build, improves code modularity, and encourages code reuse, making it simpler to maintain and expand the system in the future.

Chapter 3

Implementation:

Sql File:

```
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
START TRANSACTION;
SET time_zone = "+00:00";


/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `aamanimalinenidatabase`
--

-- --------------------------------------------------------

--
-- Table structure for table `tblaccomodation`
--

CREATE TABLE `tblaccomodation` (
  `ACCOMID` int(11) NOT NULL,
  `ACCOMODATION` varchar(30) NOT NULL,
  `ACCOMDESC` varchar(90) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblaccomodation`
--

INSERT INTO `tblaccomodation` (`ACCOMID`, `ACCOMODATION`, `ACCOMDESC`) VALUES
(12, 'Standard Room', 'max 22hrs.'),
(13, 'Travelers Time', 'max of 12hrs.'),
(15, 'Family Suite', 'max 22hrs.');

-- --------------------------------------------------------

--
-- Table structure for table `tblauto`
--

CREATE TABLE `tblauto` (
  `autoid` int(11) NOT NULL,
  `start` int(11) NOT NULL,
  `end` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblauto`
--

INSERT INTO `tblauto` (`autoid`, `start`, `end`) VALUES
(1, 11123, 1);

-- --------------------------------------------------------

--
-- Table structure for table `tblfirstpartition`
--

CREATE TABLE `tblfirstpartition` (
  `FirstPID` int(11) NOT NULL,
  `FirstPTitle` text NOT NULL,
  `FirstPImage` varchar(99) NOT NULL,
```

```
  `FirstPSubTitle` text NOT NULL,
  `FirstPDescription` text NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblfirstpartition`
--

INSERT INTO `tblfirstpartition` (`FirstPID`, `FirstPTitle`, `FirstPImage`, `FirstPSubTitle`, `FirstPDescription`) VALUES
(1, 'Welcome to Dragon House', '5page-img1.png', 'In our Hotel', 'Located on the hills of Nice, a short distance from the famous Promenade des Anglais, Hotel Anis is one of the hotels in the Costa Azzurra (or Blue Coast) able to satisfy the different needs of its guests with comfort and first rate services. It is only 2 km from the airport and from highway exits. The hotel has a large parking area , a real luxury in a city like Nice.');

-- --------------------------------------------------------

--
-- Table structure for table `tblguest`
--

CREATE TABLE `tblguest` (
  `GUESTID` int(11) NOT NULL,
  `REFNO` int(11) NOT NULL,
  `G_FNAME` varchar(30) NOT NULL,
  `G_LNAME` varchar(30) NOT NULL,
  `G_CITY` varchar(90) NOT NULL,
  `G_ADDRESS` varchar(90) NOT NULL,
  `DBIRTH` date NOT NULL,
  `G_PHONE` varchar(20) NOT NULL,
  `G_NATIONALITY` varchar(30) NOT NULL,
  `G_COMPANY` varchar(90) NOT NULL,
  `G_CADDRESS` varchar(90) NOT NULL,
  `G_TERMS` tinyint(4) NOT NULL,
  `G_EMAIL` varchar(99) NOT NULL,
  `G_UNAME` varchar(255) NOT NULL,
  `G_PASS` varchar(255) NOT NULL,
  `ZIP` int(11) NOT NULL,
  `LOCATION` varchar(125) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblguest`
--

INSERT INTO `tblguest` (`GUESTID`, `REFNO`, `G_FNAME`, `G_LNAME`, `G_CITY`, `G_ADDRESS`, `DBIRTH`, `G_PHONE`, `G_NATIONALITY`, `G_COMPANY`, `G_CADDRESS`, `G_TERMS`, `G_EMAIL`, `G_UNAME`, `G_PASS`, `ZIP`, `LOCATION`) VALUES
(11122, 0, 'test', 'test', '', 'test', '2000-02-03', '1234567890', 'test', 'test', 'test', 1, 'test@email.com', 'test', 'a94a8fe5ccb19ba61c4c0873d391e987982fbbd3', 0, '');

-- --------------------------------------------------------

--
-- Table structure for table `tblmeal`
--

CREATE TABLE `tblmeal` (
  `MealID` int(11) NOT NULL,
  `MealType` varchar(90) NOT NULL,
  `MealPrice` double NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblmeal`
--

INSERT INTO `tblmeal` (`MealID`, `MealType`, `MealPrice`) VALUES
(4, 'Lunch', 10),
(7, 'HB', 10);

-- --------------------------------------------------------
```

```
--
-- Table structure for table `tblpayment`
--

CREATE TABLE `tblpayment` (
  `SUMMARYID` int(11) NOT NULL,
  `TRANSDATE` datetime NOT NULL,
  `CONFIRMATIONCODE` varchar(30) NOT NULL,
  `PQTY` int(11) NOT NULL,
  `GUESTID` int(11) NOT NULL,
  `SPRICE` double NOT NULL,
  `MSGVIEW` tinyint(1) NOT NULL,
  `STATUS` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblpayment`
--

INSERT INTO `tblpayment` (`SUMMARYID`, `TRANSDATE`, `CONFIRMATIONCODE`, `PQTY`, `GUESTID`,
`SPRICE`, `MSGVIEW`, `STATUS`) VALUES
(1, '2023-06-23 07:12:17', '84o7ddgj', 1, 11122, 1250, 0, 'Confirmed');

-- --------------------------------------------------------

--
-- Table structure for table `tblreservation`
--

CREATE TABLE `tblreservation` (
  `RESERVEID` int(11) NOT NULL,
  `CONFIRMATIONCODE` varchar(50) NOT NULL,
  `TRANSDATE` date NOT NULL,
  `ROOMID` int(11) NOT NULL,
  `ARRIVAL` datetime NOT NULL,
  `DEPARTURE` datetime NOT NULL,
  `RPRICE` double NOT NULL,
  `GUESTID` int(11) NOT NULL,
  `PRORPOSE` varchar(30) NOT NULL,
  `STATUS` varchar(11) NOT NULL,
  `BOOKDATE` datetime NOT NULL,
  `REMARKS` text NOT NULL,
  `USERID` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblreservation`
--

INSERT INTO `tblreservation` (`RESERVEID`, `CONFIRMATIONCODE`, `TRANSDATE`, `ROOMID`,
`ARRIVAL`, `DEPARTURE`, `RPRICE`, `GUESTID`, `PRORPOSE`, `STATUS`, `BOOKDATE`, `REMARKS`,
`USERID`) VALUES
(1, '84o7ddgj', '2023-06-23', 15, '2023-06-23 00:00:00', '2023-06-23 00:00:00', 1250, 11122, 'Travel',
'Confirmed', '0000-00-00 00:00:00', '', 0);

-- --------------------------------------------------------

--
-- Table structure for table `tblroom`
--

CREATE TABLE `tblroom` (
  `ROOMID` int(11) NOT NULL,
  `ROOMNUM` int(11) NOT NULL,
  `ACCOMID` int(11) NOT NULL,
  `ROOM` varchar(30) NOT NULL,
  `ROOMDESC` varchar(255) NOT NULL,
  `NUMPERSON` int(11) NOT NULL,
  `PRICE` double NOT NULL,
  `ROOMIMAGE` varchar(255) NOT NULL,
  `OROOMNUM` int(11) NOT NULL,
  `RoomTypeID` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;
```

```
--
-- Dumping data for table `tblroom`
--

INSERT INTO `tblroom` (`ROOMID`, `ROOMNUM`, `ACCOMID`, `ROOM`, `ROOMDESC`, `NUMPERSON`,
`PRICE`, `ROOMIMAGE`, `OROOMNUM`, `RoomTypeID`) VALUES
(11, 0, 12, 'Wing A', 'without TV', 1, 10, 'rooms/1.jpg', 1, 0),
(12, 0, 12, 'Wing A', 'Without TV', 2, 15, 'rooms/1.jpg', 1, 0),
(13, 1, 13, 'Wing A', 'Without TV', 1, 445, 'rooms/2.jpg', 3, 0),
(14, 2, 13, 'Wing A', 'Without TV', 2, 495, 'rooms/3.jpg', 4, 0),
(15, 0, 15, 'Wing A', 'Without TV | for groups - minimum of 5 pax | 250php per person', 5, 1250,
'rooms/4.jpg', 1, 0),
(16, -2, 12, 'Wing B and Ground Floor', 'With TV', 1, 725, 'rooms/3page-img13.jpg', 1, 0);

-- --------------------------------------------------------

--
-- Table structure for table `tblroomtype`
--

CREATE TABLE `tblroomtype` (
  `RoomTypeID` int(11) NOT NULL,
  `RoomType` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

-- --------------------------------------------------------

--
-- Table structure for table `tblslideshow`
--

CREATE TABLE `tblslideshow` (
  `SlideID` int(11) NOT NULL,
  `SlideImage` text NOT NULL,
  `SlideCaption` text NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tblslideshow`
--

INSERT INTO `tblslideshow` (`SlideID`, `SlideImage`, `SlideCaption`) VALUES
(15, 'images.jpg', ''),
(16, 'slide-image-3.jpg', ''),
(17, 'header-bg1.jpg', ''),
(18, 'slide-image-3.jpg', ''),
(19, 'Desert.jpg', ''),
(20, 'Koala.jpg', '');

-- --------------------------------------------------------

--
-- Table structure for table `tbltitle`
--

CREATE TABLE `tbltitle` (
  `TItleID` int(11) NOT NULL,
  `Title` text NOT NULL,
  `Subtitle` text NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tbltitle`
--

INSERT INTO `tbltitle` (`TItleID`, `Title`, `Subtitle`) VALUES
(1, 'Dragon House', '24hrs.');

-- --------------------------------------------------------

--
-- Table structure for table `tbluseraccount`
--
```

```
CREATE TABLE `tbluseraccount` (
  `USERID` int(11) NOT NULL,
  `UNAME` varchar(30) NOT NULL,
  `USER_NAME` varchar(30) NOT NULL,
  `UPASS` varchar(90) NOT NULL,
  `ROLE` varchar(30) NOT NULL,
  `PHONE` int(11) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tbluseraccount`
--

INSERT INTO `tbluseraccount` (`USERID`, `UNAME`, `USER_NAME`, `UPASS`, `ROLE`, `PHONE`) VALUES
(1, 'Anonymous', 'admin', 'd033e22ae348aeb5660fc2140aec35850c4da997', 'Administrator', 912856478);

-- --------------------------------------------------------

--
-- Table structure for table `tbl_setting_contact`
--

CREATE TABLE `tbl_setting_contact` (
  `SetCon_ID` int(11) NOT NULL,
  `SetConLocation` varchar(99) NOT NULL,
  `SetConEmail` varchar(99) NOT NULL,
  `SetConContactNo` varchar(99) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1 COLLATE=latin1_swedish_ci;

--
-- Dumping data for table `tbl_setting_contact`
--

INSERT INTO `tbl_setting_contact` (`SetCon_ID`, `SetConLocation`, `SetConEmail`, `SetConContactNo`)
VALUES
(1, 'Guanzon Street, Kabankalan Catholic College Kabankalan City, 6111 philippines',
'kcc_1927@yahoo.com', '(034)471-24-79');

--
-- Indexes for dumped tables
--

--
-- Indexes for table `tblaccomodation`
--
ALTER TABLE `tblaccomodation`
  ADD PRIMARY KEY (`ACCOMID`);

--
-- Indexes for table `tblauto`
--
ALTER TABLE `tblauto`
  ADD PRIMARY KEY (`autoid`);

--
-- Indexes for table `tblfirstpartition`
--
ALTER TABLE `tblfirstpartition`
  ADD PRIMARY KEY (`FirstPID`);

--
-- Indexes for table `tblguest`
--
ALTER TABLE `tblguest`
  ADD PRIMARY KEY (`GUESTID`);

--
-- Indexes for table `tblmeal`
--
ALTER TABLE `tblmeal`
  ADD PRIMARY KEY (`MealID`);

--
-- Indexes for table `tblpayment`
```

```
--
ALTER TABLE `tblpayment`
  ADD PRIMARY KEY (`SUMMARYID`),
  ADD UNIQUE KEY `CONFIRMATIONCODE` (`CONFIRMATIONCODE`),
  ADD KEY `GUESTID` (`GUESTID`);

--
-- Indexes for table `tblreservation`
--
ALTER TABLE `tblreservation`
  ADD PRIMARY KEY (`RESERVEID`),
  ADD KEY `ROOMID` (`ROOMID`),
  ADD KEY `GUESTID` (`GUESTID`),
  ADD KEY `CONFIRMATIONCODE` (`CONFIRMATIONCODE`);

--
-- Indexes for table `tblroom`
--
ALTER TABLE `tblroom`
  ADD PRIMARY KEY (`ROOMID`),
  ADD KEY `ACCOMID` (`ACCOMID`);

--
-- Indexes for table `tblroomtype`
--
ALTER TABLE `tblroomtype`
  ADD PRIMARY KEY (`RoomTypeID`);

--
-- Indexes for table `tblslideshow`
--
ALTER TABLE `tblslideshow`
  ADD PRIMARY KEY (`SlideID`);

--
-- Indexes for table `tbltitle`
--
ALTER TABLE `tbltitle`
  ADD PRIMARY KEY (`TItleID`);

--
-- Indexes for table `tbluseraccount`
--
ALTER TABLE `tbluseraccount`
  ADD PRIMARY KEY (`USERID`);

--
-- Indexes for table `tbl_setting_contact`
--
ALTER TABLE `tbl_setting_contact`
  ADD PRIMARY KEY (`SetCon_ID`);

--
-- AUTO_INCREMENT for dumped tables
--

--
-- AUTO_INCREMENT for table `tblaccomodation`
--
ALTER TABLE `tblaccomodation`
  MODIFY `ACCOMID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=16;

--
-- AUTO_INCREMENT for table `tblauto`
--
ALTER TABLE `tblauto`
  MODIFY `autoid` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;

--
-- AUTO_INCREMENT for table `tblfirstpartition`
--
ALTER TABLE `tblfirstpartition`
  MODIFY `FirstPID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;
```

```
--
-- AUTO_INCREMENT for table `tblguest`
--
ALTER TABLE `tblguest`
  MODIFY `GUESTID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=11123;

--
-- AUTO_INCREMENT for table `tblmeal`
--
ALTER TABLE `tblmeal`
  MODIFY `MealID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=8;

--
-- AUTO_INCREMENT for table `tblpayment`
--
ALTER TABLE `tblpayment`
  MODIFY `SUMMARYID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;

--
-- AUTO_INCREMENT for table `tblreservation`
--
ALTER TABLE `tblreservation`
  MODIFY `RESERVEID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;

--
-- AUTO_INCREMENT for table `tblroom`
--
ALTER TABLE `tblroom`
  MODIFY `ROOMID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=17;

--
-- AUTO_INCREMENT for table `tblroomtype`
--
ALTER TABLE `tblroomtype`
  MODIFY `RoomTypeID` int(11) NOT NULL AUTO_INCREMENT;

--
-- AUTO_INCREMENT for table `tblslideshow`
--
ALTER TABLE `tblslideshow`
  MODIFY `SlideID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=21;

--
-- AUTO_INCREMENT for table `tbltitle`
--
ALTER TABLE `tbltitle`
  MODIFY `TItleID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;

--
-- AUTO_INCREMENT for table `tbluseraccount`
--
ALTER TABLE `tbluseraccount`
  MODIFY `USERID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;

--
-- AUTO_INCREMENT for table `tbl_setting_contact`
--
ALTER TABLE `tbl_setting_contact`
  MODIFY `SetCon_ID` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=2;
COMMIT;

/*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
/*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
/*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */
```

index.php

```
<?php
require_once("includes/initialize.php");
$content='home.php';
$view = (isset($_GET['p']) && $_GET['p'] != '') ? $_GET['p'] : '';
$account = 'guest/update.php';
$small_nav = 'theme/small-navbar.php';
switch ($view) {

  case '1' :
        $title="Home";
        $content='home.php';
    break;
  case 'gallery' :
    $title="Gallery";
    $content ='gallery.php';
    break;
  case 'about' :
      $title="About Us";
    $content = 'aboutus.php';
    break;

   case 'rooms' :
    $title="Rooms and Rates";
    $content ='room_rates.php';
    break;

  case 'contact' :
      $title="Contacts";
    $content ='contact.php';
    break;

 case 'booking' :
      $title="Book A Room";
    $content ='bookAroom.php';
    break;

     case 'accomodation' :
      $title="Accomodation";
      $content='accomodation.php';
    break;

  case 'largeview' :
      // $title="View";
    $content ='largeimg.php';
    break;
  default :
      $title="Home";
    $content ='home.php';
}

require_once ('theme/template.php');

?>
```

user.php

```
<?php
require_once(LIB_PATH.DS.'database.php');
class User{

	protected static $tbl_name = "tbluseraccount";
	function db_fields(){
		global $mydb;
		return $mydb->getFieldsOnOneTable(self::$tbl_name);
	}
	function listOfmembers(){
		global $mydb;
		$mydb->setQuery("Select * from ".self::$tbl_name);
		$cur = $mydb->loadResultList();
		return $cur;

	}
	function single_user($id=0){
			global $mydb;
			$mydb->setQuery("SELECT * FROM ".self::$tbl_name." Where `USERID`={$id}
LIMIT 1");
			$cur = $mydb->loadSingleResult();
			return $cur;
	}
	function find_all_user($name=""){
			global $mydb;
			$mydb->setQuery("SELECT *
								FROM  ".self::$tbl_name."
								WHERE  `UNAME` ='{$name}'");
			$cur = $mydb->executeQuery();
			$row_count = $mydb->num_rows($cur);//get the number of count
			return $row_count;
	}

	 static function AuthenticateUser($email="", $h_upass=""){
		global $mydb;
		$mydb->setQuery("SELECT * FROM `tbluseraccount` WHERE `USER_NAME`='" . $email .
"' and `UPASS`='" . $h_upass ."' LIMIT 1");
		$cur = $mydb->executeQuery();
		$row_count = $mydb->num_rows($cur);//get the number of count
		 if ($row_count == 1){
		 $found_user = $mydb->loadSingleResult();
		   $_SESSION['ADMIN_ID']			= $found_user->USERID;
	$_SESSION['ADMIN_UNAME']		= $found_user->UNAME;
	$_SESSION['ADMIN_USERNAME']			= $found_user->USER_NAME;
	$_SESSION['ADMIN_UPASS']		= $found_user->UPASS;
	$_SESSION['ADMIN_UROLE']		= $found_user->ROLE;
	  return true;
			}else{
				return false;
			}

	}
/*	static function AuthenticateMember($email="", $h_upass=""){
		global $mydb;
		$res=$mydb->setQuery("SELECT * FROM `user_info` WHERE `email`='" . $email . "' and
`pword`='" . $h_upass ."' LIMIT 1");
		 $found_user = $mydb->loadSingleResult();
		  $_SESSION['member_id'] = $found_user['member_id'];
	$_SESSION['fName']	= $found_user['fName'];
	$_SESSION['lName']	= $found_user['lName'];
	$_SESSION['email']	= $found_user['email'];
	$_SESSION['pword']	= $found_user['pword'];
	$_SESSION['mm']		= $found_user['mm'];
	$_SESSION['dd']		= $found_user['dd'];
	$_SESSION['yy']		= $found_user['yy'];
```

```
$_SESSION['gender']    = $found_user['gender'];
            return $found_user;
  } */

  /---Instantiation of Object dynamically---/
  static function instantiate($record) {
            $object = new self;

            foreach($record as $attribute=>$value){
              if($object->has_attribute($attribute)) {
                $object->$attribute = $value;
              }
            }
            return $object;
  }


  /--Cleaning the raw data before submitting to Database--/
  private function has_attribute($attribute) {
    // We don't care about the value, we just want to know if the key exists
    // Will return true or false
    return array_key_exists($attribute, $this->attributes());
  }

  protected function attributes() {
            // return an array of attribute names and their values
    global $mydb;
    $attributes = array();
    foreach($this->db_fields() as $field) {
      if(property_exists($this, $field)) {
                        $attributes[$field] = $this->$field;
            }
    }
    return $attributes;
  }

  protected function sanitized_attributes() {
    global $mydb;
    $clean_attributes = array();
    // sanitize the values before submitting
    // Note: does not alter the actual value of each attribute
    foreach($this->attributes() as $key => $value){
      $clean_attributes[$key] = $mydb->escape_value($value);
    }
    return $clean_attributes;
  }


  /--Create,Update and Delete methods--/
  public function save() {
    // A new record won't have an id yet.
    return isset($this->id) ? $this->update() : $this->create();
  }

  public function create() {
            global $mydb;
            // Don't forget your SQL syntax and good habits:
            // - INSERT INTO table (key, key) VALUES ('value', 'value')
            // - single-quotes around all values
            // - escape all values to prevent SQL injection
            $attributes = $this->sanitized_attributes();
            $sql = "INSERT INTO ".self::$tbl_name." (";
            $sql .= join(", ", array_keys($attributes));
            $sql .= ") VALUES ('";
            $sql .= join("', '", array_values($attributes));
            $sql .= "')";
  echo $mydb->setQuery($sql);

   if($mydb->executeQuery()) {
      $this->id = $mydb->insert_id();
      return true;
    } else {
      return false;
    }
```

```
	}

	public function update($id=0) {
	  global $mydb;
		$attributes = $this->sanitized_attributes();
		$attribute_pairs = array();
		foreach($attributes as $key => $value) {
		  $attribute_pairs[] = "{$key}='{$value}'";
		}
		$sql = "UPDATE ".self::$tbl_name." SET ";
		$sql .= join(", ", $attribute_pairs);
		$sql .= " WHERE USERID=". $id;
	  $mydb->setQuery($sql);
		if(!$mydb->executeQuery()) return false;

	}

	public function delete($id=0) {
		global $mydb;
		  $sql = "DELETE FROM ".self::$tbl_name;
		  $sql .= " WHERE USERID=". $id;
		  $sql .= " LIMIT 1 ";
		  $mydb->setQuery($sql);

			if(!$mydb->executeQuery()) return false;

	}

}
?>
```

login.php

```
<?php
 require_once ("includes/initialize.php");

 if(isset($_POST['gsubmit'])){

  $email = trim($_POST['username']);
  $upass  = trim($_POST['pass']);
  $h_upass = sha1($upass);

   if ($email == '' OR $upass == '') {
      message("Invalid Username and Password!", "error");
       redirect(WEB_ROOT."booking/index.php?view=logininfo");

    } else {
        $guest = new Guest();
        $res = $guest::guest_login($email,$h_upass);

        if ($res==true){
           redirect(WEB_ROOT."booking/index.php?view=payment");
        }else{
            message("Invalid Username and Password! Please contact administrator", "error");
            redirect(WEB_ROOT."booking/index.php?view=logininfo");
        }

 }
 }
?>
```

database.php

```
<?php
require_once("config.php");
class Database {
	var $sql_string = '';
	var $error_no = 0;
	var $error_msg = '';
	private $conn;
	public $last_query;
	private $magic_quotes_active;
	private $real_escape_string_exists;

	function __construct() {
		$this->open_connection();
		// $this->magic_quotes_active = get_magic_quotes_gpc();
		$this->real_escape_string_exists = function_exists("mysqli_real_escape_string");
	}

	public function open_connection() {
		$this->conn = mysqli_connect(DB_SERVER,DB_USER,DB_PASS);
		if(!$this->conn){
			echo "Problem in database connection! Contact administrator!";
			exit();

		}else{

			$db_select = mysqli_select_db($this->conn,DB_NAME);
			if (!$db_select) {
				echo "Problem in selecting database! Contact administrator!";
				exit();
			}
		}

	}

	function setQuery($sql='') {
		$this->sql_string=$sql;
	}

	function executeQuery() {
		$result = mysqli_query($this->conn,$this->sql_string);
		$this->confirm_query($result);
		return $result;
	}

	private function confirm_query($result) {
		if(!$result){
			$this->error_no = mysqli_errno($this->conn);
			$this->error_msg = mysqli_error($this->conn);
			return false;
		}
		return $result;
	}

	function loadResultList( $key='' ) {
		$cur = $this->executeQuery();

		$array = array();
		while ($row = mysqli_fetch_object($cur)) {
			if ($key) {
				$array[$row->$key] = $row;
			} else {
				$array[] = $row;
			}
		}
		mysqli_free_result( $cur );
```

```
		return $array;
	}

	function loadSingleResult() {
		$cur = $this->executeQuery();

		while ($row = mysqli_fetch_object($cur)) {
		return $data = $row;
		}
		mysqli_free_result($cur);
		//return $data;
	}

	function getFieldsOnOneTable($tbl_name) {

		$this->setQuery("DESC ".$tbl_name);
		$rows = $this->loadResultList();

		$f = array();
		for ( $x=0; $x<count($rows); $x++ ) {
			$f[] = $rows[$x]->Field;
		}

		return $f;
	}

	public function fetch_array($result) {
		return mysqli_fetch_array($result);
	}
	//gets the number or rows
	public function num_rows($result_set) {
		return mysqli_num_rows($result_set);
	}

	public function insert_id() {
   // get the last id inserted over the current db connection
		return mysqli_insert_id($this->conn);
	}

	public function affected_rows() {
		return mysqli_affected_rows($this->conn);
	}

	 public function escape_value( $value ) {
		if( $this->real_escape_string_exists ) { // PHP v4.3.0 or higher
			// undo any magic quote effects so mysql_real_escape_string can do the work
			if($this->magic_quotes_active) { $value = stripslashes($value); }
			$value = mysqli_real_escape_string($this->conn,$value);
		} else { // before PHP v4.3.0
			// if magic quotes aren't already on then add slashes manually
			if( !$this->magic_quotes_active ) { $value = addslashes($value); }
			// if magic quotes are active, then the slashes already exist
		}
		return $value;
	}

	public function close_connection() {
		if(isset($this->conn)) {
			mysqli_close($this->conn);
			unset($this->conn);
		}
	}

}
$mydb = new Database();


?>
```

Chapter 4

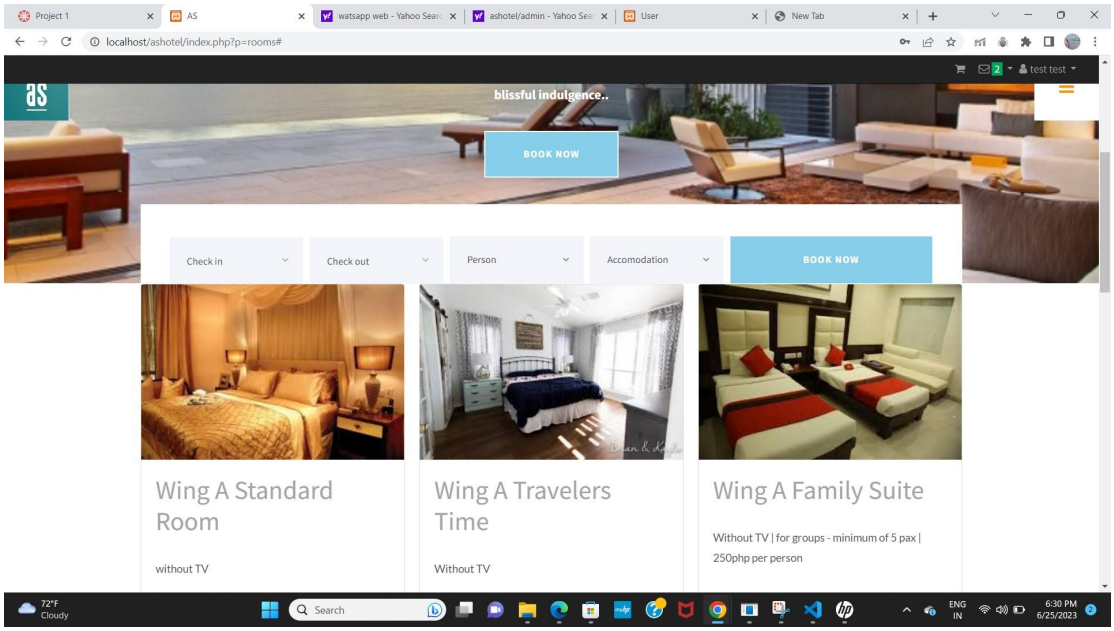
Test Run Results

In this chapter, we will present the test run results of the hotel reservation system. We conducted various tests to ensure the functionality and performance of the system. The following screenshots illustrate the test scenarios and their outcomes.

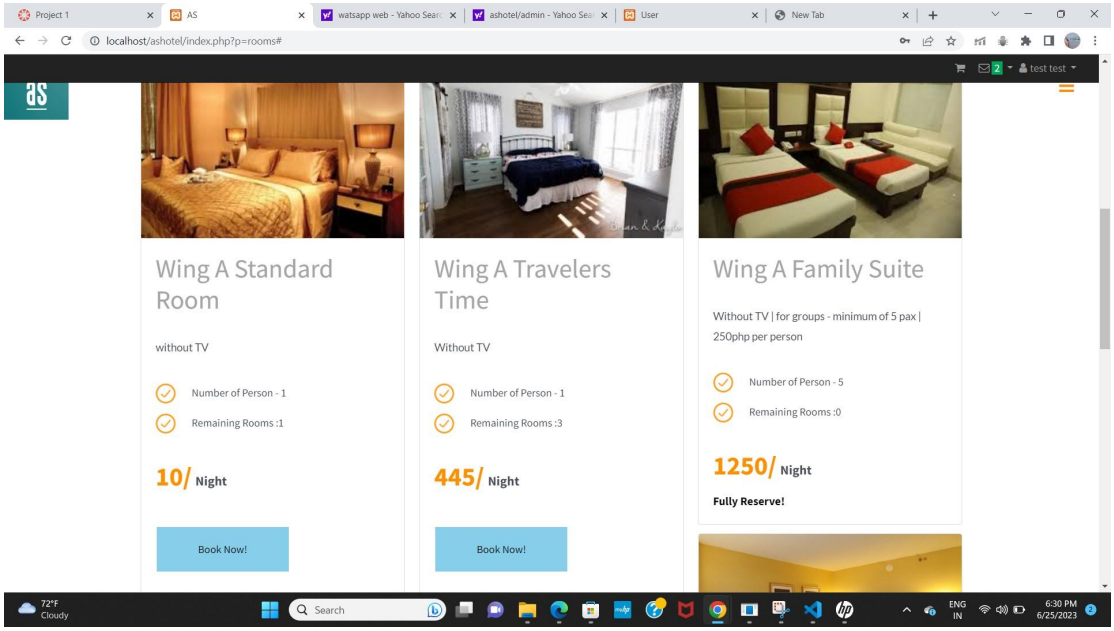
4.1 Test Scenario 1: Valid Reservation

In this test scenario, we entered valid information for a reservation, including the check-in and check-out dates, number of rooms, adults, and children. The system successfully displayed the available rooms, allowed us to select a room type, and proceeded to the confirmation page.

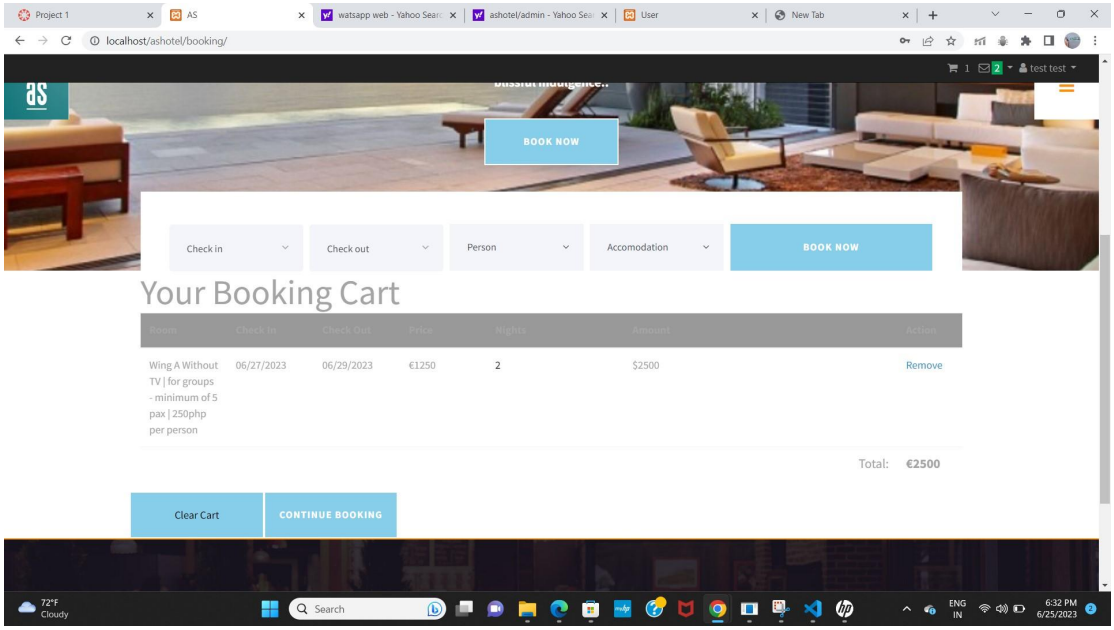
Screenshot 1: Reservation Form



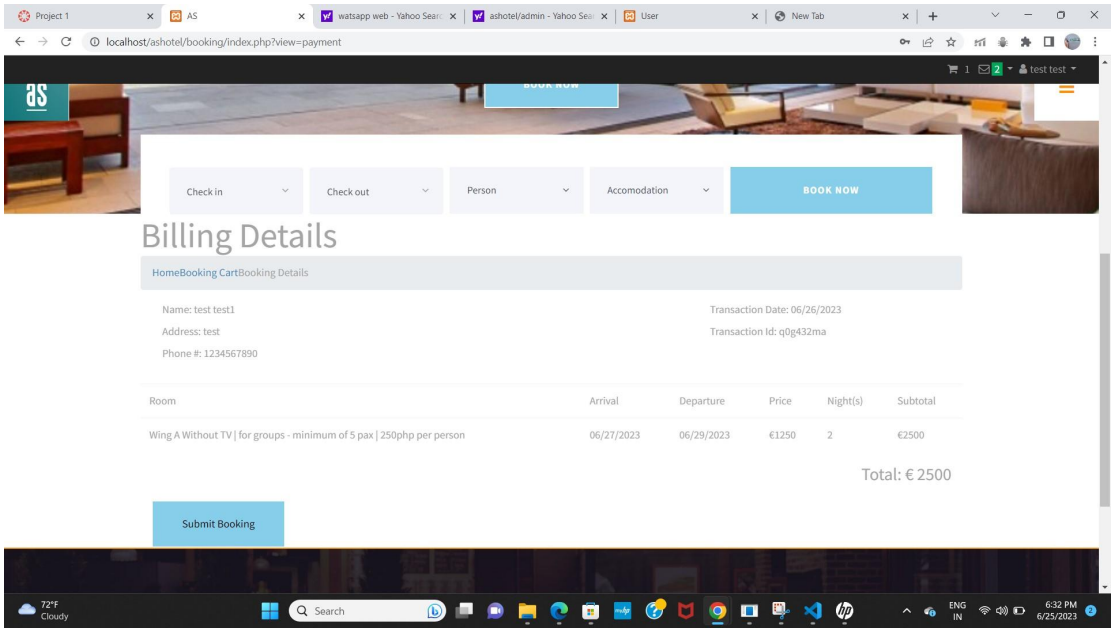
Screenshot 2: Available Rooms



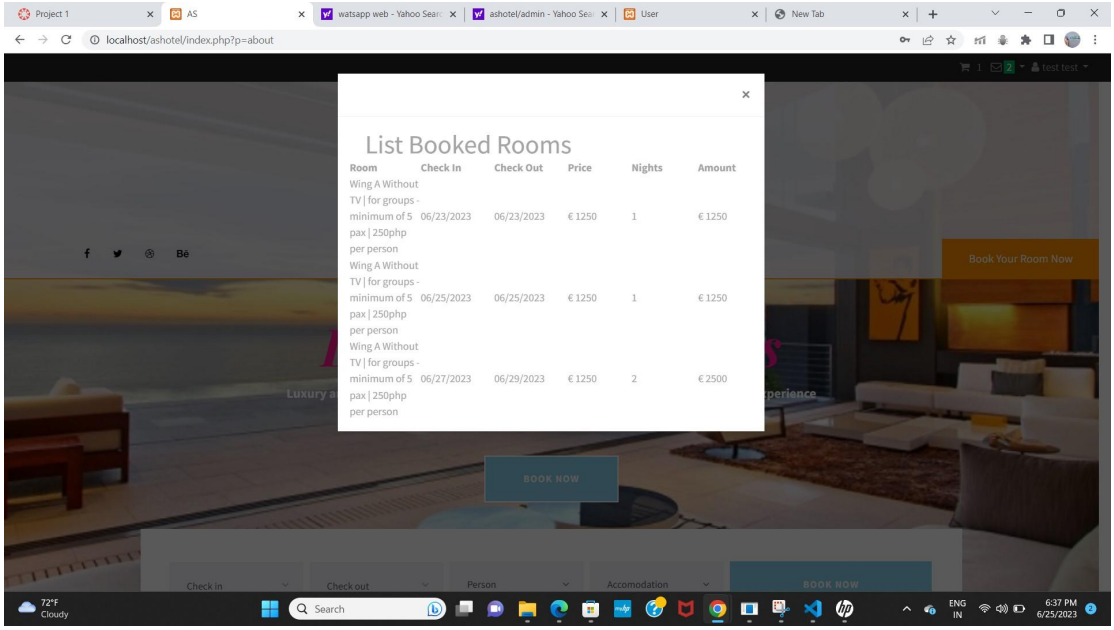
Screenshot 3: Confirmation Page



Screenshot 4: Billing details



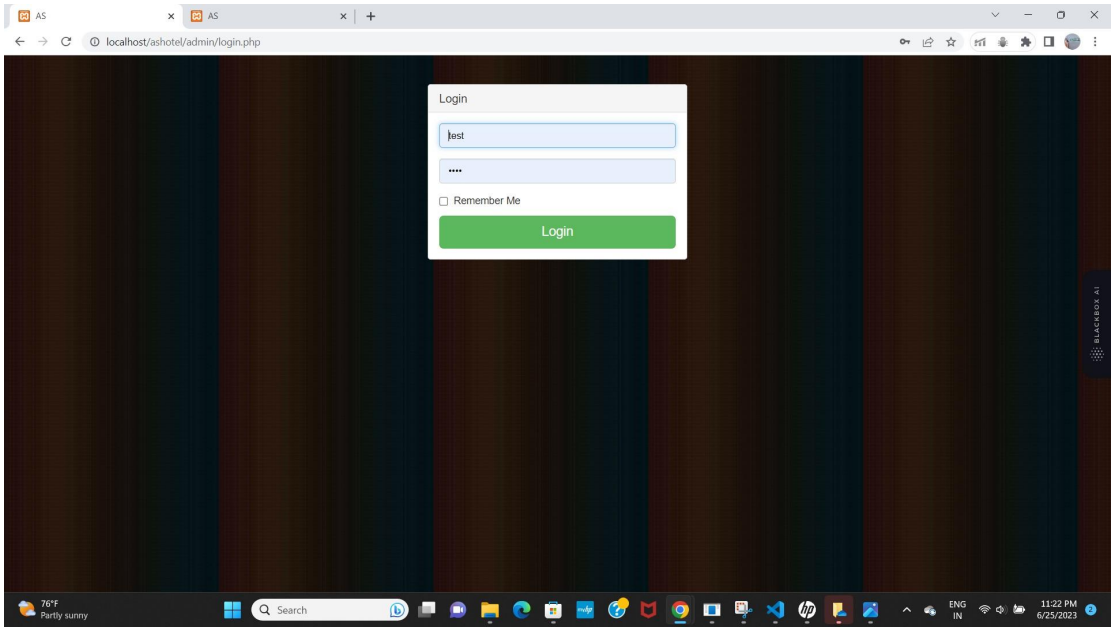
Screenshot 5: List of rooms booked in a particular user account



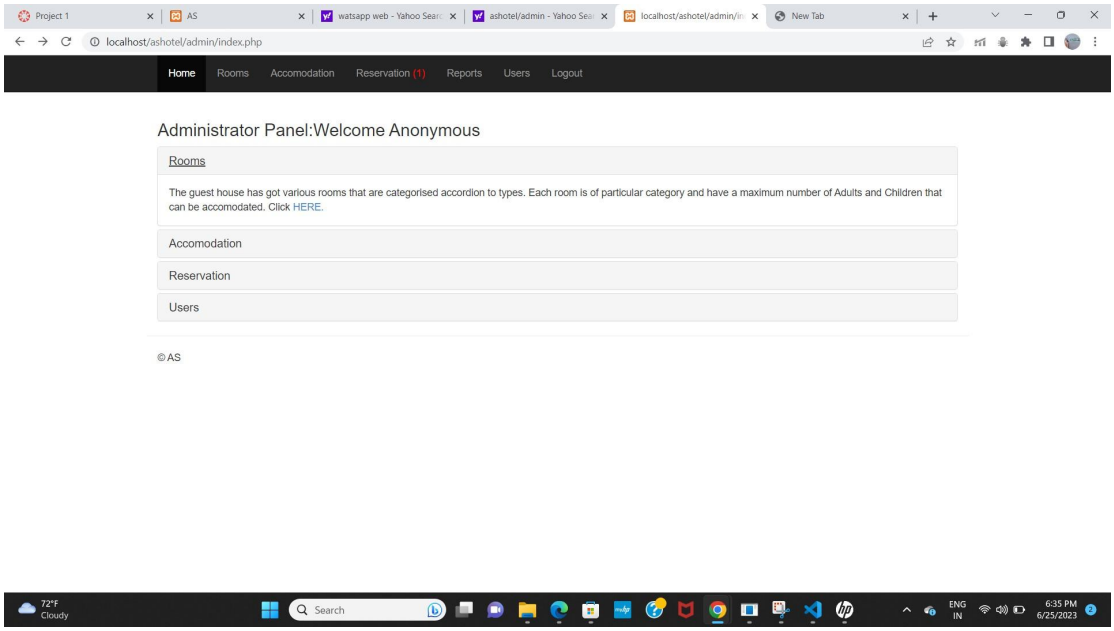
4.2 Test Scenario 2: Admin Login

In this test scenario, we accessed the admin system by logging in with the correct credentials. The system authenticated the login and provided access to the administrative functions.

Screenshot 6: Admin Login Page



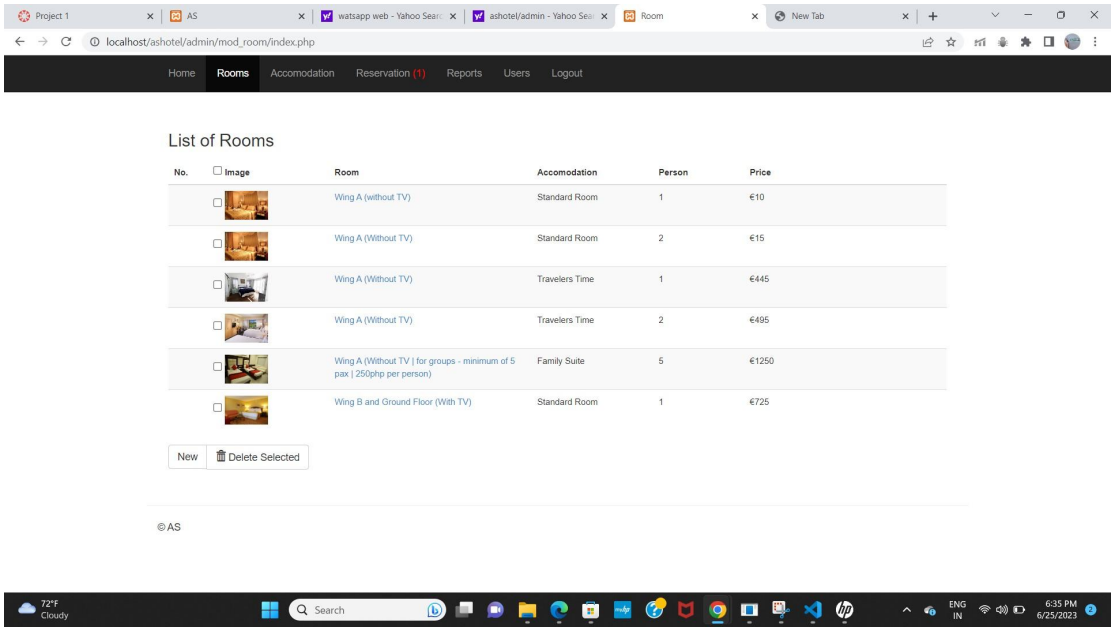
Screenshot 7: Admin Dashboard



4.3 Test Scenario 3: Modify Room Details

In this test scenario, we modified the details of a specific room, including the room type and price, using the admin system. The system successfully updated the database with the new information.

Screenshot 8: Modify Room Details



Overall, the test run results demonstrate the successful implementation and functionality of the hotel reservation system. The system effectively handles valid and invalid inputs, displays available rooms, and allows users to make reservations. The admin system provides secure access for management to modify database content.

Chapter 5

Conclusions and Discussions

5.1 Cool Options for Online Hotel Booking

The project's creation, a hotel reservation system, has a number of innovative features that improve the user experience and make life easier for both hotel management and visitors. Among these qualities are:

Dynamic Availability: The system dynamically retrieves data from the database to provide the current status of available rooms for the chosen length of stay. Users will always be given correct and current information thanks to this.

Design for Responsiveness: The Bootstrap framework was used to provide responsive views for the system. Because of this, users of desktops, tablets, and smartphones will see the website in a seamless manner across a range of screen sizes and devices.

Personalized Confirmation Page: Users are taken to a confirmation page after making a reservation where they can enter their personal data. The page provides a unique confirmation number for convenient reference, summarizes the reservation information, and calculates the total cost.

Admin System: Hotel management may securely view and edit database material using the web-based admin system. It makes it possible to do functions like expanding the number of rooms, altering room rates, and maintaining the entire system.

Search Functionality: The system's search function enables users to look up reservations using a variety of parameters, such as the confirmation number, last name, or email address. By eliminating the need for users to log in, this streamlines the process of getting reservation information.

5.2 Room for Future Growth

In spite of the fact that the hotel reservation system offers a strong foundation for managing reservations and room availability, there are several areas that could use enhancement in the future:

User Registration and Login: Implementing a user registration and login system can provide further advantages including preserving user preferences, offering tailored experiences, and enabling users to access their reservation history.

Payment Integration: By integrating a payment gateway, users will be able to securely pay for their bookings online. This functionality would make the booking process more convenient and efficient.

Advanced Search choices: Adding advanced choices to the search feature, including filtering by room amenities or particular dates, can improve the user experience and provide you more freedom while looking for accommodations.

Automated alerts: Implementing automated email or SMS alerts for reservation confirmations, reminders, or updates can increase communication with guests and minimize manual follow-up activities.

Performance optimization: Ensuring smooth and effective operation, especially during times of high traffic, can be accomplished by continuously improving the system's performance, including database queries and page load times.

5.3 Restrictions of the Hotel Booking Website

Despite the hotel reservation system's effective adoption, there are several drawbacks that should be acknowledged:

Scalability: If the number of users and reservations considerably rises, the system's scalability can be a problem. To prepare for future development, adequate performance testing and infrastructure scalability measures should be put in place.

Security Considerations: Although the system has a login feature for the administrative system, extra security measures, including the usage of secure coding principles, input validation, and defense against common web vulnerabilities, should be taken into consideration to protect user and system data.

Localization and Internationalization: At the moment, the system operates under the assumption of a single language and currency. Multiple languages, currencies, and date formats can be supported with the

addition of localization and internationalization tools to serve a user base that is worldwide.

Reporting and Analytics: The addition of reporting and analytics capabilities would offer insightful information on reservation trends, occupancy rates, and other important performance factors. Making sensible business decisions and streamlining operations can both be facilitated by this knowledge.

In conclusion, the hotel booking system created for this project shows how PHP and MySQL can be successfully integrated to produce a useful and user-friendly platform for booking hotels. The system's cool features, like responsive design, dynamic availability, and the admin system, improve the user experience. However, there is still room for advancements in the future, such as user registration.

Chapter 6

Youtube Link:

https://youtu.be/6iOqgxeXZvc

Narration:

Welcome to the demonstration of our hotel reservation system. In this video, we will showcase the key features and functionality of our web-based application.

As you can see, the home page provides a brief introduction to our hotel, including its name, address, contact details, and directions. Users can easily navigate through the different sections of the website using the intuitive menu at the top.

Let's proceed to the reservation process. Here, users can select their check-in and check-out dates, choose the number of persons, and specify the type of accomodation. The system validates the user's inputs, ensuring that the check-out date is later than the check-in date and that the number of people is a positive value.

Once the user submits the reservation request, the system dynamically retrieves information from the backend MySQL database to display the available rooms for the specified duration of stay. The room listings include images, room types, prices per night, and the total cost for the stay period.

After selecting the preferred room type, the user is redirected to the confirmation page. Here, users are prompted to enter their personal information, such as name, address, contact details, and email address. The page also summarizes the room type, stay period, cost of the stay, and provides a unique confirmation number for reference.

Now that the reservation is confirmed, let's explore the admin system. The web-based admin system is accessible through a login/logout feature, ensuring the security and privacy of the hotel management.

Once logged in, hotel management can easily modify the database content. They can add new rooms, change room prices, and perform other administrative tasks to ensure the smooth operation of the hotel. They can see the guest details and their status here. They can also see the report of the rooms available and confirmed here.

Our website is designed to be responsive, ensuring a seamless user experience across different devices. Bootstrap framework has been utilized to create visually appealing and mobile-friendly views..

In conclusion, our hotel reservation system provides a user-friendly and efficient platform for guests to make reservations and for hotel management to manage room availability and other administrative tasks. With its intuitive interface, dynamic room availability, and responsive design, it offers a seamless booking experience for our valued guests.

Thank you for watching our demonstration of the hotel reservation system. Should you have any further questions or feedback, please feel free to reach out to us.

Chapter 7

References:

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