

# Hotel Management System

**Subject:** Software Engineering (CSE 305)

→ Group -4

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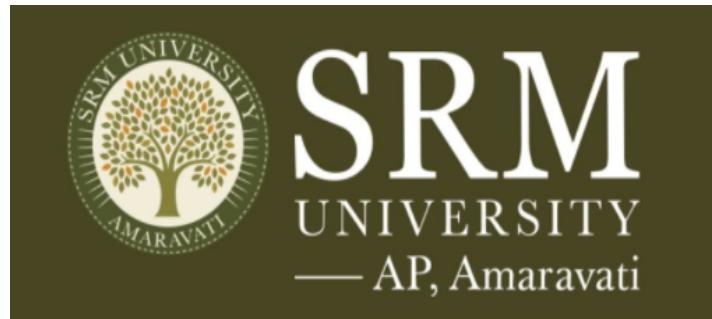
## →The crew of the Project:

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**Title:** Hotel Management System

## SRM UNIVERSITY AP ANDHRA PRADESH

COMPUTER SCIENCE AND ENGINEERING



### Declaration And Approval:

We, students from SRM-AP college, Amaravathi hereby declare that the project work report entitled “Hotel Management System” has been submitted to our project organizer.

It is a record of original work done by our group, we also declare that this project Report is of our own effort and it has not been submitted to any other university for the award of any degree.

Student's Signature,  
Boyapati Sai Venkat,  
Konakanchi Subrahmanyam,  
Maddirala Sai Karthik.

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## 1. Abstract:

The main aim of developing a hotel management system. Planning hotel management projects has the main objective of turning down management efforts in hotels. There is no difficulty in finding and using the required software and hardware.

The purpose of the hotel booking system is to automate the existing manual process by utilizing computerized equipment and fully-featured computer programs, thus enabling customers' valuable information as well as their valuables to be stored for a longer period and easily accessed.

Thus, the hotel manager will be able to maintain further activities, time to time check about work and bookings and customers will be able to plan their stay accordingly by looking at and booking online rooms.

## 2. Introduction:

In today's dynamic world, hotel management has gone deep into departments such as catering, airlines, clubs, and tourism, making it an attractive career choice. Through the Hotel Management system, the customers can book the rooms and services of the hotel online. It allows for easy management of customer information and facilitates communication between the hotel and customers.

The project, Hotel Management System is a web-based application that allows the hotel manager to handle all hotel activities online. This



website has been built as a full-stack web application. This is a user-friendly application and the ability to manage various hotel bookings and rooms make this system very flexible and convenient. This web application has the flexibility to manage the entire system from a single online system.

An effective hotel management project includes features for booking hotel rooms, managing staff, and more. Using the system, the manager can advertise available rooms. So the Online booking and viewing of rooms are available to customers. Admins have the power to approve or reject a customer's reservation request. Besides the hotel services, other hotel services can also be viewed and booked by customers.

Therefore, both hotel managers and customers can use the sync general, the aim of the Hotel Management System is to generalize and simplify the monthly or day-to-day activities of hotels such as the processing of room reservations, checking in and out customers, assigning rooms based on customer requirements, and calculating the bill, etc. which has to be performed repeatedly on regular basis. Providing a quick, reliable, efficient, and user-friendly system is the main goal.



### **3. Literature Reviews:**

It is designed so the customer can browse the Hotel, Services, and Rooms and book their stay accordingly. This helps both the user and the owner save time. Administrators can store user details directly in the database, which reduces the amount of manual work and streamlines the process. There are some of the perspectives which

made the website idea came from and each feature provided has a unique strategy of background work.[1]

In today's dynamic world, hotel management has gone deep into departments such as catering, airlines, clubs, and tourism, making it an attractive career choice. Through the Hotel Management system, the customers can book the rooms and services of the hotel online. It allows for easy management of customer information and facilitates communication between the hotel and customers.[7][8][9]

As a facilitator, the Hotel website is used to make the user aware of the services and activities which the hotel provides. Each of the pages displayed on the website has a specific purpose. On the website, we provide the most up-to-date information on available rooms, the food recipes menu, as well as other services such as gym, massage, pool, room service, etc.[10]

In using the Hotel Management system website, the user will find it very easy to access, very easy to use, and has very comfortable options and features. If the user is using the system for the first time, this website provides them with useful information and allows them to make an online payment. [4]

Users will be able to access it very comfortably because options, views, and processes are simple and clear. The user can check their expenditure and pay their bill directly from the website in order to remind themselves of the total they spent. In addition to being able to choose any payment method of their comfort, the user will also be able to complete the billing process by choosing an option.[2][3]

The users are probably already familiar with hotel services as they have been to various hotels. Because of this, they will require advanced features and advanced services. Our website had many advanced features that fulfilled the user's expectations. Services will be provided

at the best level, and users will be able to utilize the services according to their needs.[5]

For various purposes, including login verification and account access, the website must communicate with the main branch for each session, and the following list contains the communication interface requirements that have to be fulfilled in order to run the software reliably.[6]

## 4. Software Requirements:

### 4.1 User Interface Requirements

An aesthetically pleasing user interface and an interactive help feature will be provided to the user for each service available on the site. It is a menu-driven interface and the following screens will be provided:-

- A small welcome page is displayed at the beginning of the website which can make the user feel look elegant and to the user understand what was the website all about. This helps to provide a brief overview to the user.
- A welcome page will direct the user to the login or register pages. The user is facilitated to choose at the welcome page whether to go to the login/register page. The new users have to do the registration first then only they can log in to the website. But the existing users can directly enter their username and password and can enter into the website.
- The admin asks the user about their name, mail id, gender, phone number, and password which are very primary details to login

into a software/ website. In the same way for the already existing user, the admin asks for the username and password. If the user enters the wrong login details then a small error notification will be displayed for the user notifying the issue.

- After the user completes the login process he will be directed to the main website.
- Pages and features available on the main website:
  - Home page.
  - About Page.
  - Hotel Rooms.
  - Activities & Services.
  - Food Menu.
  - Billing & Payment
  - Contact Us
  - Feedback.
- Each of the pages has a unique use and feature. Each page will help the user to utilize the available services of the Hotel.

## 4.2 Hardware Interfaces

Required Hardware in order to run/access software:

- Minimum 4GB of RAM for the Admin Side and 1GB+ RAM for the client side.
- Monitor with a minimum resolution of 1024x768.
- Keyboard and mouse/touchpad.
- Multicore-1.8Ghz Processor.
- HDD/SSD with a minimum space of 10GB for Admin and 1GB for Client.

- 
- Gigabit Ethernet Port or Router for the internet.
- 

## 4.3 Software Interfaces

- **Backend Technologies:**

- **Framework:** Django
- **Database:** (My SQL or SQLite) in order to store/access login details, room details, menu details, payment information, etc.

- **Front End Technologies:**

- HTML
- CSS
- Javascript
- Bootstrap 5.0
- Node js
- React js

- **OS:** Microsoft Windows 10(32-bit) and above.
- 

## 4.4 Communications Interfaces

For various purposes, including login verification and account access, the website must communicate with the main branch for each session, and the following list contains the communication interface requirements that have to be fulfilled in order to run the software reliably. There are sustain interface abilities:

- Supports all types of browsers.
- Customers must have an active internet connection to access the website
- A broadband connection with speeds of 5 Mbps or more.
- A telecom connection with the above-mentioned speeds is sufficient

## 5. Proposed Schema:

Hotel management and administration are made easier with this application. Detailed information about an unlimited number of customers can be kept. This makes the booking considerably faster and reduces a great deal of manual work. Users can track at all times which rooms are available for occupancy. The system also helps the hotel to better manage their rooms and reduces a lot of paperwork.

Hotel management software assists in managing a hotel more efficiently with tools like booking or reserving rooms, reserving as well as canceling the room, ordering room service, making reservations at the restaurant, viewing menus of recipes, etc. Software like this makes it easier for the administrator to understand customer details so that they can satisfy customer requirements, as well as maintain user data according to these details. The admin can update the menu of recipes available, the room availability, and the services provided from time to time so that the users can easily see the plans for their stay.

In general, the aim of the Hotel Management System is to generalize and simplify the monthly or day-to-day activities of hotels such as the processing of room reservations, checking in and out customers, assigning rooms based on customer requirements, and calculating the bill, etc. which has to be performed repeatedly on regular basis. Providing a quick, reliable, efficient, and user-friendly system is the main goal.

Each Of the pages has a unique use and features. Each page will help the user to utilize the available services of the Hotel. Every page can be accessed by the user after logging in to the website by providing the



necessary details. In the same way the user information and the selected services everything can be viewed by the admin. Admin has the authority to change the services according to availability. Now let's explore how different functions manage structures and data files:

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- **Login/Registration:**

The website for this hotel management system is designed for multiple users. In the beginning, the website will redirect the user to the login/register page since to access the website, the user must enter his/her credentials and these credentials must be validated.

If you are a first-time visitor to the website, you will have to register your details before you can log in. If you are an existing user, you can simply use your login details. Users will be prompted to enter their login details to determine whether they are correct. Incorrect entry will result in an "Invalid User/Password" message.

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- **Service Details Pages:**

Our website will assist the user with learning about the hotel, our services, room availability, food recipes, and mainly the packages. The home page and about page tell the user all these things.

We intend to use these pages to provide detailed information about the hotel's activities in order to help users better understand the services we provide and convince them to plan a stay with us.



- **Room & Service Pages:**

Checking information about the rooms and our services is crucial for the user so they can check the availability and book the rooms according to their needs also Users can browse the services, such as massages, room service, and food recipes, and book them as needed.



- **Billing and Payment:**

The user can check their expenditure and pay their bill directly from the website in order to remind themselves of the total they spent. Besides enabling the user to track the progress of their monetary expenditure, it also allows them to complete the payment very easily via many payment methods such as credit card, debit card, net bank, etc.



- **Menu Page:**

This menu page is intended for users who are interested in discovering what menu items are available at our hotel when they visit for lunch or dinner. Likewise, the hotel guests will also require food to be served to them according to their taste, so they will be able to see the menu and place an order accordingly.



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- **Contact Us:**

It is natural for every user to have questions regarding their stay at a hotel, such as the rooms, services, food, payment, and costs. Consequently, to clarify a user question, they can use the option called contact us. This will send the user's question/doubt to the admin and they will respond.

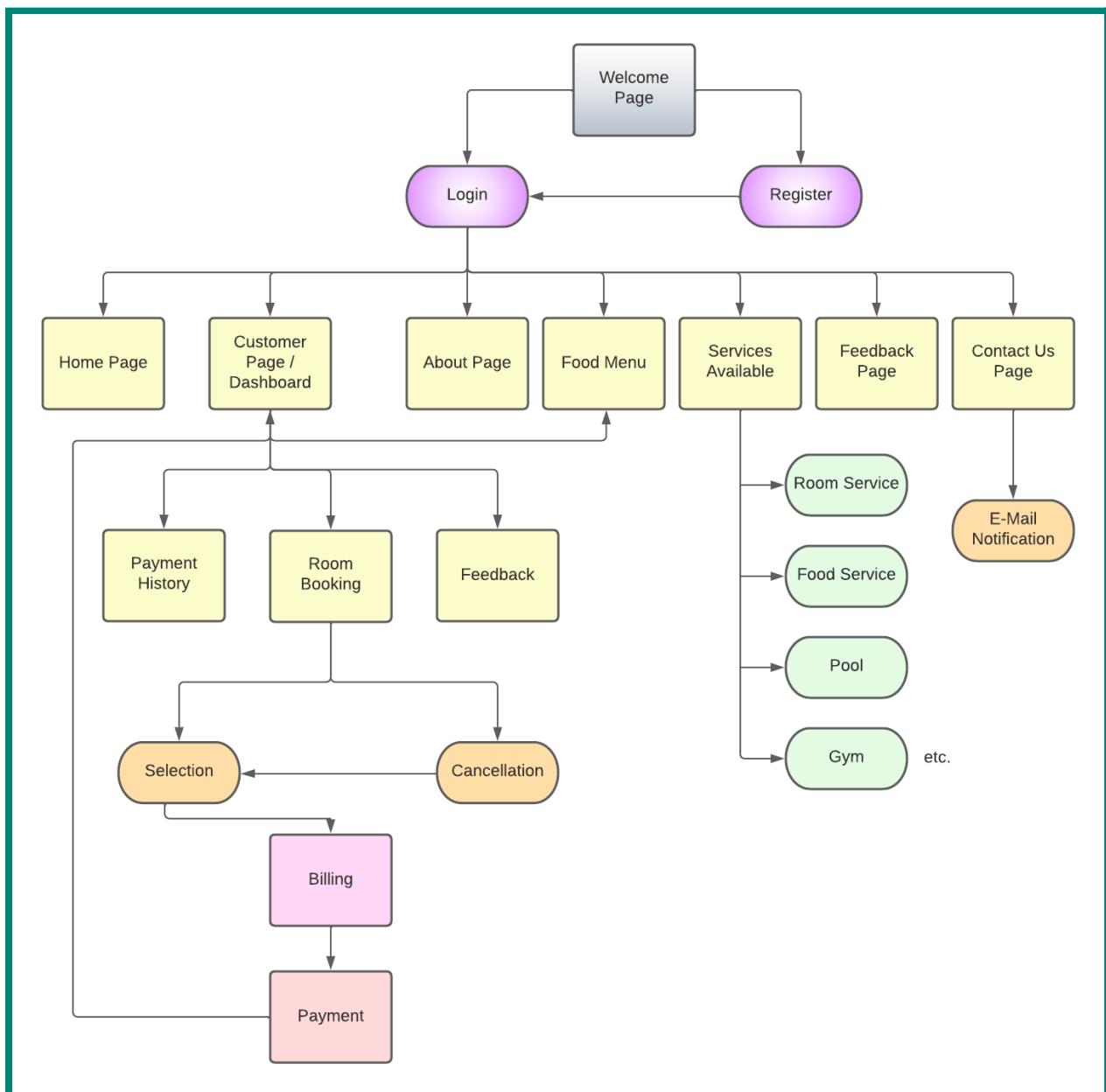
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- **Feedback Section:**

Feedback from hotel guests is the only way to improve and develop services. Guest feedback is one of the most important aspects of estimating the quality of the stay at the hotel.

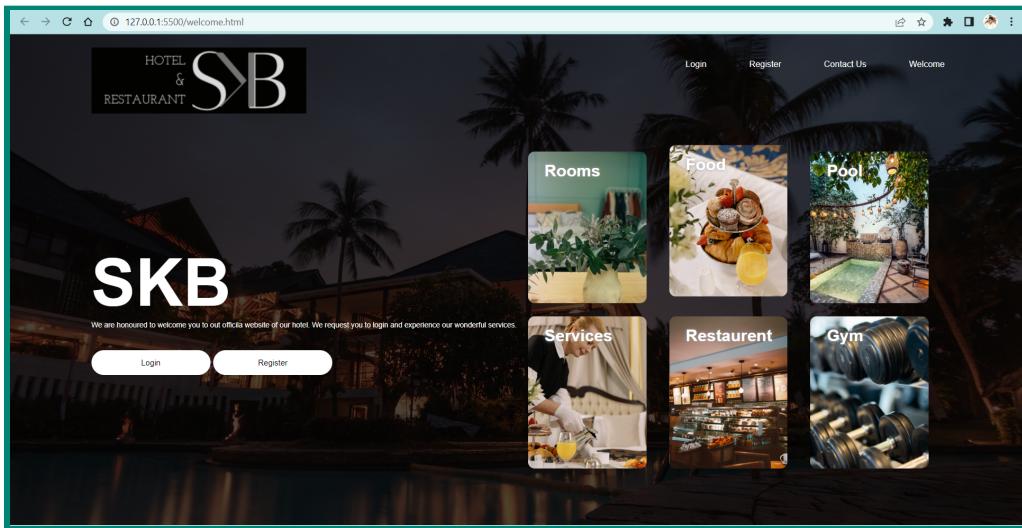
As a result, the feedback section will be helpful to hotel management to improve themselves. The user only has to answer a few simple questions after leaving the hotel.

## 6. Flow Chart

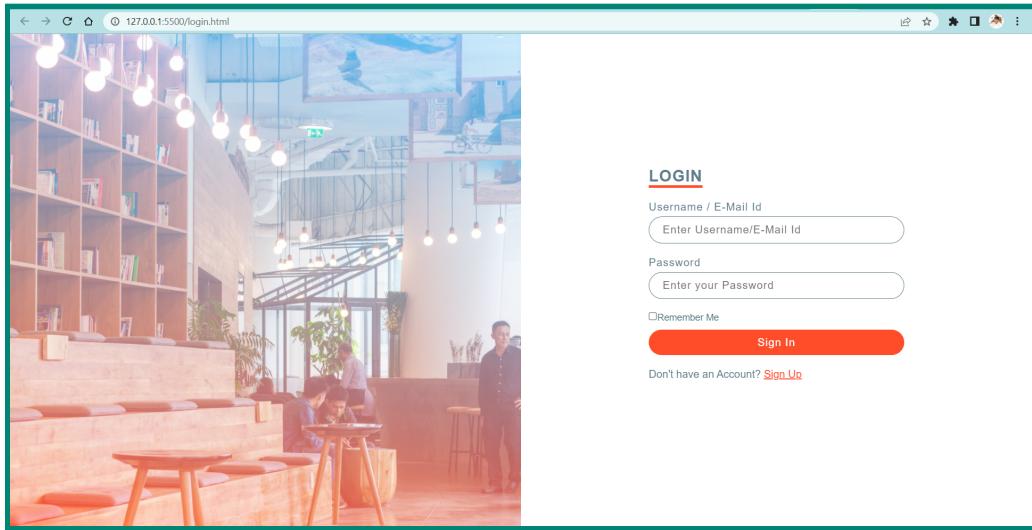


## 7. Results/Screenshots:

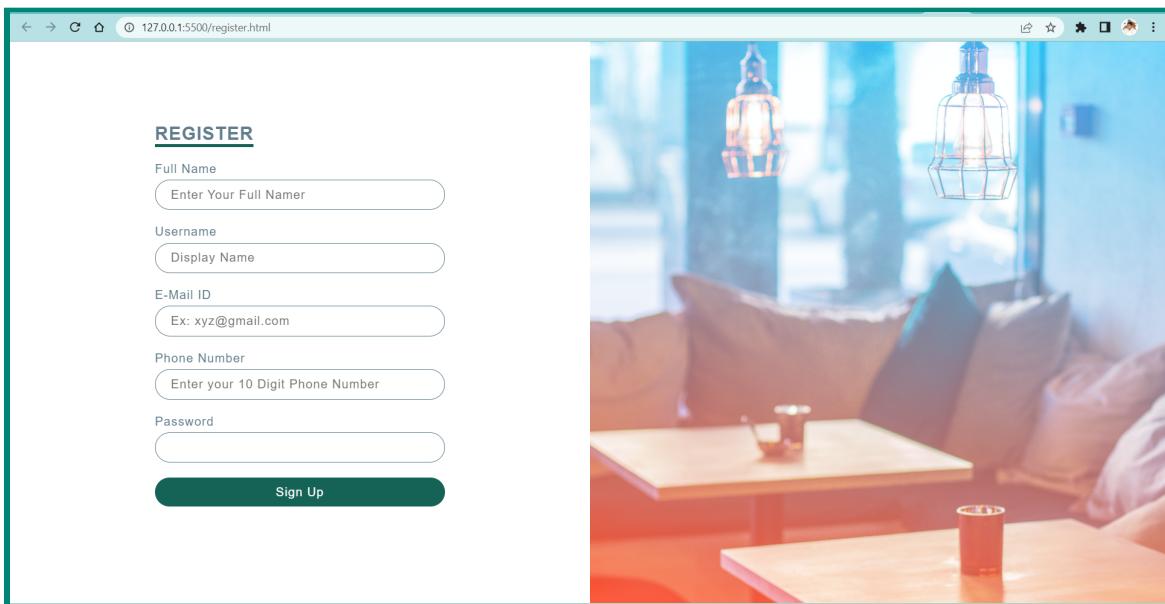
### Welcome Page:



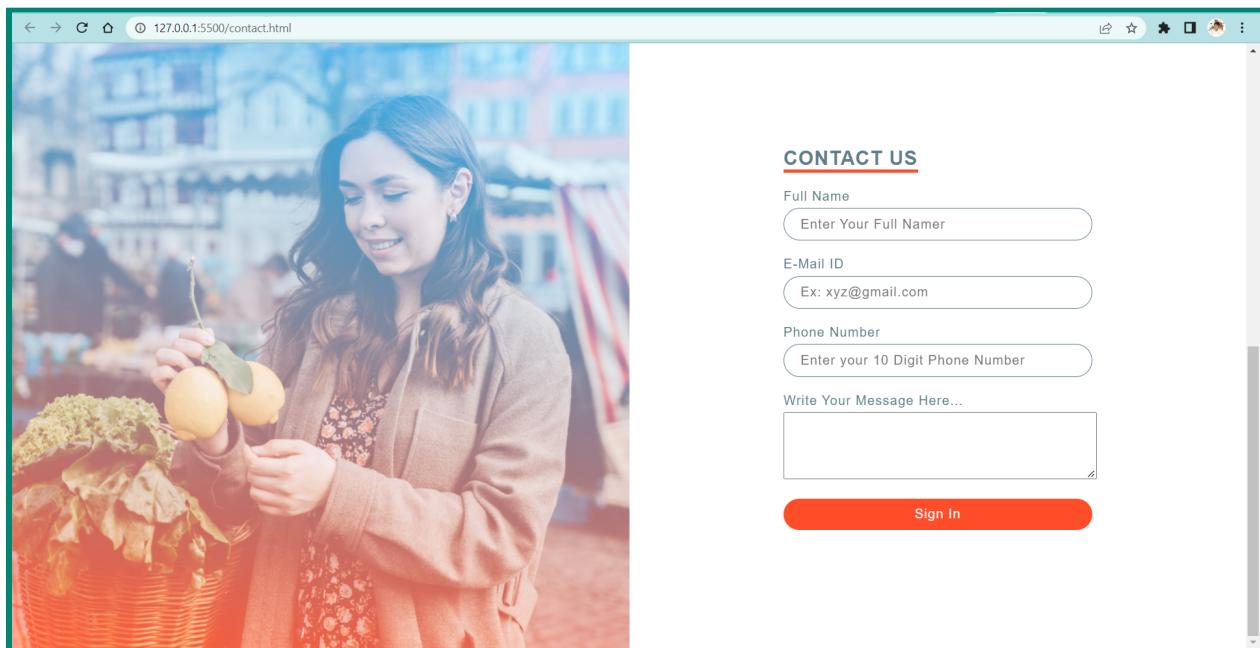
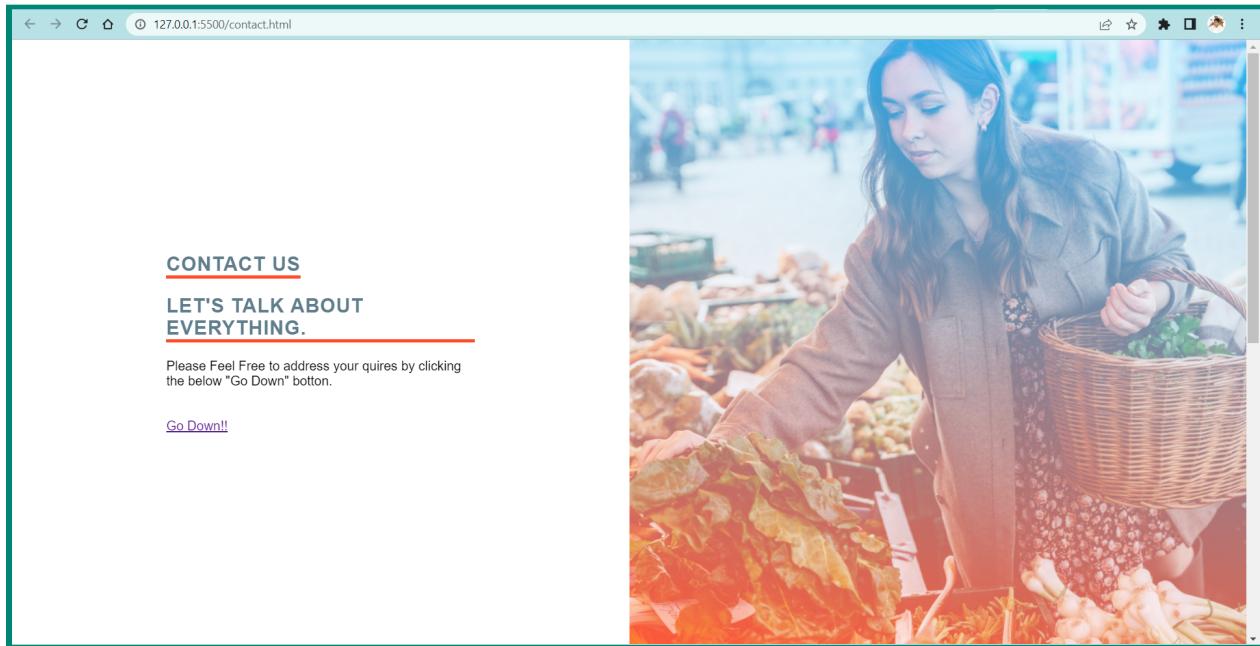
## Login Page:



## Register Page:



## Contact Us page:



## Customer Page:

Navbar

Welcome , Subrahmanyam Konakanchi

Features And Services



Room Booking Services  
With supporting text below as a natural lead-in to additional content.



Room Booking Services  
With supporting text below as a natural lead-in to additional content.



Room Booking Services  
With supporting text below as a natural lead-in to additional content.

Menu

Features And Services



Room Booking Services  
With supporting text below as a natural lead-in to additional content.  
[Click for more Info](#)



Room Booking Services  
With supporting text below as a natural lead-in to additional content.  
[Click for more Info](#)



Room Booking Services  
With supporting text below as a natural lead-in to additional content.  
[Click for more Info](#)

## Room Booking Section:

**Room Booking ( Book A Room Of Your Choice )**

Pickup - Location  
 X

We'll never share your email with anyone else.

Drop Off - Location  
 X

Room Type	Adults	Children
<a href="#">Open this select menu</a>	<input type="text" value="Username"/>	<input type="text" value="Username"/>

[Search For Rooms](#)

## Rating Section:

**Rating Section**

<div style="border: 1px solid #ccc; padding: 10px; text-align: center;"> <b>4.1</b>          VERY GOOD          183 ratings       </div>	<div style="text-align: center;"> <div style="display: flex; justify-content: space-between;"> <span>Excellent</span> <span>71%</span> </div> <div style="display: flex; justify-content: space-between;"> <span>VeryGood</span> <span>55%</span> </div> <div style="display: flex; justify-content: space-between;"> <span>Good</span> <span>48%</span> </div> <div style="display: flex; justify-content: space-between;"> <span>Average</span> <span>30%</span> </div> <div style="display: flex; justify-content: space-between;"> <span>Poor</span> <span>15%</span> </div> </div>
--	---

  
**Subrahmanyam Konakanchi**  
**4.0**  
 Very Good  
Last updated 3 mins ago

Friendly staff and probably the best cheese pizza I've had!

  
**Karthik Maddirala**  
**5.0**  
 Excellent  
Last updated 3 mins ago

Good Hospitality. Food qualy is very good

## Feedback Setion

### Feedback Section

Name

Email Id

Message

## Payment Section:



Boyapati Sai Venkat

Username: boyat123  
Age : 21  
Email: boyapati@gmail.com

Gender: Male  
Mobile No : 8622589532  
Address: Guntur



Room Details

Room Type: King  
Room No: 101  
Floor No: 1

Services: Massage  
Room Availability: Yes  
Room Price: 3500

**Payment**

Method:  Net Banking  Card  UPI

Boyapati Sai Venakat	
Card Holder Name	
1651 5484 1511 653	
Card Number	
12-10-2023	599
Expiry Date	CVV
3950	
Amount	

**Order Recap**

Room Price	3500.00
Amount toward deductible	+ 0.00
Insurance	+ 100.00
Services	+ 120.00
CGST (Taxes)	+ 200.00
SGST (Taxes)	+ 180.00
Coupon Code	- 150.00
<b>Total</b>	<b>3950.00</b>

**Make Payment**

**localhost:3000 says**

**Payment Successful**

**OK**

**Payment**

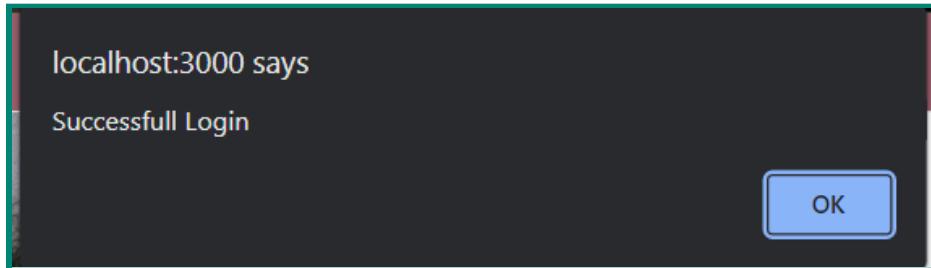
Method:  Net Banking  Card  UPI

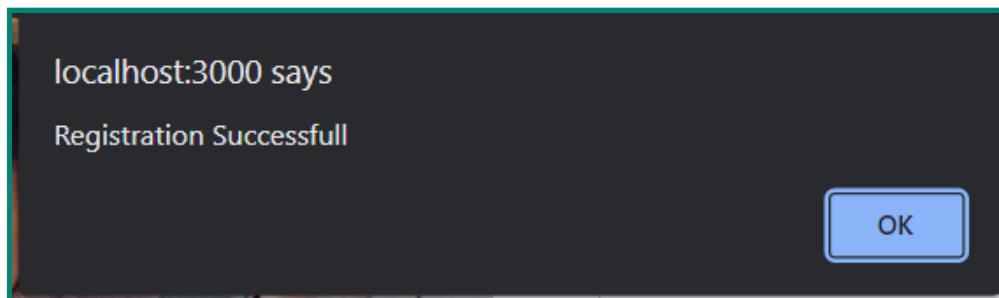
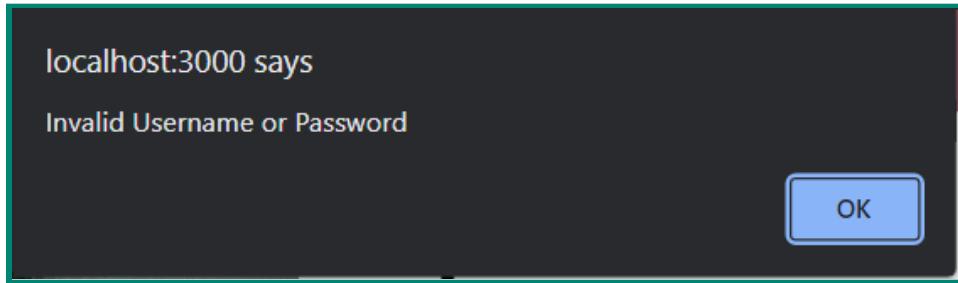
Boyapati Sai Venakat	
Card Holder Name	
1651 5484 1511 653	
Card Number	
12-10-2023	599
Expiry Date	CVV
3950	
Amount	

**Order Recap**

Room Price	3500.00
Amount toward deductible	+ 0.00
Insurance	+ 100.00
Services	+ 120.00
CGST (Taxes)	+ 200.00
SGST (Taxes)	+ 180.00
Coupon Code	- 150.00
<b>Total</b>	<b>3950.00</b>

**Make Payment**





## Admin Page:

The Admin Page interface consists of three main sections, each with a title and a button. The first section is titled "Room View" and contains the text "Click the button to view the Menu" and a yellow "Search For Rooms" button. The second section is titled "Payment View" and contains the text "Click the button to view the Payments" and a yellow "Search For Rooms" button. The third section is titled "Menu" and contains the text "Click the button to view the Menu" and a yellow "Search For Rooms" button.

**Room View**  
Click the button to view the Menu  
Search For Rooms

**Payment View**  
Click the button to view the Payments  
Search For Rooms

**Menu**  
Click the button to view the Menu  
Search For Rooms

## Room View

Click the button to view the Menu

[Search For Rooms](#)



Room Type: King

Services: Massage

Room No: 101

Room Availability: 1

Flooe No: 1

Room Price: 0

[Price](#)

[Update](#)



Room Type: King

Services: Pool

Room No: 102

Room Availability: 1

Flooe No: 1

Room Price: 0

[Price](#)

[Update](#)



Room Type: Queen

Services: Massage

Room No: 201

Room Availability: 1

Flooe No: 2

Room Price: 0

[Price](#)

[Update](#)

## Menu Section:

### Menu Section

Filter

[View Menu](#)



Manchuria

This Item belongs to the Starters

[₹ 150.00](#)



Chicken Biryani

This Item belongs to the Main Course

[₹ 350.00](#)

## 8. Conclusion

The hotel Management System project is intended for booking rooms through an online platform. Our Hotel Management System has 2 end-users they are Admin/Owner and User/Customer.

As an administrator, you will be able to view financial reports and update any information related to the room, such as adding rooms. The administrator is the only one who can see the customer information, payment and billing details, feedback provided by the user, and questions.

The user can check the availability of rooms, services, and the food menu. These services can be booked by the user and he or she will be able to enjoy the stay.

## 9. References

### Research References:

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### Text Book:

Roger S. Pressman, "Software Engineering: A Practitioner Approach", 7th International Edition, McGraw-Hill Education (Asia), Singapore

- **Link:**

[http://sendy.itmaranatha.org/PSI/RPL-7th\\_ed\\_software\\_engineering\\_a\\_practitioners\\_approach\\_by\\_roger\\_s\\_pressman\\_pdf](http://sendy.itmaranatha.org/PSI/RPL-7th_ed_software_engineering_a_practitioners_approach_by_roger_s_pressman_pdf)

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### **Youtube:**

- [https://www.youtube.com/results?search\\_query=srs+document+in+software+engineering](https://www.youtube.com/results?search_query=srs+document+in+software+engineering)
- [https://www.youtube.com/results?search\\_query=flowcharts+for+hotel+management+system+in+software+engineering](https://www.youtube.com/results?search_query=flowcharts+for+hotel+management+system+in+software+engineering)
- [https://www.youtube.com/results?search\\_query=report+for+hotel+management+system+in+software+engineering](https://www.youtube.com/results?search_query=report+for+hotel+management+system+in+software+engineering)

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### **Apps Used:**

- App.Diagram: <https://app.diagrams.net/>
- Lucid-Chart: <https://www.lucidchart.com/pages/>

