Hotel Reservation System

By

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Under Guidance of Ms. Sathya

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I am deeply grateful to Ms. Sathya for her unwavering support and expertise in guiding me through the development of this DBMS lab report on the hotel reservation system. Her insightful feedback and encouragement have been invaluable assets in ensuring the success of this project. Her dedication to fostering our understanding of database management systems has truly made a difference in our learning journey.

Abstract

The Hotel Reservation System provides a user-friendly platform for customers to register and reserve rooms according to their preferences. Upon registration, each user is assigned a unique customer_id, which serves as their identifier throughout the reservation process. Using their customer_id, users can browse available rooms, select their desired dates, duration of stay, and specify any room preferences they may have

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Introduction

The Hotel Reservation System offers a convenient solution for travelers to secure their accommodations in advance, alleviating the stress and uncertainty associated with last-minute room searches. By enabling users to register or pre-book their rooms beforehand, the system ensures that their preferred accommodations are reserved and waiting for them upon arrival.

In scenarios where travelers arrive late at night or during peak periods when most rooms are occupied, pre-booking through the Hotel Reservation System proves invaluable. Users can rest assured knowing that their reserved room will be held for them, regardless of the time they arrive. This not only provides peace of mind but also eliminates the hassle of scrambling to find available rooms in unfamiliar surroundings. Central to the Hotel Reservation System is the concept of customer convenience. By requiring users to obtain a unique customer ID for booking, the system ensures efficient management of reservations and personalized service delivery. New users can easily register by clicking on the "Join Now" option, streamlining the process of creating an account and initiating their booking journey.

Features

- 1. User Registration: Customers can create an account within the system, providing necessary personal information for registration.
- 2. Unique Customer ID: Upon successful registration, each user is assigned a unique customer_id, facilitating easy identification and management of reservations.
- 3. Room Selection: Users can view available rooms based on their selected dates and duration of stay. They can browse through various room options, including room type, amenities, and price.
- Reservation Management: Customers can make reservations by selecting their preferred room and specifying the check-in and check-out dates. They can also indicate any special preferences or requests, such as room location or additional services.

5. Real-time Availability: The system provides real-time updates on room availability, ensuring accurate and up-to-date information for users during the reservation process.

Hotel Reservation System Interface:

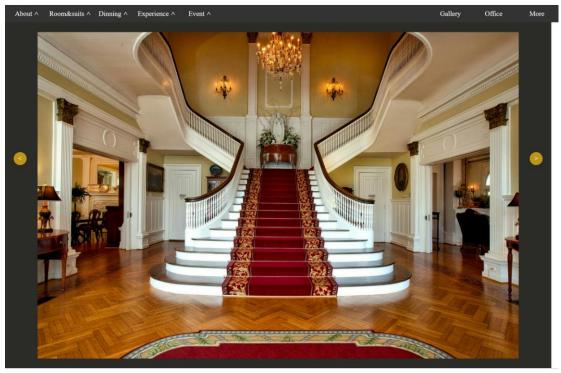
Home page:

The Home Page serves as the virtual entrance to the hotel, offering guests a glimpse into its ambiance and offerings. To captivate users and encourage exploration, the following elements are integrated:

- Visual Appeal: The Home Page features striking imagery of the hotel's exterior, lobby, and key amenities, evoking a sense of luxury and comfort.
- Branding Elements: Consistent branding elements such as the hotel logo, color scheme, and typography establish a cohesive identity and reinforce brand recognition.
- Design Rooms Showcase: A carousel or grid layout showcasing high-resolution images of the hotel's design rooms allows guests to envision their stay and select their preferred accommodation.
- Navigation Convenience: A user-friendly navigation menu, strategically placed and intuitively designed, enables seamless transition to other sections of the website, including the Reservation and Join Us pages.



Sign in | join now | Find Reservetions | @English | INR | 🛛



Reservation page:

The Reservation Page is the heart of the HRS interface, where guests initiate the booking process. To simplify this process and enhance user satisfaction, the following features are implemented:

- Streamlined Booking Form: A concise and intuitive booking form prompts users to input essential details such as check-in and check-out dates, number of rooms required, and room preferences (e.g., Premium, Signature, Comfort).
- Dynamic Room Availability Display: Real-time updates on room availability based on the selected dates provide transparency and assist users in making informed decisions.
- Personalization Options: Additional fields for special requests or preferences allow guests to tailor their experience, such as requesting a specific floor or amenities.

• Responsive Design: The Reservation Page is designed with responsiveness in mind, ensuring compatibility across various devices and screen sizes for a seamless booking experience on desktops, tablets, and smartphones.

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	customer_id	The second	
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	Todate		
	dd-mm-yyyy		
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	Platinum	~	
	No_Of_Rooms		A Company of the
	Submit		
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		and the	
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Join us page:

The Join Us Page serves as the gateway for new guests to register and become part of the hotel's community. To encourage registration and simplify the process, the following strategies are employed:

- User-Friendly Registration Form: A concise and easy-to-complete registration form prompts users to provide basic information such as name, email address, and phone number.
- Database Integration: Seamless integration with the HRS database ensures that user information is securely stored and accessible for future bookings, while also assigning a unique customer ID for identification and tracking purposes.
- Clear Call-to-Action: A prominent call-to-action button encourages users to register, accompanied by persuasive copy highlighting the benefits of joining the hotel's loyalty program or newsletter.

• Privacy Assurance: Transparent information regarding data security measures and privacy policies instills trust and confidence in users, alleviating concerns about the confidentiality of their personal information

Name	
Enter your name	
Email address	
Enter your email	
Phone number	
Enter your phone number	

Signup Form

EER Diagram of hsr database:

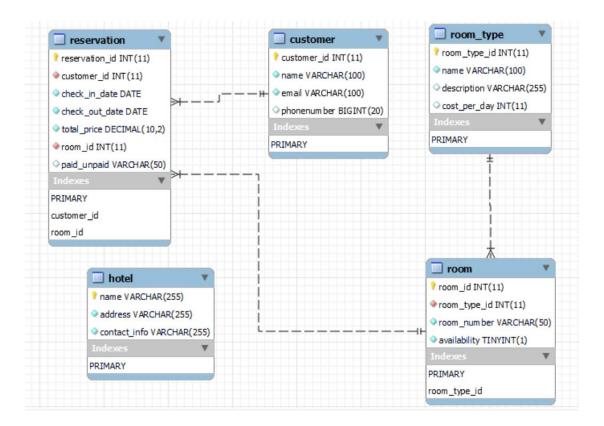


Table Schema:

Hotel Table

```
use hsr;
CREATE TABLE Hotel (
    name VARCHAR(255) NOT NULL,
    address VARCHAR(255) NOT NULL,
    contact_info VARCHAR(255) NOT NULL,
    PRIMARY KEY (name) -- Assuming the hotel name is unique
);
```

Room Table

```
> CREATE TABLE Room (
    room_id INT PRIMARY KEY AUTO_INCREMENT,
    room_type_id INT NOT NULL,
    number VARCHAR(50) NOT NULL,
    availability BOOLEAN NOT NULL,
    FOREIGN KEY (room_type_id) REFERENCES Room_Type(room_type_id)
    );
```

Room-Type Table

```
CREATE TABLE Room_Type (
    room_type_id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(100) NOT NULL,
    description VARCHAR(255),
    cost_per_day int
    );
```

Customer Table

```
> CREATE TABLE Customer (
    customer_id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(100) NOT NULL,
    email VARCHAR(100) NOT NULL,
    phone_number VARCHAR(20) NOT NULL
    );
```

Reservation Table

```
CREATE TABLE Reservation (
reservation_id INT PRIMARY KEY AUTO_INCREMENT,
customer_id INT NOT NULL,
check_in_date DATE NOT NULL,
check_out_date DATE NOT NULL,
total_price DECIMAL(10, 2) NOT NULL,
room_id INT NOT NULL,
FOREIGN KEY (customer_id) REFERENCES Customer(customer_id),
FOREIGN KEY (room_id) REFERENCES Room(room_id)
```

Literature Survey

Recommended Hardware Requirements:

- Pentium Processor or higher
- 128 MB RAM or higher
- 200 MB of Disk Storage or higher

Recommended Software Requirements:

- Windows 7 or later
- Microsoft Edge Browser
- Mysql database
- Xampp Software with localhost configuration
- Xampp Apache server
- Xampp Mysql server
- Visual Studio Code

Technologies Used:

- HTML5 and later
- CSS 3
- PHP 5 and later
- Mysql database
- Xampp control panel
- Apache Web Server
- Mysql Web Server
- Visual Studio Code editor

Working of HSR

Home Page Header Section:

At the top header section of the Home Page, users are presented with two anchor tags: "Join Now" and "Find Reservation." These options offer convenient access to important functionalities of the Hotel Reservation System (HRS).

Join Now Anchor Tag:

Clicking on the "Join Now" anchor tag redirects users to the join.php page. Here, new users can register by providing their name, phone number, and email address.

Upon successful registration, users receive a unique customer ID, which they can use for future reservations.

Find Reservation Anchor Tag:

The "Find Reservation" anchor tag allows users to quickly navigate to the reservation.php page.

This page facilitates the process of finding and booking hotel reservations based on user preferences and availability.

Hotel Information Section:

Below the header section, users can find detailed information about the hotel, its amenities, and services. This section aims to provide users with a comprehensive overview of what the hotel has to offer, enticing them to explore further and make a reservation.

Reservation Process:

Join.php Page:

- 1. New users click on the "Join Now" anchor tag to access the join.php page.
- 2. Here, users fill out the registration form with their name, phone number, and email address.
- 3. Upon submission, the system generates a unique customer ID for the user.

Reservation.php Page:

- 1. Users return to the Home Page and click on the "Find Reservation" anchor tag to access the reservation.php page.
- 2. Here, users are prompted to provide their customer ID, desired check-in and check-out dates, room type preference, and the number of rooms required.
- 3. Upon submission, the HRS checks for room availability based on the provided information.

Reservation Outcome:

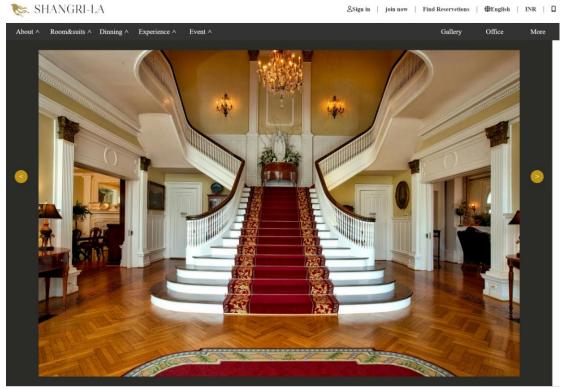
If rooms are available for the specified dates and preferences, users are redirected to a success page confirming their reservation.

If rooms are not available, users are redirected to a page notifying them that rooms matching their criteria are not available for the specified dates.

Users may be provided with alternative options or prompted to adjust their reservation criteria accordingly.

This seamless and intuitive reservation process ensures a user-friendly experience for guests looking to book accommodations at the hotel through the HRS.

Outcame of pages:



On clicking join now --

Ŝign in ∣ join now ∣ Find Reservetions ∣ ⊕English ∣ INR ∣ 🗍

Signup Form

samanth	
Email address	
samanth@gmail.com	
Phone number	
989899999	

Signup Form

	1.000		
	Name		
	Enter your name		
	Email address		
	Enter your email		
	Phone number		
	Enter your phone number		
	Submit		
our customer id is 26			
note it			
our registration is complete			
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	Status		
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	From date		
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	Todate		
	25-04-2024	-	
EEEEEEE EE	RoomType		
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	Submit		
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If customer_id is already in data base--

Success! Your reservation has been successfully made



Thank you for choosing Shangri-La Hotel for your stay. We are honored to be a part of your journey.

If the provided customer ID is not known or incorrect, an error message will be displayed, prompting the user to enter a valid customer ID

Conclusion:

In conclusion, the Hotel Reservation System (HRS) stands as a cornerstone in the seamless operation of hotel management, offering guests a convenient and efficient platform to book accommodations and experience the luxury and comfort of the Shangri-La hotel. Through intuitive user interfaces, streamlined reservation processes, and robust backend functionalities, the HRS not only enhances the guest experience but also empowers hotel staff with the tools necessary to efficiently manage bookings, room availability, and customer information.

With features like easy registration for new users, detailed room descriptions, and error handling mechanisms for reservation processes, the HRS ensures a user-friendly experience for guests at every step of their journey. By leveraging technology to automate manual tasks, optimize resource allocation, and provide real-time insights into hotel operations, the HRS enables the Shangri-La hotel to deliver unparalleled service and exceed guest expectations.

Looking ahead, continuous refinement and innovation in the HRS will be essential to keep pace with evolving guest preferences, industry trends, and technological advancements. By staying agile and responsive to the needs of both guests and hotel staff, the HRS will remain a key enabler in driving operational efficiency, enhancing guest satisfaction, and maintaining the Shangri-La hotel's position as a premier destination for luxury accommodation and unparalleled hospitality.

Appendix

Index.html

html
<html lang="en"></html>
<head></head>
<meta charset="utf-8"/>
<meta content="width=device-width, initial-scale=1.0" name="viewport"/>
<title>Document</title>
<link href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.0.0-</td></tr><tr><td>beta3/css/all.min.css" rel="stylesheet"/>
<link href="style.css" rel="stylesheet"/>
<header></header>
<pre><div class="container"></div></pre>
<div class="logo"></div>
 <i class="fa-brands fa-phoenix-framework"></i>
<pre><pre><pre><pre></pre></pre></pre></pre>
<pre><div class="nav"></div></pre>
<pre><div class="sign"></div></pre>
<i class="fa-regular fa-user"></i> Sign in
<div class="seperate"></div>
<div class="join"></div>

join now
<div class="seperate"></div>
<div></div>
<pre>Find Reservetions</pre>
<div class="seperate"></div>
<div class="english"></div>
<i class="fa-solid fa-globe"></i> English
. / dž
<div class="seperate"></div>
<pre><div class="seperate"></div> <div class="in"></div></pre>
INR
<pre><div class="seperate"></div> <div class="phone"></div></pre>
<pre><i class="fa-solid fa-mobile-screen-button"></i></pre>
<pre><div class="info"></div></pre>
<pre><div class="first"></div></pre>
<pre><div class="list ></td></tr><tr><td>About <pre>class=" j"="">^</div></pre>

```
<div id="room" class = "size box ">
Room&suits ^
</div>
<div id="dining" class = "size box" >
Dinning ^
</div>
<div id="exper" class = "size box" >
Experience>
</div>
<div id="exper" class = "size box" >
Experience>
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<div id="exper" class = "size box" >
Experience>
</div>
</div id="exper" class = "size box" >
Experience>
</div>
</div id="exper" class = "size box" >
Experience>
</div id="exper" class = "size box" >
Experience
</div id="galary" class = "size" >
Gallery
</div id="office" class = "size" >
Office
</div>
</div class = "size" >
More
</div>
```

</div

div>

. . . .

```
<body>
```

```
About the Resort
  Overview
  <a href="" class="space">Explore Singapore</a>
  class="space" ><a href="" class="space">Services & Facilities</a>
  <a href="" class="space">The Palawan @ Sentos</a>
  <a href="" class="space">Map & Directions</a>
  class="space"><a href="" class="space">Awards</a>
<div class="room" class="flex-box">
     Room
      class="space">Superior Hill View
      Deluxe Sea View
        class="space">Panoramic Sea View
         Deluxe Pool View
        class="space">Family Garden
           class="space">Terrace Pool View
              Terrace Sea View
  Suites
     Island Suite
        class="space">Deluxe Sea View Suite
           class="space">Panorama Suite
             class="space">Sentosa Suite
  <div class="third-li">
     Connecting Rooms
```

```
Two Superior Hill View Rooms Connecting
     class=space>Two Deluxe Sea View Rooms Connecting
    <div class="dining" class="flex-box">
Restaurent
Casserole
Casserole
Trapizza
<div class="second-li">
Bars & Lounges
        The Bubble Bar
          Siloso Beach Bar
         <div class="Experience" class="flex-box">
Sports & Recreation
   Casserole
   class="space"> Silver Shell Cafe
   Trapizza
Chi, The Spa
     Overview
     Good to Know
<div class="third-li">
For Kids
      Cool Zone (Kids Club)
     class="space"> Children's Swimming Pool, Water Slides and Splash Pad
```

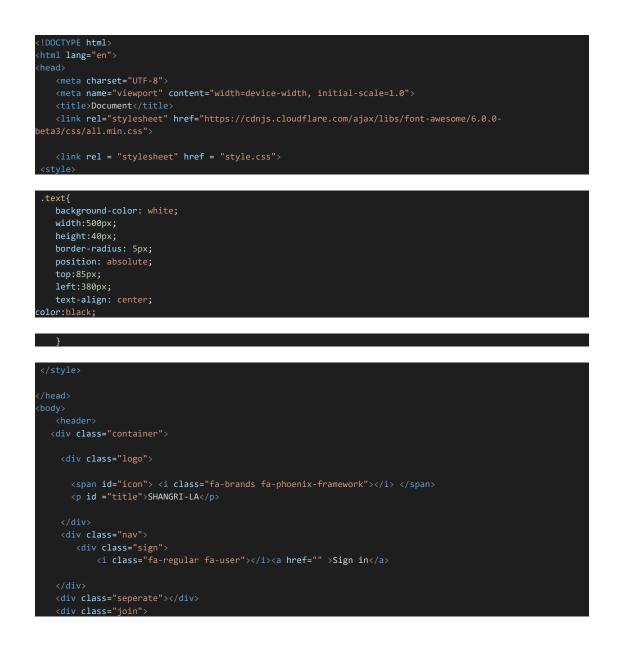
```
class="space"> Nestopia
<div class="first-li">
  Meetings & Events
      Overview
        class="space"> Experience It
         Unique Destination Events
        class="space"> Book Meeting Room Online
        class="space"> Event Spaces
  Weddings & Celebrations
     Overview
        Weddings By Shangri-La
        Wedding Packages
        Celebration Packages
        Request for Proposal
```



<script src = "logic.js">

</body> </html>

Reservation.php



```
<a href="join.php">
        join now
</a>
</div>
<div Class="seperate"></div>
<div Class="reser">Find Reservetions</a>
</div>
<div class="seperate"></div>
<div class="seperate"></div>
<div class="fa-solid fa-globe"></i><a href="">English</a>
</div>
<div class="seperate"></div>
<div class="seperate"></div>
<div class="in">
        INR
</div>
<div class="seperate"></div>
<div class="seperate"></div>
</div>
</div>
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</divs
</divs
</div>
</divs
</div>
</div>
</div>
```

hody

</header>

div class="reser_back">

/div>



| <p>Status</p>
php</th <th></th> <th></th> <th></th> | | | |
|---|---------|--|--|
| if(isset(\$boolean)){
echo "YOUR RESERVATION IS SUCC | ESFUL"; | | |
| | | | |
| } | | | |
| ?> | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| php</th <th></th> <th></th> <th></th> | | | |

include("data.php");

<sript src ="logic.js"></sript>
</body>

Data.php

<?php if(isset(\$_POST["button"])){ \$customer_id = \$_POST["customer_id"]; \$from_date = \$_POST["fromdate"]; \$to_date = \$_POST["todate"]; \$room_type = \$_POST["roomtype"]; \$no_of_rooms = filter_input(INPUT_POST, 'no_of_rooms', FILTER_SANITIZE_NUMBER_INT);

```
$servername = "localhost";
$username = "root";
$password = "";
$database = "hsr";
$conn ="";
$cost =0;
```

try{
 // Create connection
 scalar connect(\$servername, \$username, \$password, \$database);

//Check connection

}

catch(exception){
 echo"better luck next time";

```
/* this if else blocks will check the room type and give per day cost of the perticular type room */
if($room_type="Premium"){
$cost = 7000;
}
else if($room_type ="Signature"){
$cost = 5000;
}
else{
    $cost = 4000;
}
/* using DateTime class so that i can get diff in numb to calculate total prize */
$fromdate = new DateTime($from_date);
$todate = new DateTime($to_date);
$intervel = $todate->diff($fromdate);
$n = $intervel-> days;
```

\$total_price = \$no_of_rooms * \$cost * \$n ;
\$q ="select customer_id from customer where customer_id ='\$customer_id'";
\$r = mysqli_query(\$conn,\$q);
if(\$r){

\$query = "SELECT room_id FROM Room
WHERE room_type_id FROM Room_Type WHERE name = '\$room_type')



Join.php

<?php

if(isset(\$_POST["button"])){ \$customer_id = \$_POST["customer_id"]; \$from_date = \$_POST["fromdate"]; \$to_date = \$_POST["todate"]; \$room_type = \$_POST["roomtype"]; \$no_of_rooms = filter_input(INPUT_POST, 'no_of_rooms', FILTER_SANITIZE_NUMBER_INT);

\$servername = "localhost"; \$username = "root"; \$password = ""; \$database = "hsr"; \$conn =""; \$cost =0;

try{

\$conn = mysqli_connect(\$servername, \$username, \$password, \$database);

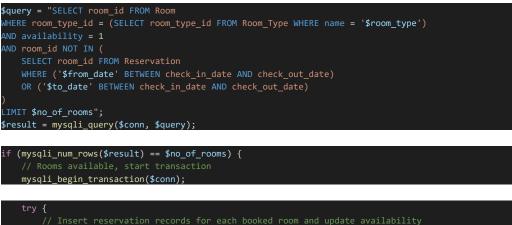
//Check connection

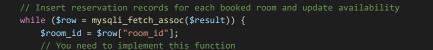
, catch(exception){ echo"better luck next time";

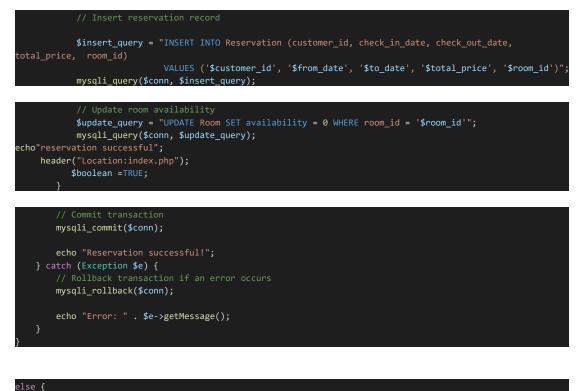
}

/* this if else blocks will check the room type and give per day cost of the perticular type room */
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}
else{
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}
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\$fromdate = new DateTime(\$from_date);
\$todate = new DateTime(\$to_date);
\$intervel = \$todate->diff(\$fromdate);
\$n = \$intervel-> days;

\$total_price = \$no_of_rooms * \$cost * \$n ;
\$q ="select customer_id from customer where customer_id ='\$customer_id'";
\$r = mysqli_query(\$conn,\$q);
if(\$r){







echo "Sorry, rooms are not available for the selected dates.";

lse{
 echo"your customer_id is invalid
";
 echo "click on join now to get your customer_id";

For success messege



| html |
|--|
| <html lang="en"></html> |
| <head></head> |
| <meta charset="utf-8"/> |
| <pre><meta content="width=device-width, initial-scale=1.0" name="viewport"/></pre> |
| <title>Document</title> |
| <pre><link <="" href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css" pre="" rel="stylesheet"/></pre> |
| integrity="sha384-QWTKZyjpPEjISv5WaRU90FeRpok6YctnYmDr5pNlyT2bRjXh0JMhjY6hW+ALEwIH" |
| crossorigin="anonymous"> |
| <style></th></tr><tr><td>.image img{</td></tr><tr><td>position:relative;</td></tr><tr><td>left:10px;</td></tr><tr><td>height:264 px;</td></tr><tr><td>width :397px;</td></tr><tr><td>}</td></tr><tr><td></style> |
| |



References

• https://www.shangri-la.com/en/singapore/rasasentosaresort/rooms-suites/suites/island-suite/