

ROOM RESERVATION PROJECT

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1. Introduction

Purpose of the Project

The purpose of the Room Reservation System project is to provide users with a convenient platform to browse and reserve rooms in a hotel or accommodation facility. The project aims to streamline the process of room reservation and improve user experience through an intuitive web application.

1. Introduction:

The Room Reservation System is a web-based application designed to streamline the process of booking rooms in a hotel or similar establishment. The system aims to provide users with an easy and efficient way to view available rooms, make reservations, and manage their bookings. This report details the development and implementation of the Room Reservation System, outlining its features, architecture, and management approach.

2. Project Requirements:

Addition of a room (multiple categories)

- Consultation of the state of the rooms
- Reservation of room of a specific category and duration
- Cancellation of reservations
- Arrival of customers
- Leaving customers

3. Chosen Technologies and Motivations:

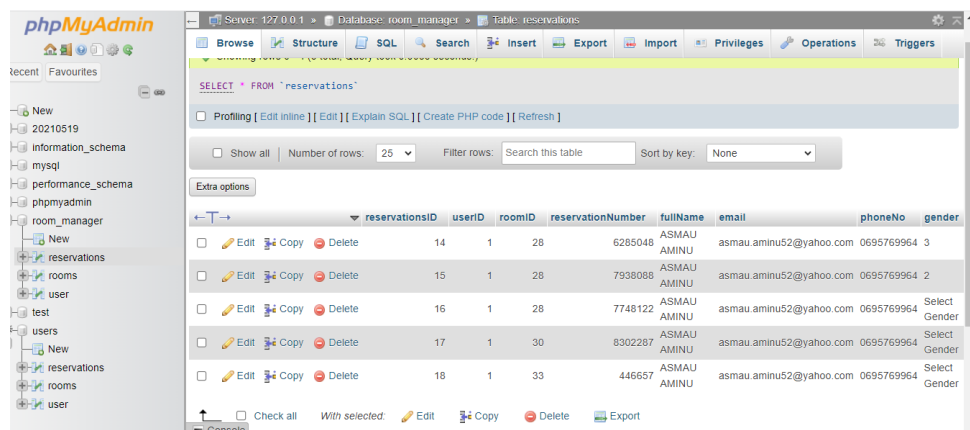
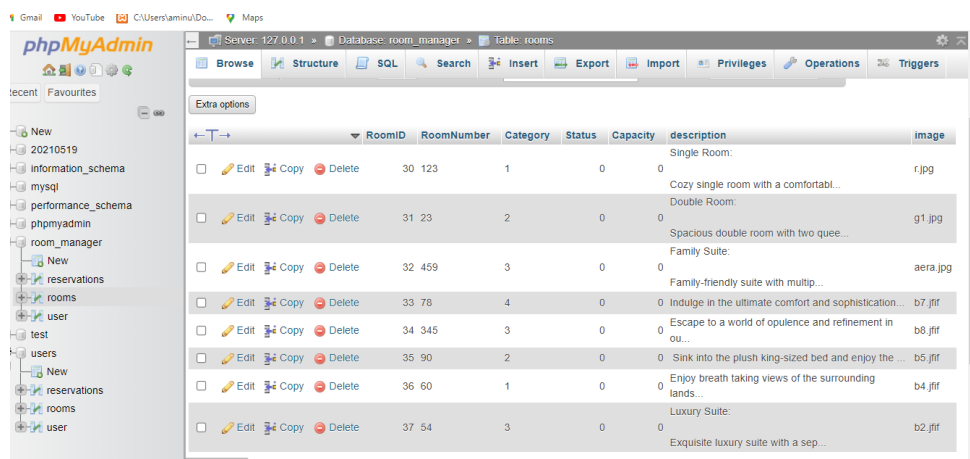
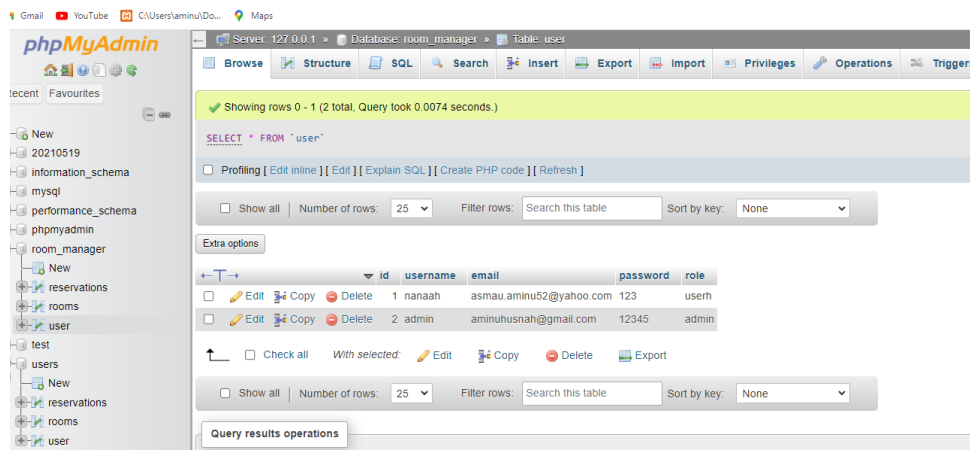
For the development of the Room Reservation System, I use Java as the programming language and JSP (Java Server Pages) for creating dynamic web pages. The Spring MVC framework was chosen to implement the Model-View-Controller (MVC) architecture, separating concerns and ensuring maintainability. The choice of MySQL as the database management system offers data storage and retrieval capabilities.

4. Application Architecture and Detailed Design:

3.1. MVC Pattern Implementation: The system follows the MVC architectural pattern. The Model represents the business logic and interacts with the database. The View handles the presentation layer, displaying information to users. The Controller receives user input, processes it, and communicates with the Model and View.

3.2. Software Components and Their Interactions: The Room Reservation System consists of various components, including user authentication, room management, reservation handling, and administrative controls. User interactions trigger controller actions, which update the model and the view accordingly.

3.3. Database Design: The database design includes tables for users, rooms, reservations, and other relevant information. Relationships between tables are established to maintain data integrity. The database design ensures efficient data storage and retrieval for a smooth user experience.



4. Project Management:

4.1. Planning: The project was planned using an iterative approach with multiple releases. The initial planning phase involved defining project goals, scope, and timeline. Agile methodologies were employed to accommodate changes and enhance collaboration among team members.

4.2. Releases: The project was divided into several releases, each delivering specific features. Early releases focused on user registration, login, and room

availability display. Subsequent releases added reservation functionality, user profile management, and administrative controls.

5. User Guide:

The user guide provides comprehensive instructions for using the Room Reservation System. It covers user registration, login, room search, reservation creation, profile management, and administrative functionalities. Screenshots and step-by-step explanations assist users in navigating the system effectively.

6. Conclusion:

The Room Reservation System project successfully achieved its goals of providing a user-friendly platform for booking rooms. The system's functionalities were implemented according to the project requirements, enhancing the user experience and simplifying room reservation processes.

7. Perspectives:

The Room Reservation System lays the foundation for potential enhancements. Future perspectives include incorporating payment gateways for online transactions, implementing a feedback system, and optimizing the user interface for various devices.

In conclusion, the Room Reservation System project demonstrates the successful implementation of a web-based application that facilitates room booking processes. The project team's collaboration, choice of technologies, and adherence to best practices contributed to the development of a robust and user-friendly system.

SCREENSHOTS

Admin Panel

Admin Panel

Hello AdminLogout

Dashboard

Users

Reservations





Add rooms

View rooms

View Rooms

Home / View Rooms

List of Rooms

ID	Room Number	Category	Status	Capacity	Description	Image Name	Image	Actions
30	123	1	0	0	Single Room: Cozy single room with a comfortable bed. Perfect for solo travelers looking for a quiet stay. Includes modern amenities and a private bathroom.	r.jpg		Edit Delete
31	23	2	0	0	Double Room: Spacious double room with two queen-sized beds. Ideal for couples or families with children. Features a stunning view and luxurious furnishings.	g1.jpg		Edit Delete
32	459	3	0	0	Family Suite: Family-friendly suite with multiple bedrooms and a common living space. Accommodates larger groups and provides a homely atmosphere. Includes a fully equipped kitchenette for added convenience.	aera.jpg		Edit Delete
33	78	4	0	0	Indulge in the ultimate comfort and sophistication with our Deluxe Rooms. Each room is a sanctuary of	b7.jpg		Edit Delete

localhost:8080/mini-proj/AdminPanel.jsp

Import favouritesAmazon.co.uk - On...Booking.comGmailYouTubeMapsOther favourites

Admin Panel

Hello AdminLogout

Dashboard

Users

Reservations

Add rooms

View rooms

Dashboard

Home / Dashboard

ALL USERS

8

13% INCREASE

ALL BOOKINGS

4% INCREASE

TOTAL BUDGET

13% DECREASE

Admin Panel

Hello AdminLogout

Dashboard

Users



Reservations

Add rooms

View rooms

View Users

Home / View Users

ID	USER NAME	EMAIL	ROLE	Action
1	nanaah	asmau.aminu52@yahoo.com		
2	admin	aminuhusnah@gmail.com	admin	

localhost:8080/mini-proj/AdminPanel.jsp

Import favouritesAmazon.co.uk - On...Booking.comGmailYouTubeMapsOther favourites

Admin Panel

Hello AdminLogout

Dashboard

Users

Reservations

Add rooms

View rooms

Add Rooms

Home / Rooms

Upload Hotel Room Details

Room Number:

Category:

Select Category

Capacity:

Description:

Room Image:

[Choose File](#) No file chosen

Submit

Admin Panel

Hello AdminLogout

Dashboard

Users

Reservations

Add rooms

View rooms

View Users

HomeView Users

ID	USER NAME	EMAIL	ROLE	Action
2	admin	aminuhusnah@gmail.com	admin	
9	asmau	asmau.aminu52@yahoo.com	userth	

Admin Panel

Hello AdminLogout

Dashboard

Users

Reservations

Add rooms

View rooms

View Bookings

HomeView Reservations

ID	Booking Number	Full Name	Mobile Number	Email	Status	Action
15	7938088	ASMAU AMINU	0695769964	asmau.aminu52@yahoo.com	Not approved	
16	446657	ASMAU AMINU	0695769964	asmau.aminu52@yahoo.com	Not approved	

USER

localhost8080/mini-proj/login.jsp

Import favouritesAmazon.co.uk - On...Booking.comGmailYouTubeMapsOther favourites

Sign in

Your Name

Password

☐ Remember me

Log in

Or login with

Create an account

Sign up

Your username

Your Email

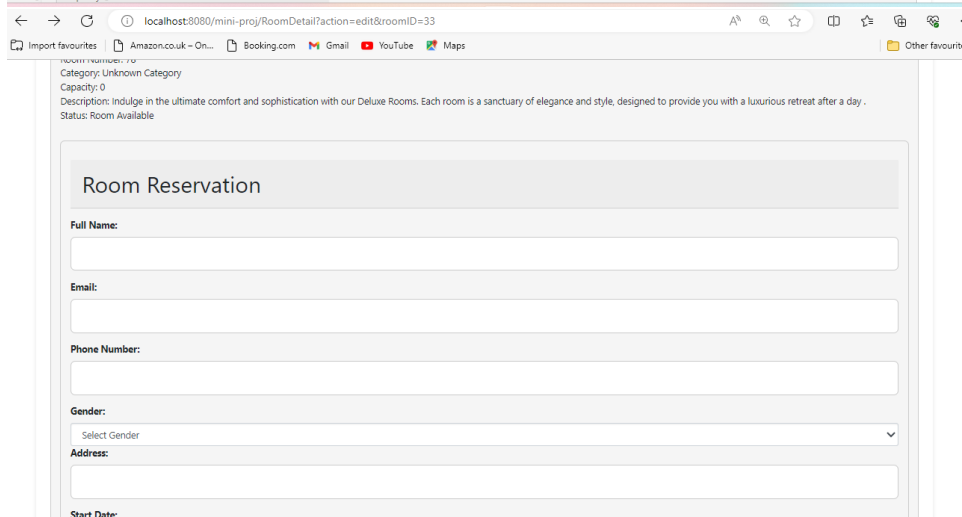
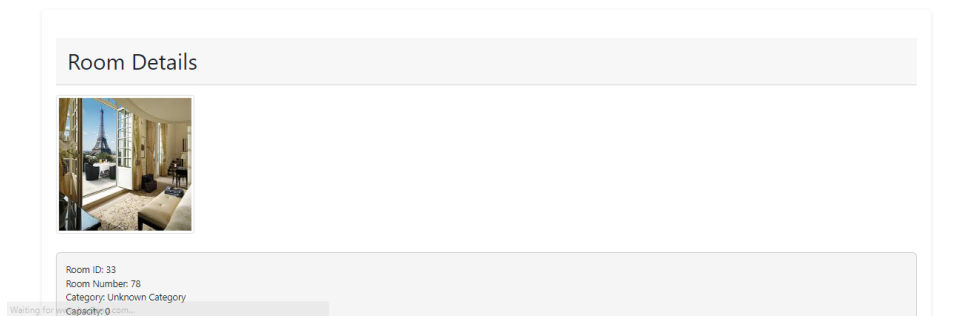
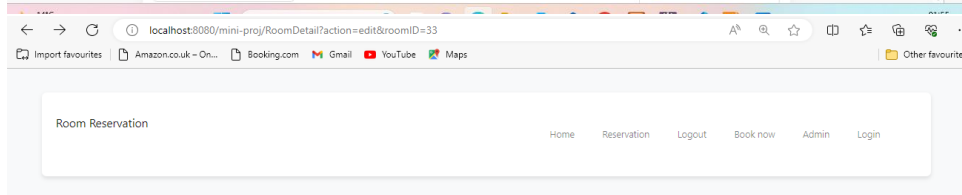
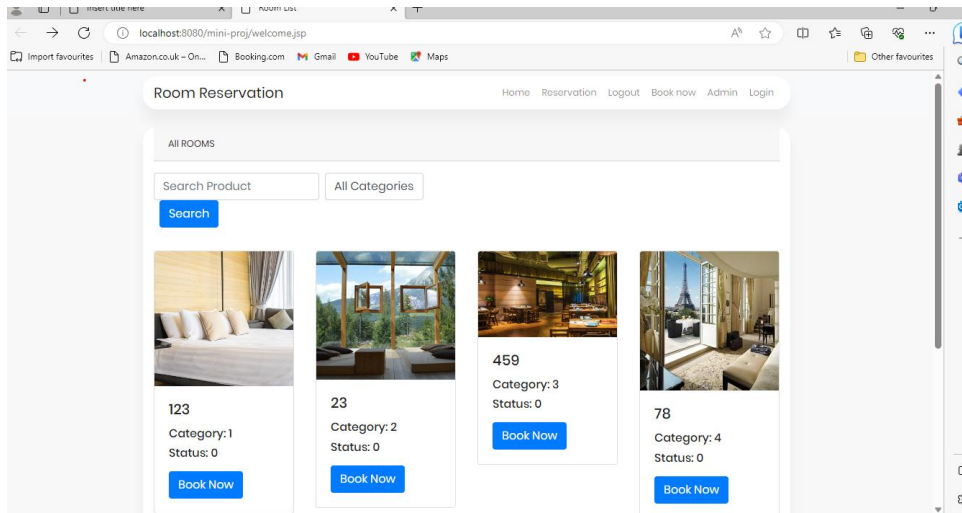
Password

Repeat your password

☐ I agree all statements in [Terms of service](#)

Register

[I am already member](#)



Gender:

Select Gender

Address:

Start Date:

dd/mm/yyyy





















End Date:

dd/mm/yyyy

Reserve Room

Reservation Confirmation

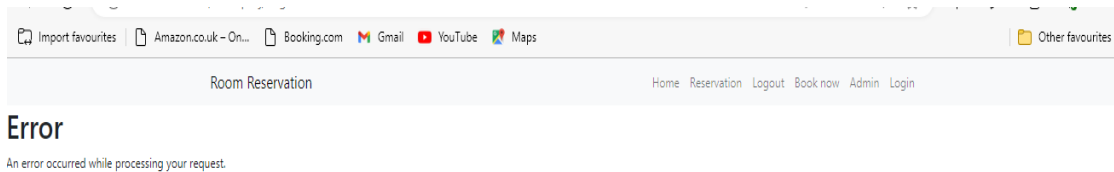
Reservation is successful! [Reservation details](#)

ID	Booking Number	Full Name	Email	Status	Action		
18	446657	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-31	2023-09-07	Not approved	 
17	8302287	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-30	2023-09-01	Not approved	 
16	7748122	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-31	2023-09-03	Not approved	 
15	7938088	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-22	2023-08-30	Not approved	 
14	6285048	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-30	2023-08-31	Not approved	 
13	4603485	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-26	2023-08-31	Not approved	 
12	8819429	AMINU AISHATU	asmau.aminu@eleve.isep.fr	2023-08-29	2023-08-31	Not approved	 
11	4968081	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-29	2023-08-31	Not approved	 
10	2606031	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-29	2023-08-31	Not approved	 
9	2128815	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-29	2023-08-31	Not approved	 

Goodbye!

You have been successfully logged out.

[Log In Again](#)



AFTER THE ADMIN APPROVE

The screenshot shows the same web browser window as before, but the main content area now displays a table of reservations. The table has columns for ID, Booking Number, Full Name, Email, StartDate, endDate, Status, and Action. There are two rows of data, both with a status of 'Approved'. The 'Action' column contains links for 'View' and 'Cancel' for each row.

ID	Booking Number	Full Name	Email	StartDate	endDate	Status	Action
21	4701959	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-31	2023-09-03	Approved	View Cancel
20	2039501	ASMAU AMINU	asmau.aminu52@yahoo.com	2023-08-30	2023-09-02	Approved	View Cancel

THANK YOU.