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Report: Project Of Hotel Management

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❖ Hotel Management System Report

• Project Overview

The Hotel Management System is a software application designed to streamline the operations of a hotel. It provides functionalities for managing bookings, customer information, room availability, and billing. The system aims to enhance the efficiency of hotel management and improve the customer experience.

• Objectives

To automate the booking process for customers.

To manage room availability and pricing effectively.

To maintain customer records and history.

To generate reports for management analysis.

To provide a user-friendly interface for both staff and customers.

• Technologies Used

Programming Language: Java

IDE: NetBeans

Database Management: MySQL

Database Tool: MySQL Workbench

Frameworks/Libraries: (If any, mention here)

Operating System: (e.g., Windows, Linux)

Features

User Authentication:

Login and registration for hotel staff and administrators.

- **Room Management:**

Add, update, and delete room information.

View room availability and pricing.

Booking Management:

Create, update, and cancel bookings.

Search for available rooms based on customer requirements.

- **Customer Management:**

Store and manage customer details.

View booking history and preferences.

Billing System:

Generate invoices for customers.

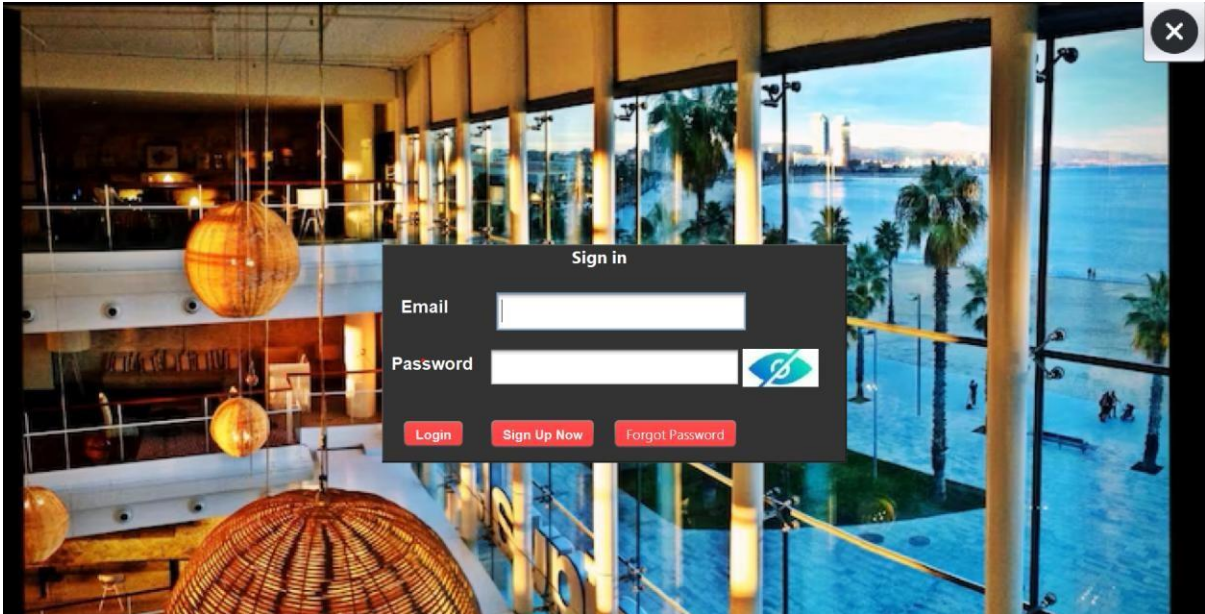Process payments and manage transactions.

- **Reporting:**

Generate reports on bookings, revenue, and occupancy rates.

User Interface

The user interface is designed to be intuitive and user-friendly, allowing staff to navigate through the system easily. Below are some screenshots of the application:

Screenshot 1: Login Page

Screenshot 2 Admin Page:

Double Click on Table row to change Status

Search by Email   [   ]   [Search]   [Refresh]

Name	Email	Password	Segurity Questiom	Answer	Status
Asif	asif@gmail.com	asif786	Your Favourite City	karachi	pending
asmat	asmatali@gmail.c...	asmat786	Your Favourite B...	java	approved
basit	basit@gmail.com	45104	Your Favourite G...	cricket	pending
Zahid Ali AMhar	k24sw012@gmail....	z1a3h5i7d	Your Favourite City	Karachi	approved
SFS	sfs@gmail.com	sfs786	Your Favourite G...	pbg	approved
Fateh	sfs12@gmail.com	onttowfive	Your Favourite Bi...	python	pending
wajid	w@gmail.com	123	Your Favourite City	Hyderabad	
waheed	wa@gmail.com	4321	Your Favourite City	sukkur	
zam	zam@gmail.com	54321	Your Favourite B...	Holy Quran	approved
zahid khan	zk@gmail.com	zk12	Your Favourite B...	quran	approved
Admin	zm@gmail.com	admin	Your Favourite G...	hockey	pending

Screenshot 3: Signup:
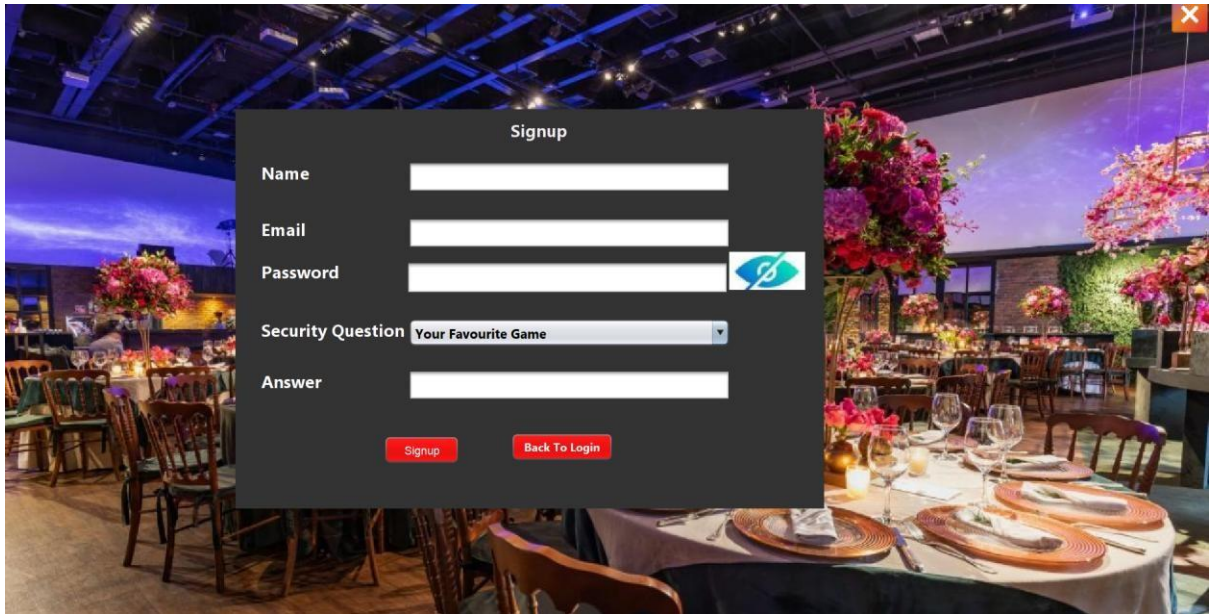
Screenshot 4 Forgot Password:
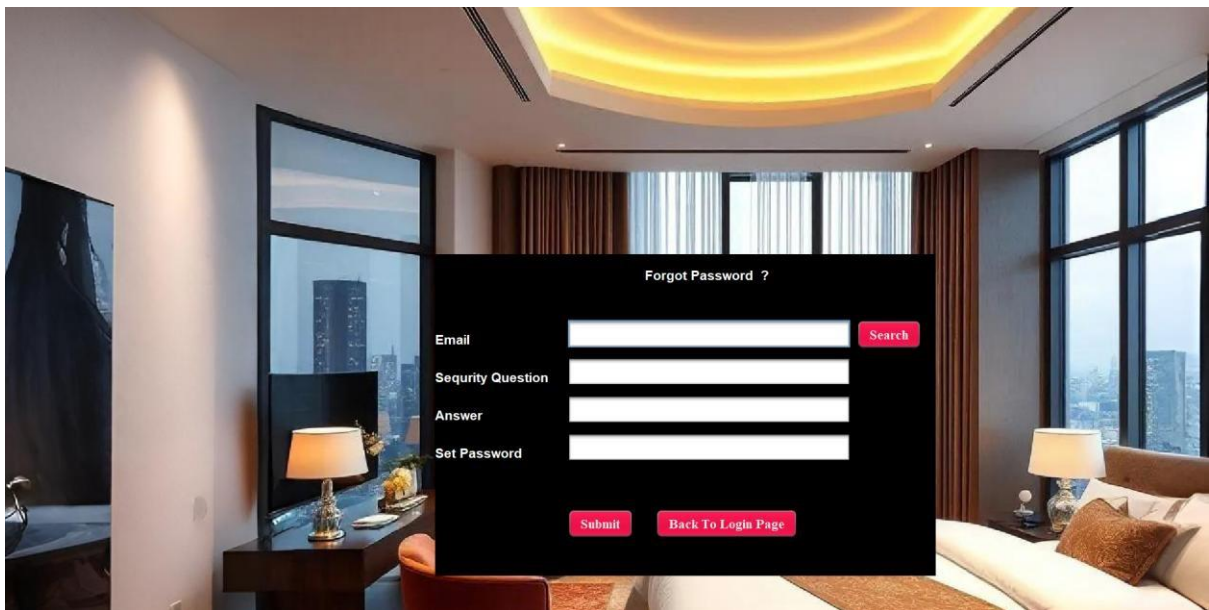
Screenshot 5: Home Page:
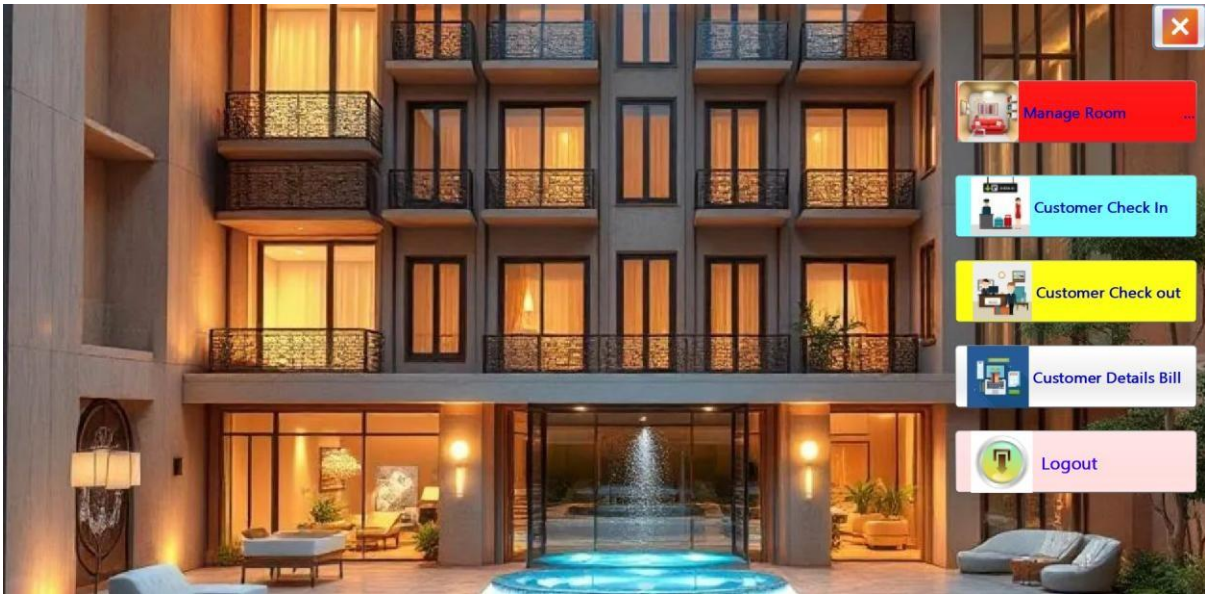
Screenshot 6 Manage Room:

Room Number	Room Type	Bed	Pricce	Status
12	NON AC	Single	300.0	Booked
13	AC	Double	12000.0	Booked
14	NON AC	Single	30000.0	Booked
15	AC	Double	50000.0	Booked
16	AC	Single	60000.0	Booked
17	AC	Double	50000.0	Booked
18	AC	Double	6000.0	Booked
19	AC	Single	37000.0	Booked
20	NON AC	Double	35000.0	Booked
21	AC	Single	21000.0	Booked
22	AC	Single	22000.0	Booked
23	AC	Single	23000.0	Booked
25	AC	Single	70000.0	Booked
26	AC	Single	26000.0	Booked
27	NON AC	Double	270000.0	Booked
28	AC	Single	28000.0	Booked
29	AC	Single	29000.0	Booked
30	AC	Single	30000.0	Booked
31	AC	Single	31000.0	Not Booked
32	AC	Single	32000.0	Booked
33	AC	Single	33000.0	Booked
34	AC	Single	34000.0	Not Booked
35	AC	Single	35000.0	Not Booked
37	NON AC	Double	87000.0	Not Booked
38	NON AC	Double	50000.0	Not Booked
39	NON AC	Double	23000.0	Booked
45	AC	Single	46000.0	Not Booked
50	AC	Single	80000.0	Booked
51	AC	Single	51000.0	Booked
60	AC	Single	60000.0	Booked

Room Number

Room Type

AC

Bed

Single

Price

Double Click on rows for update & Delete

Add Room

Screenshot 7 : Check-In
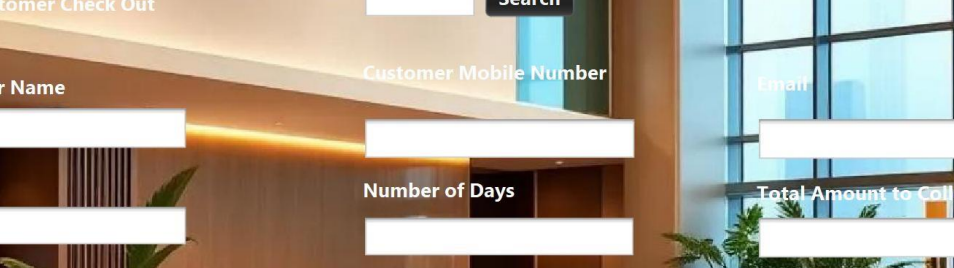
Screenshot 8 : Check-Out

Name	Mobile Num...	Email Id	Gender	Adress	Id	Nationality	Date	Room Number	Bed	Room Type	Price
uzair	03000023...	u@qmail....	Male	Nawabshah	45400023...	pakistani	2025-04-25	29	Single	AC	29000.0
sadaf	03212211...	sadaf@qm...	Female	banqali str...	12121212...	banqali	2025-04-25	39	Double	NON AC	23000.0
Kashif	99887766...	k@qmail.c...	Male	kpk	99887766...	pakistani	2025-04-26	50	Single	AC	80000.0
nasir	99887777...	n@qmail....	Male	kpk	99887777...	pakistani	2025-04-26	51	Single	AC	51000.0
ks	00998877...	ks@qmail....	Female	Karachi	00998877...	pakistani	2025-04-26	60	Single	AC	60000.0
zahidali	03083253...	k24sw012...	Male	Karachi	45401122...	pakstaniu	2025-04-26	80	Single	AC	80000.0

Screenshot 9 : Generate Bill:

-: Zahid Ali Mahaar :-
****
Bill ID:- null
Customer Details:-
Name:- null
Mobile Number:- null
Email:- null
****
Room Details:-
Room Number:- null
Type:- null
Bed:- null
Price:- null
Check IN Date=null   Number of Days=null
Check OUT Date=null   Total Amount=null
****
Thank You from karachi Hotel Manageent,,Please Visit Again.

Print

Screenshot 10: Database:

Login page:

name	email	password	sq	ans	status
Asif	asif@gmail.com	asif786	Your Favourite City	karachi	pending
asmat	asmatali@gmail.com	asmat786	Your Favourite Book	java	approved
basit	basit@gmail.com	45104	Your Favourite Game	cricket	pending
Zahid Ali AMhar	k24sw012@gmail.com	z1a3h5i7d	Your Favourite City	Karachi	approved
SFS	sfs@gmail.com	sfs786	Your Favourite Game	pbg	approved
Fateh	sfs12@gmail.com	onttowfive	Your Favourite Bike	python	pending
wajid	w@gmail.com	123	Your Favourite City	Hyderabad	NULL
waheed	wa@gmail.com	4321	Your Favourite City	sukkur	NULL
zam	zam@gmail.com	54321	Your Favourite Book	Holy Quran	approved
zahid khan	zk@gmail.com	zk12	Your Favourite Book	quran	approved
Admin	zm@gmail.com	admin	Your Favourite Game	hockey	pending
NULL	NULL	NULL	NULL	NULL	NULL

Screenshot of Customer table:

name	mobile	email	gender	address	id	nationality	date	roomnumber	bed	roomtype	price	status	amount	outdate	billid	days
asmat	11223344556	a@gmail.com	Male	Hyderabad	1122334455667	pakistani	2025-04-25	21	Single	AC	21000	check out	NULL	2025-05-25	10	NULL
sfs	11223344556	sfs@gmail.com	Male	kpk	1122334455667	pakistani	2025-04-25	22	Single	AC	22000	check out		2025-04-25	11	NULL
wasif	03153248654	wasif@gmail.com	Male	village fazal	4512309812321	pakistani	2025-04-25	23	Single	AC	23000	check out	NULL	NULL	12	NULL
Saira	03098765476	s@gmail.com	Male	Karachi	1234512345543	pakistani	2025-04-25	25	Single	AC	70000	check out	NULL	NULL	13	NULL
Wahidbux	55443322116	w@gmail.com	Male	SBA	7665544332211	pakistani	2025-04-25	26	Single	AC	26000	check out	NULL	NULL	14	NULL
pk	88776655443	pk@gmail.com	Male	Sukrand	1122334455667	pak	2025-04-25	27	Double	NON AC	270000	check out	NULL	NULL	15	NULL
umair	03000233412	u@gmail.com	Male	karachi	4540112233445	pakistani	2025-04-25	28	Single	AC	28000	check out	NULL	NULL	16	NULL
uzair	03000023231	u@gmail.com	Male	Nawabshah	4540002323134	pakistani	2025-04-25	29	Single	AC	29000	NULL	NULL	NULL	17	NULL
ayaan	03012345678	a@gmail.com	Male	SBA	0312345678 12	pak	2025-04-25	30	Single	AC	30000	check out	NULL	2025-04-25	18	NULL
Tabraiz	03000123456	t@gmail.com	Male	SBA	0300012345612	Pakistani	2025-04-25	31	Single	AC	31000	check out	0	2025-04-25	19	0
Shakeel	03002233445	s@gmail.com	Male	hyderabad	4544002233445	pak	2025-04-25	32	Single	AC	32000	check out	NULL	NULL	21	NULL
SK	03098765432	sk@gmail.com	Male	Karachi	4540998765432	pakistani	2025-04-25	33	Single	AC	33000	check out	NULL	NULL	23	NULL
rahemm	99887766554	r@gmail.com	Male	kpk	9988776655412	pak	2025-04-25	34	Single	AC	34000	check out	NULL	2025-05-25	25	NULL
hussain	03212276342	hussain@gmail.c...	Male	village filano	1212121212121	pakistani	2025-04-25	35	Single	AC	35000	check out	NULL	2025-12-03	28	NULL
tariq	12121212121	tariq@gmail.com	Male	babarloiby...	1212121212112	PAKISTANI	2025-04-25	37	Double	NON AC	87000	check out	NULL	2025-06-23	33	NULL
sadaf	03212211221	sadaf@gmail.com	Female	bangali str...	1212121212121	bangali	2025-04-25	39	Double	NON AC	23000	NULL	NULL	2025-09-21	34	NULL
israr	09876543215	israr@gmail.com	Male	village mpm	1234567890987	indian	2025-04-26	45	Single	AC	46000	check out	NULL	2026-09-25	38	NULL
Kashif	99887766544	k@gmail.com	Male	kpk	9988776654454	pakistani	2025-04-26	50	Single	AC	80000	NULL	NULL	2026-09-29	40	NULL

❖ **Database Design**

The database is designed to support the functionalities of the hotel management system. Below is a brief overview of the main tables:

Users Table: Stores user credentials and roles.

Rooms Table: Contains information about room types, availability, and pricing.

Bookings Table: Records all booking transactions.

Customers Table: Maintains customer information and history.

User Interface Implementation Steps

 Setting Up the Project:

Open NetBeans and create a new Java project.

Set up the necessary libraries for database connectivity (e.g., MySQL Connector/J).

- **Designing the User Interface:**

Use Java Swing or JavaFX to create the GUI components.

Design the login page, dashboard, room management, booking management, and billing sections.

- **Connecting to the Database:**

Establish a connection to the MySQL database using JDBC.

Implement methods for CRUD operations (Create, Read, Update, Delete) for each table.

Implementing Functionality:

Write Java methods to handle user authentication, room management, booking processes, and billing.

Ensure that the application can handle exceptions and provide user feedback.

Testing the Application:

Test each feature thoroughly to ensure functionality and usability.

Fix any bugs or issues that arise during testing.

Finalizing the User Interface:

Polish the UI for better user experience, ensuring it is intuitive and easy to navigate.

Reporting

The reporting feature allows hotel management to generate various reports, including:

Occupancy Reports: Displays the percentage of rooms occupied over a specific period.

Revenue Reports: Summarizes total revenue generated from bookings.

Customer Reports: Lists customer details and their booking history.

These reports can be generated in a user-friendly format, allowing management to make informed decisions based on data analysis.

❖ Conclusion

The Hotel Management System developed using Java and MySQL provides a robust solution for managing hotel operations. By automating key processes such as booking management, room availability, and customer records, the system enhances operational efficiency and improves the guest experience. Future enhancements could include mobile access, online booking capabilities, and integration with third-party services to further streamline hotel management.

❖ Links:

1 To watch the promo video of hotel management project click here:

https://drive.google.com/file/d/1-4XTCDGQ1OBQfoZgdfJkMwRGoTVMO47c/view?usp=drive_link

1 To watch the source code of hotel management project click here:
https://drive.google.com/file/d/16mlDov87ZBOpCE44GPSt3eYfoN75Ff_L/view?usp=drive_link

#_____THE END_____#

$_____Thank you_____$