Hotel Management System

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OUTLINE

- Abstract
- Problem Statement
- Proposed Solution
- System Architecture
- UML Diagrams
- System Requirements
- Conclusion
- Future Scope
- References
- Snapshots of Website

ABSTRACT

The Hotel Management System (HMS) is a software solution developed as a capstone project during a Java full-stack training program conducted by TASK and Edunet. It aims to provide a user-friendly platform for hotel owners and customers by streamlining operations and automating various tasks. The system comprises two login portals – one for administrators (hotel owners) and another for customers. The administrator portal facilitates tasks such as managing room bookings and viewing booking history, while the customer portal allows users to register, log in, and make room reservations. Powered by MySQL for backend data management and built using Java EE technologies for the front-end, the HMS features a responsive user interface, secure authentication mechanisms, and seamless integration with the backend database.

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Problem Statement

➢The hospitality industry, particularly hotel management, faces numerous challenges in efficiently managing operations, maintaining customer satisfaction, and optimizing revenue.

➢Traditional methods of managing hotel operations, such as manual booking systems and paper-based record-keeping, are time-consuming and prone to errors. Additionally, customer expectations for seamless booking experiences and personalized services continue to rise, necessitating the adoption of modern technology solutions.

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Proposed Solution

Efficient Management: Streamlines the process of managing hotel bookings, customer information, and room availability, resulting in improved efficiency and productivity for hotel staff.

Enhanced User Experience: Provides a user-friendly interface for both administrators and customers, making it easy to navigate and utilize the system for booking purposes.

Data Accuracy: Ensures accurate storage and retrieval of booking information, reducing the risk of errors and discrepancies in customer records.

Customization: Offers flexibility in terms of customization options, allowing hotels to tailor the system to their specific requirements and branding.

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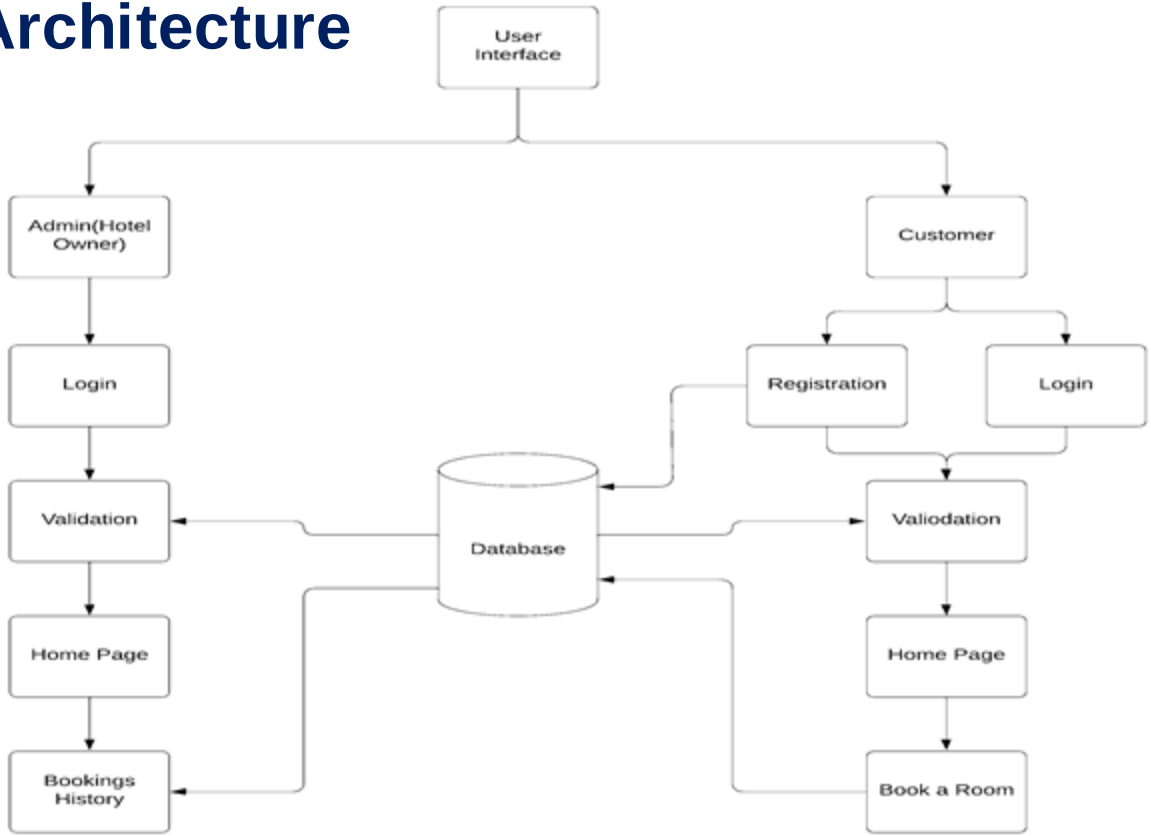
System Architecture



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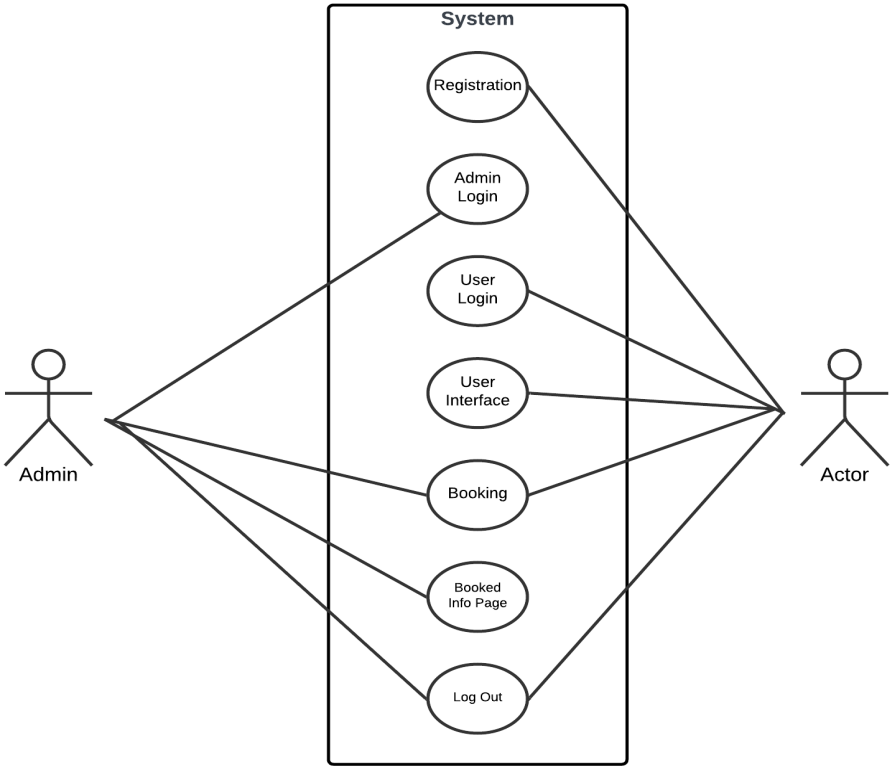
UML Diagrams

Use case diagram



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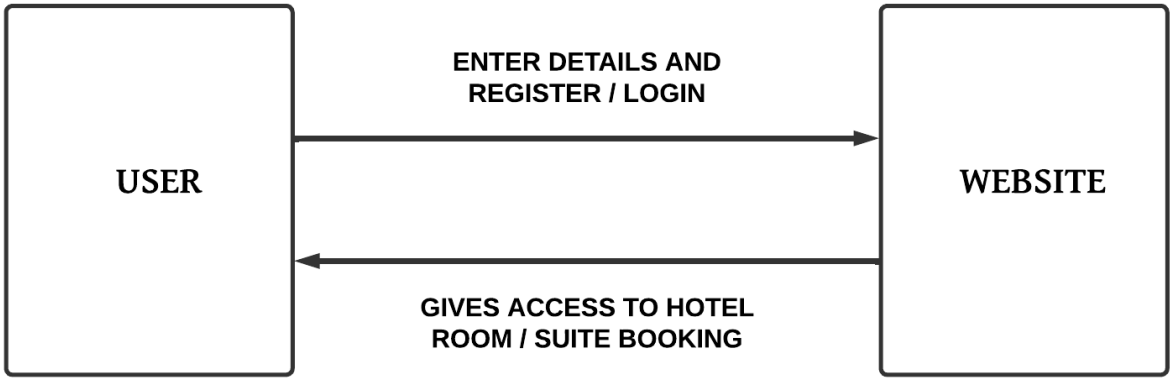
Data flow diagram



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System Requirements

Hardware Requirements

- **Processor:** Intel core i5
- **Hard Disk:** 500GB
- **RAM:** 8GB
- **Monitor:** 14 Inches
- **Keyboard:** Optical
- **Mouse:** Optical

Software Requirements

- **Frontend Development:** HTML, CSS, JavaScript
- **Backend Development:** Java, JavaScript
- **Database management:** MySQL
- **Deployment:** Web Server : Apache Tomcat
- **Operating System:** Windows 11
- **Code Editor IDE:** Eclipse

Conclusion

The Hotel Management System project has successfully streamlined booking processes, improving efficiency and customer satisfaction. Despite challenges, the project team's resilience and adaptability led to valuable lessons learned. User feedback shaped a system that positively impacted hotel staff, management, and customers. Looking ahead, we plan for continuous improvement, ensuring scalability and adaptability. The project's closure marks not just an achievement but the beginning of ongoing support. Gratitude goes to the dedicated team and stakeholders for their contributions, setting a high standard for future projects.

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Future Scope

The hotel management system is designed to cater to the needs of small to medium-sized hotels and hospitality businesses. Its scope includes:

Reservation Management: The system allows administrators to manage room reservations, check availability, and handle booking requests efficiently.

Customer Management: Administrators can maintain customer records, track guest preferences, and provide personalized services to enhance customer satisfaction.

Reporting and Analytics: Administrators can generate reports on various aspects of hotel operations, such as occupancy rates, revenue, and guest feedback, to gain insights and make data-driven decisions.

Integration: The system can be integrated with existing hotel systems, such as point-of-sale (POS) systems and accounting software, to streamline operations and improve overall efficiency.

Scalability: The system is designed to be scalable, allowing hotels to adapt and expand their operations as needed without compromising performance or functionality.

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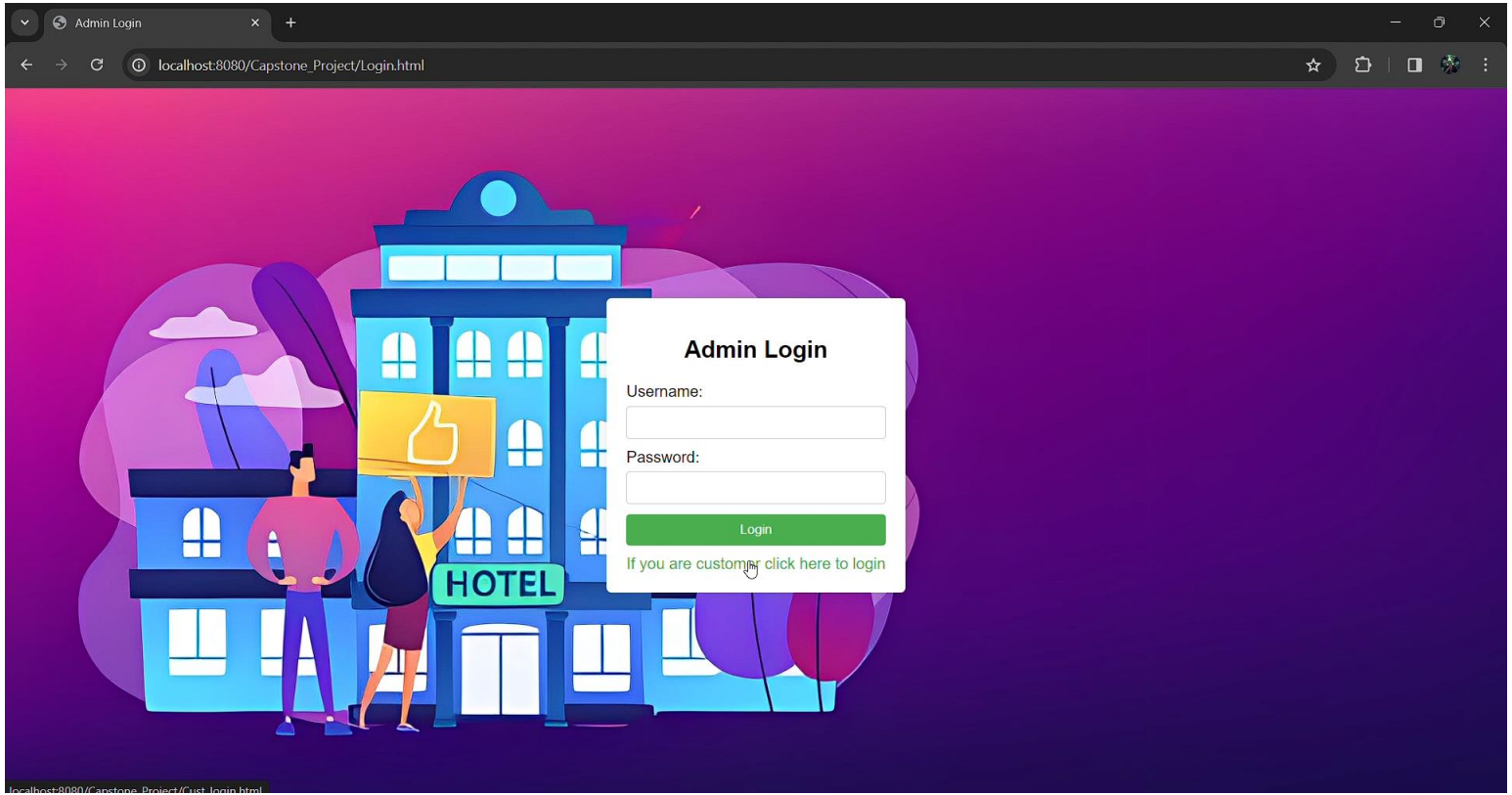
References

- Eclipse Foundation: https://www.eclipse.org/
- Java EE Documentation: https://www.oracle.com/java/technologies/java-ee-glance.html
- MySQL Documentation: https://dev.mysql.com/doc/
- W3Schools - HTML: https://www.w3schools.com/html/
- W3Schools - CSS: https://www.w3schools.com/css/
- W3Schools - JavaScript: https://www.w3schools.com/js/
- Servlet API Documentation: https://javaee.github.io/servlet-spec/
- Tomcat Documentation: https://tomcat.apache.org/tomcat-9.0-doc/index.html

Snapshots of Website

Admin Login:



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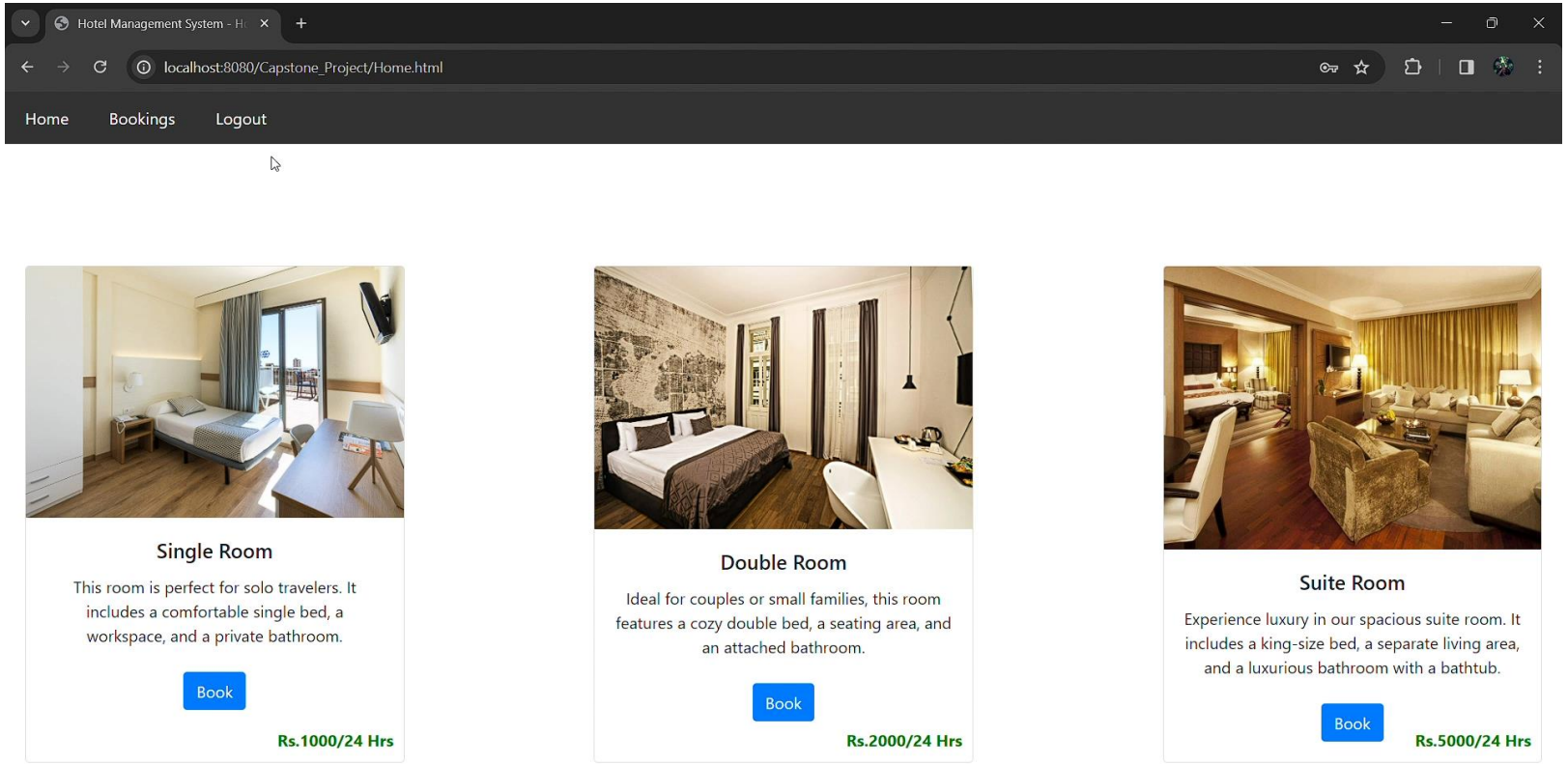
Admin Interface:



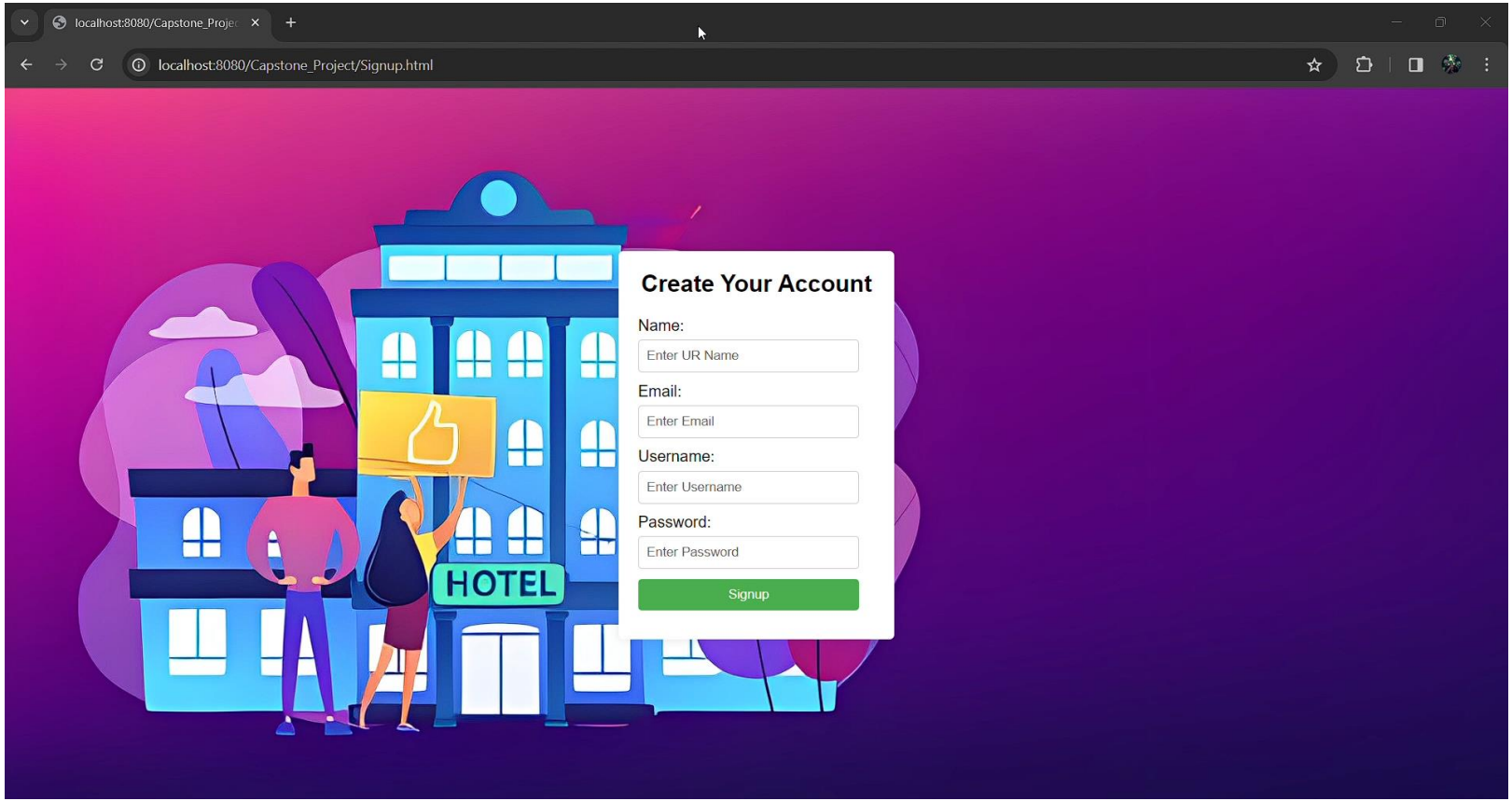
Booked Info Page:

Booking Information

Customer Name	Email	Phone Number	Room Type	Check-in Date	Check-in Time	Check-out Date	Check-out Time
Suresh	Suresh7458@gmail.com	9658741230	double	2024-02-23	07:30	2024-02-24	18:30
Karthik	Karthik9856@gmail.com	9632587410	suite	2024-02-22	15:30	2024-02-23	20:30
Gopi Krishna	gopikrishna6467@gmail.com	9874563210	single	2024-02-23	09:00	2024-02-26	09:00

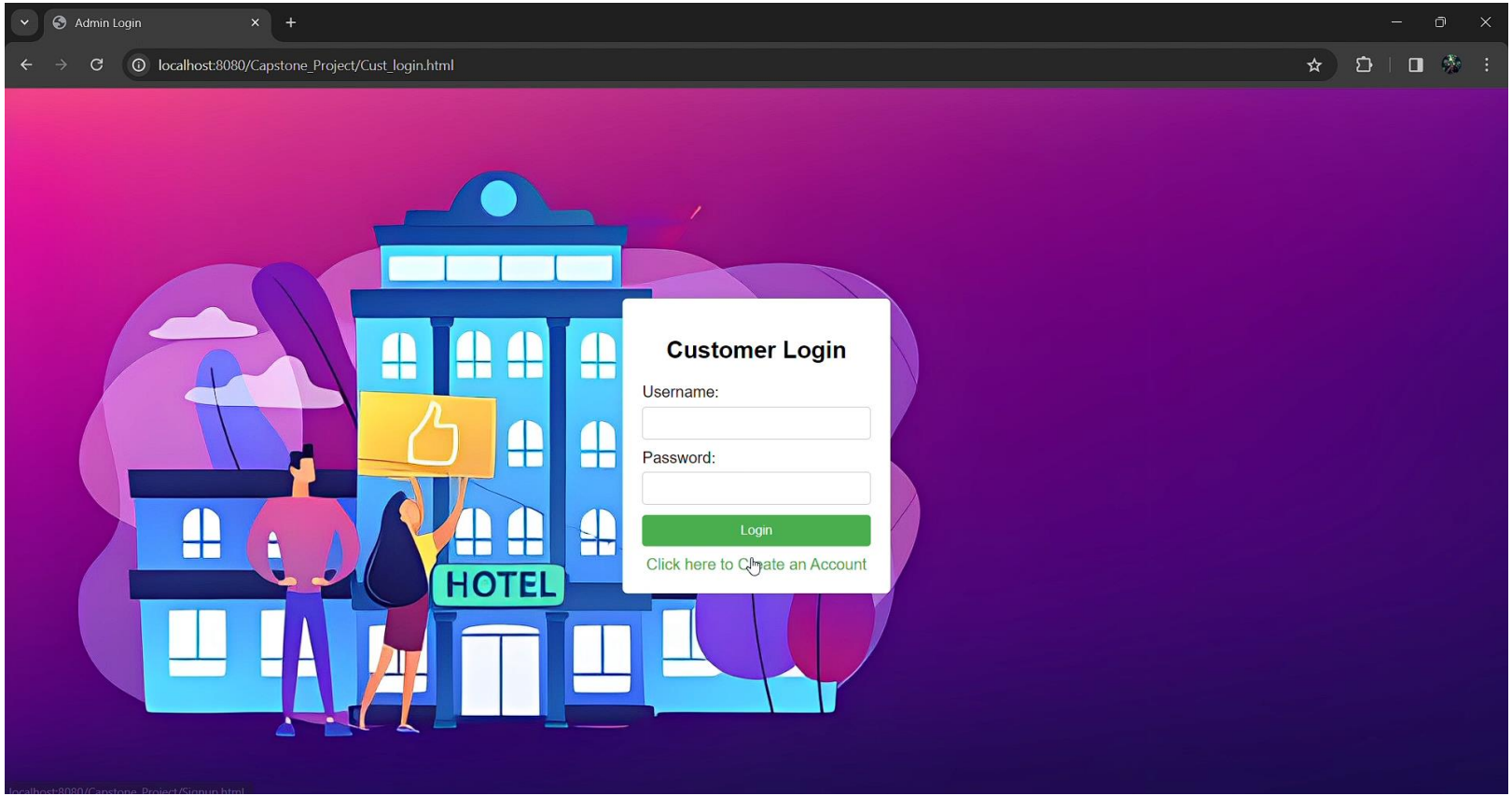
HOTEL MANAGEMENT SYSTEM

Registration:



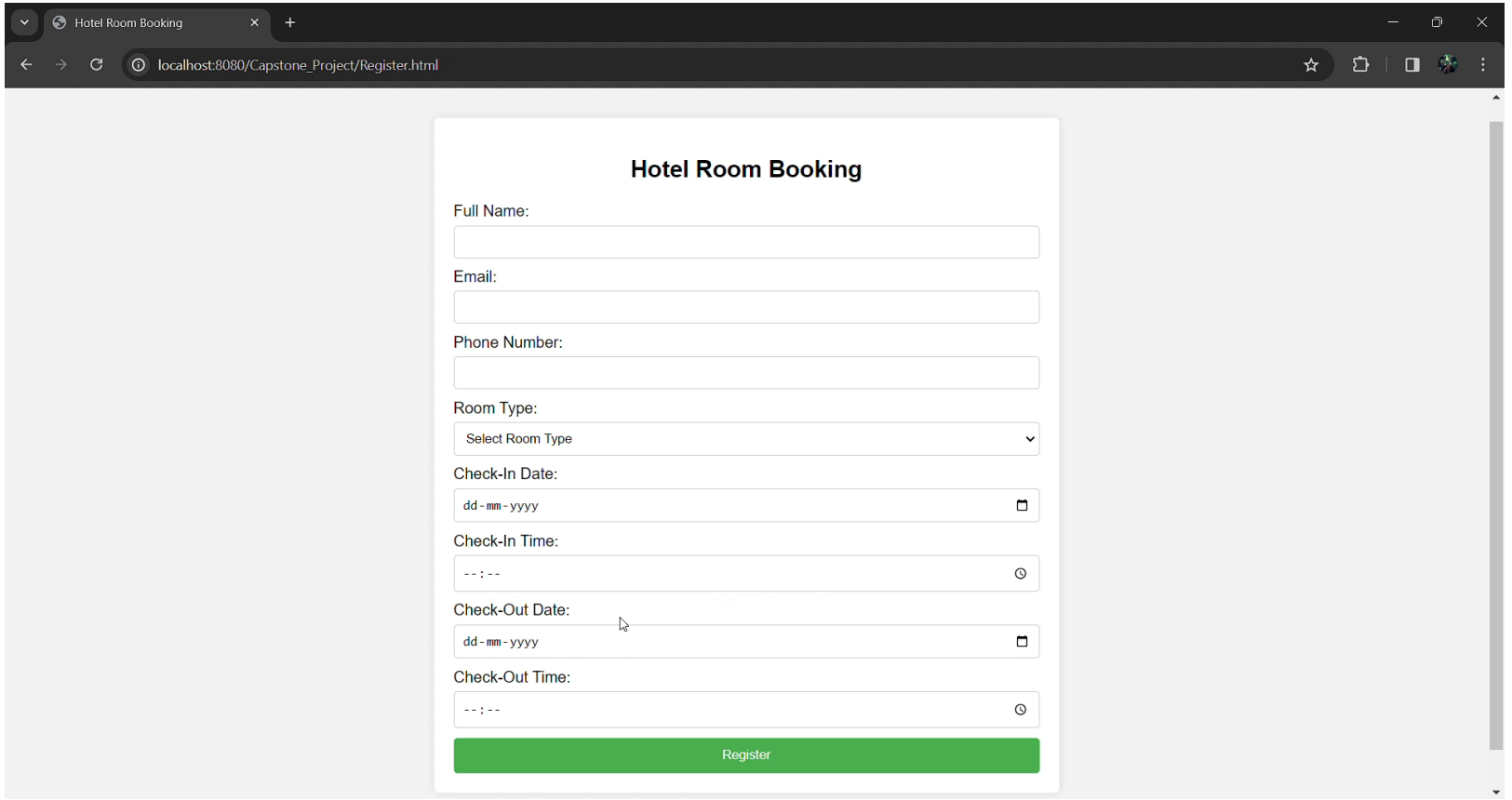
HOTEL MANAGEMENT SYSTEM

Customer Login:



HOTEL MANAGEMENT SYSTEM

Booking Page:



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Thank you!