

Project Report

HOTEL MANAGEMENT SYSTEM

Team Binary Wing



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INTRODUCTION

In our project “**Hotel Management System**” We have tried to show how the data/information in hotels is managed. This is just an overview of management in hotels. It manages and maintains the records of customers, rooms, employees, and drivers in the hotel. The project is aimed to maintain the day-to-day state of admission/vacation of Residents, List of employees, room details etc. Main objective of this project is to provide a solution for hotels to manage most their work using computerized processes.

This software application will help admin to handle customer information, room allocation details, Payment details etc.

The rooms have different categories like single bed, double bed etc. so their charges and records will be maintained accordingly.

This software has been made in a user-friendly interface, so that anyone can add, delete, update the entries and handle all the transactions easily. As a security we have provided Admin username and Password.

The project, Hotel Management System is a desktop-based application that allows the hotel manager to handle all hotel activities online. Interactive GUI and the ability to manage various rooms, employees, drivers and customers make this system very flexible and convenient. This application gives managers the power and flexibility to manage the entire system from a single online system. Hotel management project provides room booking, staff management and other necessary hotel management features. The system allows the manager to post available rooms in the system.

OBJECTIVE

The objective of the Hotel Management System is to develop a project which maintains booking of rooms, providing drivers, etc. It is a windows-based application to be implemented in Java.

The Purpose of the whole process is to ease the daily or regular activities of the Hotel Management into an automatic computerized retrievable process. The daily activities includes the Room activities, Entering details of the new customer check in, To allocate a room as per the customer need and interest, Recording the checkout time and details, Releasing or Empty of room and to record the process in a computer system for future.

Main objective of this project is to provide a solution for hotels to manage most their work using computerized processes. This software application will help admin to handle customer information, room allocation details, Payment details etc.

- Keeping records of admission of customers.
- Facilities provided by hotels are fully utilized in an effective and efficient manner.

FEATURE

1. Hotel Room Bookings and Reservation
2. Front Desk Operations
3. Managing Guest Profile
4. User Privilege and security control
5. Keeping a tab on guest check-in check-out status
6. Maintenance of hotel rooms.
7. Providing a user friendly interface.

DEVELOPMENT METHODOLOGY

SYSTEM ANALYSIS

Study Of Current System-

The current System of Hotel Management is fully based on paperwork. Hotel Management has to manage all records of customers and rooms on paper.

Problem and Weakness of Current System-

Paperwork is a tedious job. There can be delay and the problem of human error in allocating rooms and providing resources.

ADVANTAGE OF HOTEL MANAGEMENT SYSTEM

- Sometime it happens that the rooms get booked soon when one visits the place therefore user can make advance booking using this system.
- It saves user time in searching a room.
- The system is useful as it calculates an exact cost of rooms for requested number of days.
- It saves organization resources and expenses.
- This system is effective and saves time and cost of users.
- It is less time consuming and provides maximum accuracy.

COST BENEFIT ANALYSIS

- Role Based Screen Access
- The roles can be any of the following:
- Administrator Role - is for provisioning of Register/Update/Remove/Transfer Contract.
- Data Entry role – for entering of basic form data
- Supervisory role – for review/approval/rejection/modification of data
- Decision making role – viewing of report and decision making

FEASIBILITY STUDY

- To analyze whether the software will meet organizational requirements Feasibility is defined as the practical extent to which a project can be performed successfully. To evaluate feasibility, a feasibility study is performed.
- To determine whether the software can be implemented using the current technology and within the specified budget and schedule A feasibility study is a preliminary investigation of a proposed system to decide whether the system can run smoothly with the organization.
- To determine whether the software can be integrated with other existing software.
- Benefits that are expected and to decide will the organization go for it.

Three Types of feasibility study

1. Technical Feasibility.

Ascertains that the technology chosen for software development has a large number of users so that they can be consulted when problems arise, or improvements are required

2. Operational Feasibility.

Analyzes whether users will adapt to a new software. Determines whether the organization is satisfied by the alternative solutions proposed by the software development team.

3. Economical Feasibility

Cost of hardware, software, development team, and training. Feasible only if tangible and intangible benefits outweigh the cost. The cost for the proposed online shopping system is outweighing the cost and efforts involved.

REQUIREMENT SPECIFICATION

User Requirements

There should be software which allocates rooms automatically and maintains records of customers.

System Requirements

There should be a database backup of the hotel management system. There should be a Java supported framework for the system. Operating system should be Windows XP or a higher version of windows.

User Interface

The User interface required to be developed for the system should be user friendly and attractive.

There are two sets of java APIs for graphics programming:

AWT (Abstract Windowing Toolkit) and Swing.

- ❑ AWT API was introduced in JDK 1.0. Most of the AWT components have become obsolete and should be replaced by newer Swing components.
- ❑ Swing API, a much more comprehensive set of graphics libraries that enhances the AWT, was introduced as part of Java Foundation Classes (JFC) after the release of JDK 1.1. JFC consists of Swing, Java2D, Accessibility, Internationalization, and Pluggable Look-and-Feel Support APIs. JFC was an add-on to JDK 1.1 but has been integrated into core Java since JDK 1.2.

For the development of this project both hardware and software were required.

The hard required is any machine compatible for running the softwares and resources required.

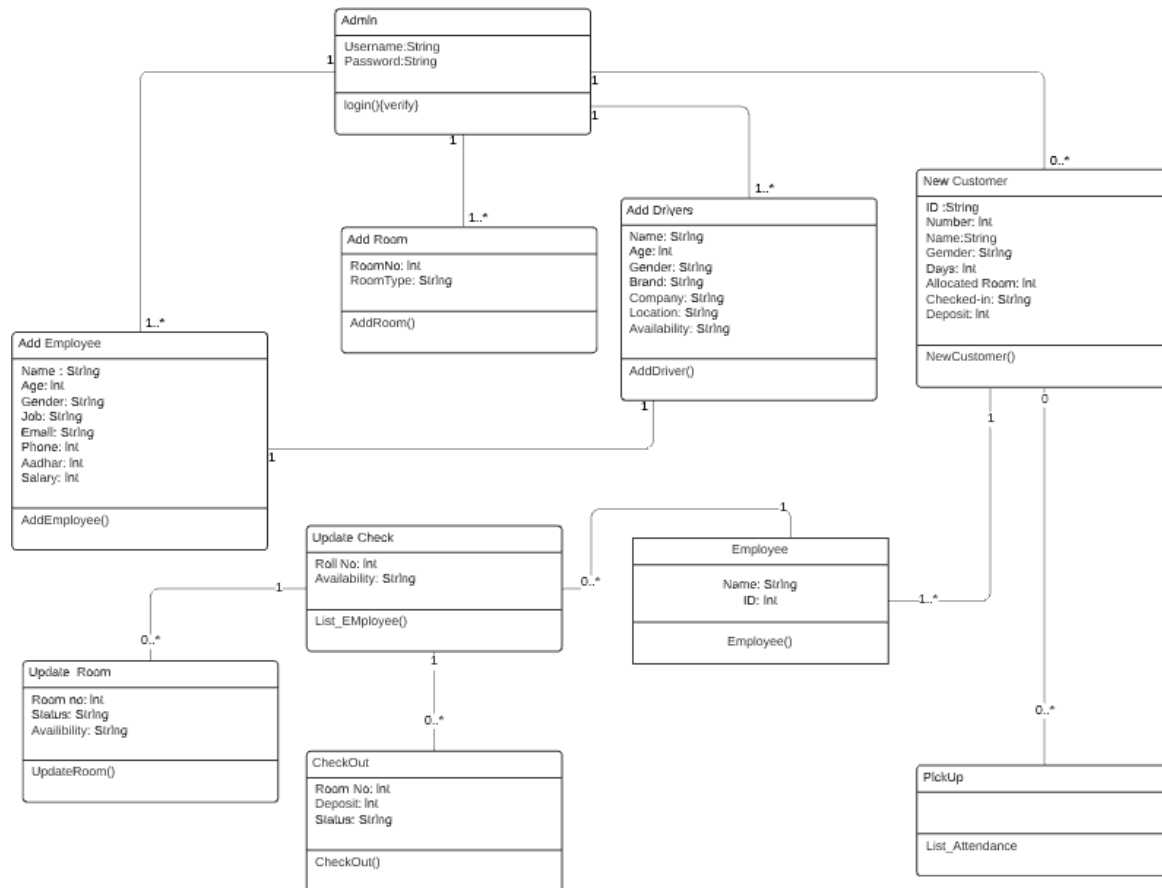
Software Requirements

- Operating System Windows 10
- Front End Java, NetBeans
- Back End MySQL

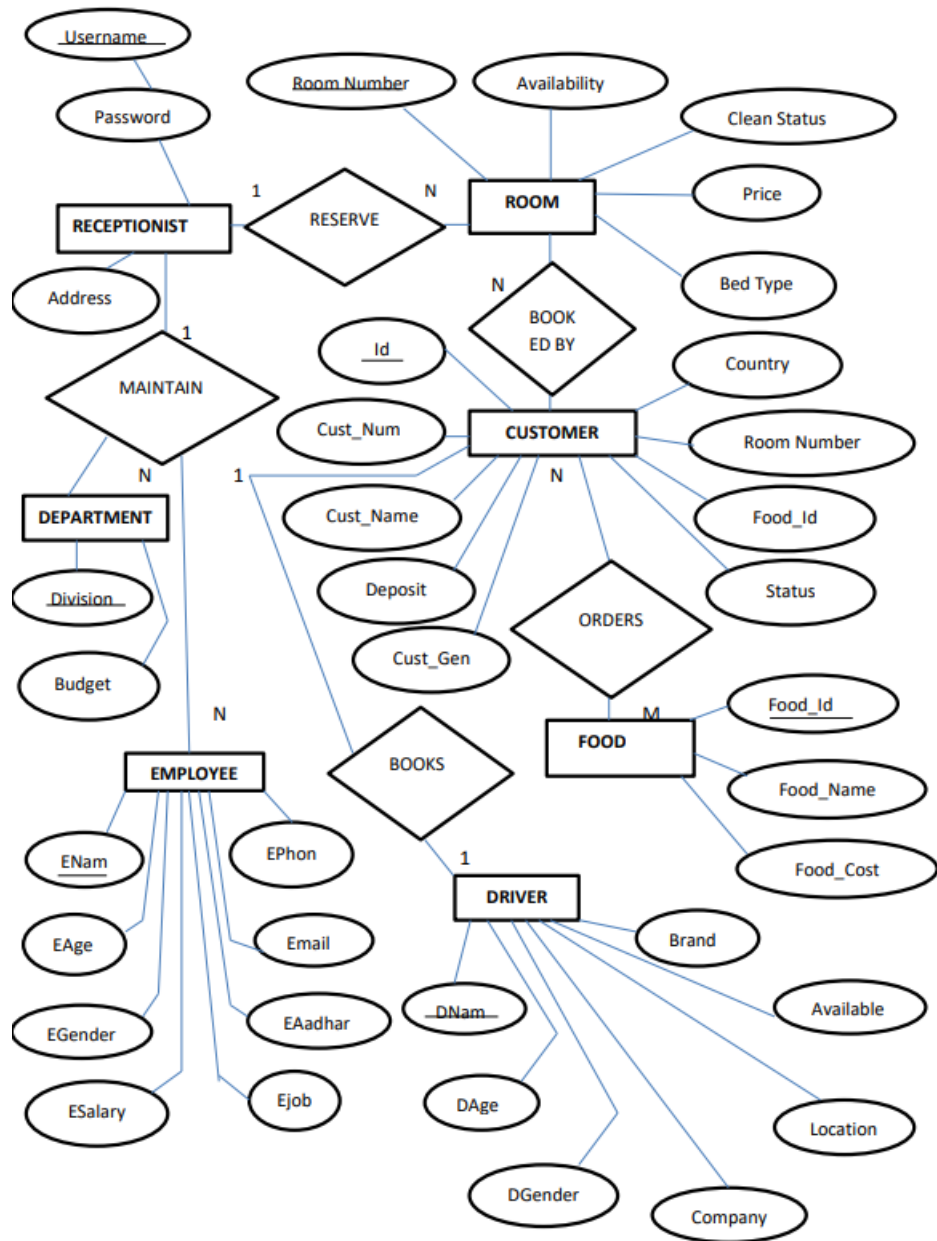
Hardware Requirements

- Desktop PC or a Laptop
- Printer
- Operating System – Windows 10
- Intel® Core™ i3-6006U CPU @ 2.00GHz
- 4.00 GB RAM
- 64-bit operating system, x64 based processor
- 1024 x 768 monitor resolution
- Keyboard and Mouse

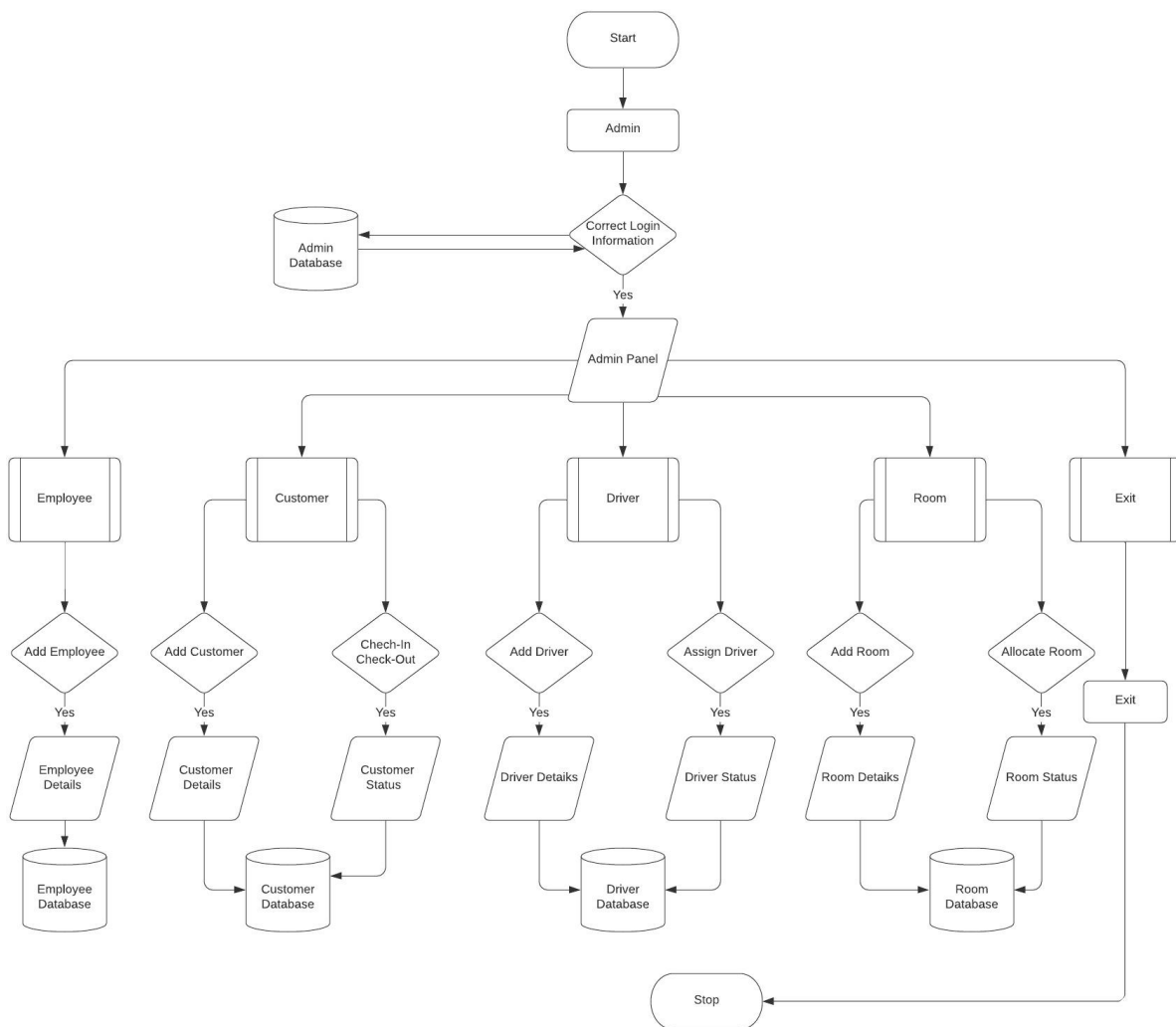
Class Diagram



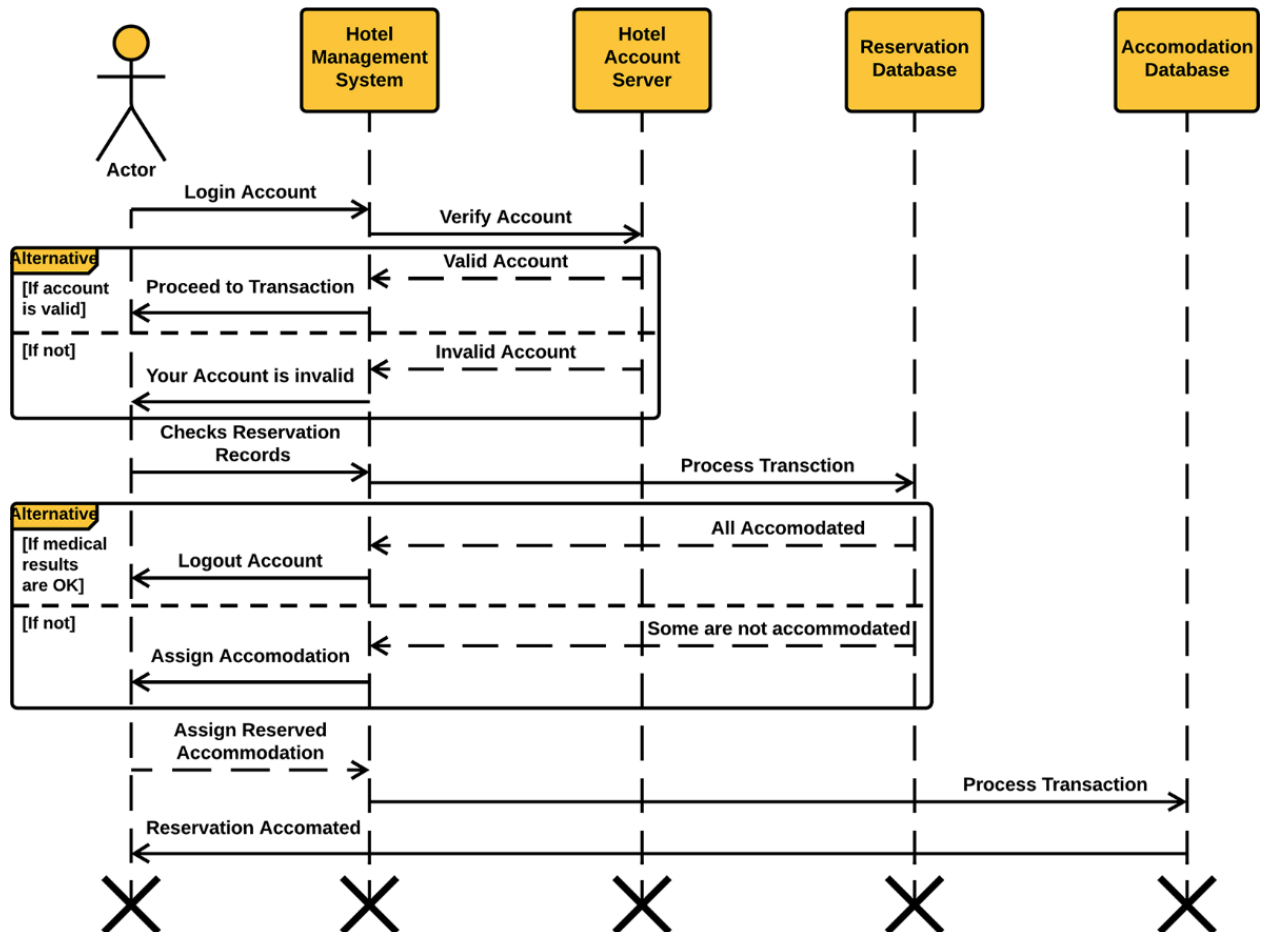
ER Diagram



Flowchart



Sequential Diagram



Project Module:

Administrative Modules

There are 2 modules I have included in this project:

1. Admin: Admin can add a new room, a new employee and a new drive.
2. Receptionist: Receptionist can add a new customer and allocate rooms, can check all room details, customers details, employee details, search for a particular room etc.



Implementation

Testing

Unit Testing

Unit testing is a testing technique in which modules are tested individually. Small individual units of source code are tested to determine whether it is fit to use or not. Different modules of games are put to test while the modules are being developed. Here modules refer to individual levels, players, scenes

Integration Testing

Integration testing is the technique in which individual components or modules are grouped together and tested. It occurs after testing. The input for the integrated testing, are the modules that have already been unit tested.

System Testing

System testing is conducted on the entire system as a whole to check whether the system meets its requirements or not. 'Valar Morghulis' was installed on different systems and any errors or bugs that occurred were fixed.

Acceptance Testing

User Acceptance is defined as a type of testing performed by the Client to certify the system with respect to the requirements that was agreed upon. This testing happens in the final phase of testing before moving the software application to the Market or Production environment.

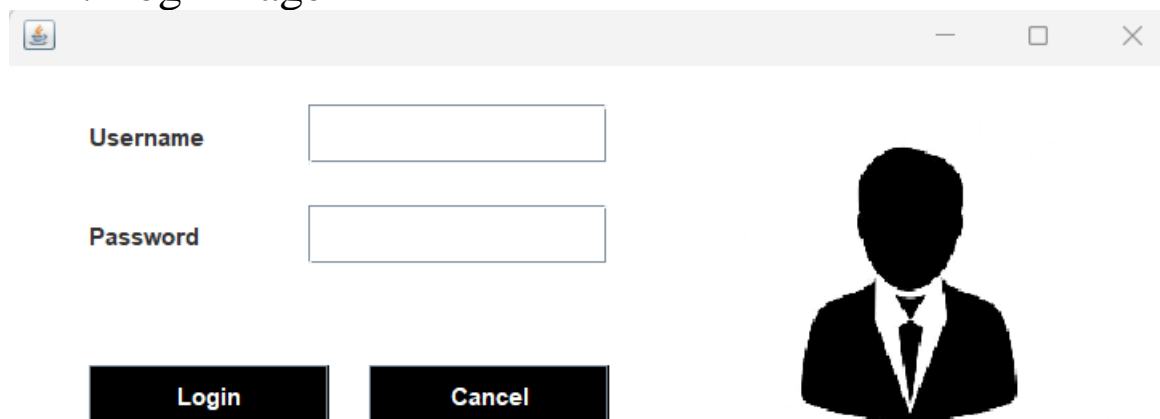
Coding Phase with respective Screenshots and Database

Output Screenshot

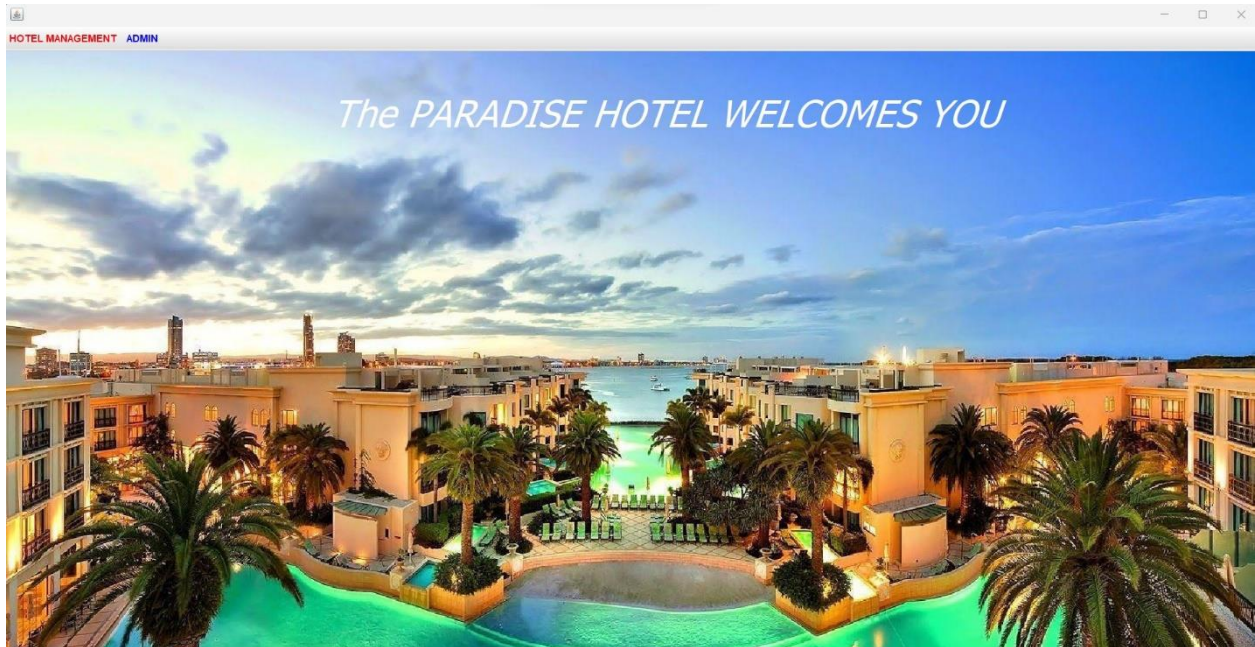
1. Start Screen



2. Login Page

A screenshot of a software window titled "PARADISE HOTEL MANAGEMENT SYSTEM". The window displays a login form with two input fields: "Username" and "Password". Below the fields are two buttons: "Login" and "Cancel". To the right of the form is a silhouette icon of a person in a suit. The window has a standard Windows-style title bar with minimize, maximize, and close buttons.

3. DashBoard Page



4. Add Employee

A screenshot of the "Add Employee" form overlay on the same Paradise Hotel dashboard background. The form is a white window with a title bar and contains the following fields and controls:

- NAME:
- AGE:
- GENDER: (dropdown menu)
- JOB: (dropdown menu)
- SALARY:
- PHONE:
- EMAIL:
- NID:

Below the form fields are two buttons: "Add" and "Cancel". To the right of the form fields is an illustration of four hotel staff members: a female receptionist, a male bellhop, a female maid, and a male porter with a suitcase.

5. Add Rooms

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Add Rooms


Room Number

Available

Cleaning Status

Price

Bed Type



6. Add Driver

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Add Drivers

Name

Age


Gender

Car Company

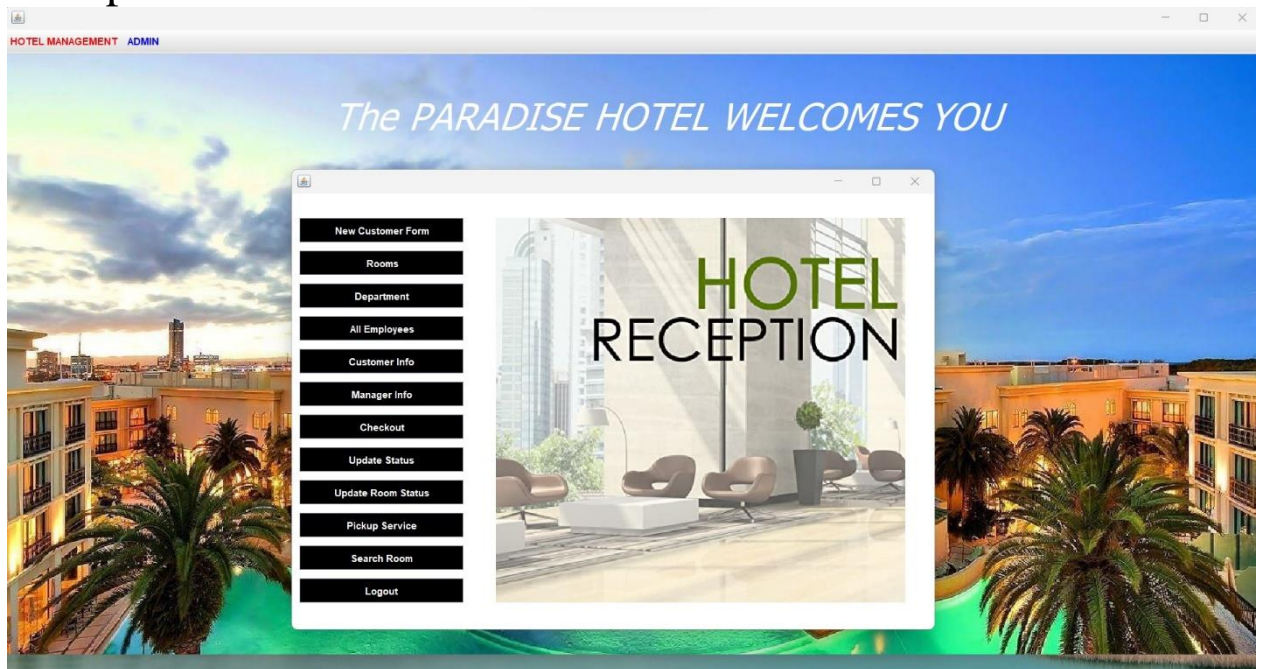
Car Model

Availability

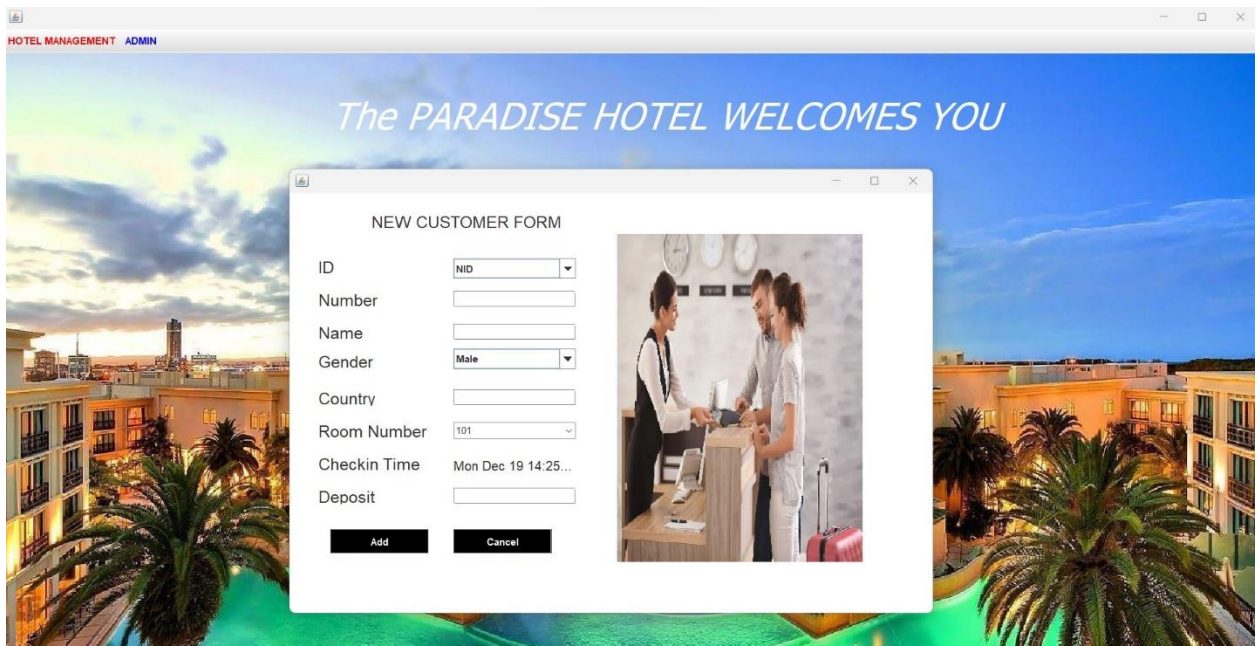
Location



7. Reception



8. Add new Customer



9. Room Details

Room Details

Room Number	Availability	Status	Price	Bed Type
101	Available	Cleaned	2000	Double Bed
102	Available	Dirty	2000	Single Bed
103	Available	Cleaned	3000	Single Bed
104	Available	Cleaned	3000	Single Bed
104	Available	Cleaned	5000	Double Bed
105	Available	Dirty	4900	Double Bed
106	Occupied	Dirty	3900	Single Bed

[Back](#)

The screenshot also shows a background image of a hotel building at night and a smaller inset image of a hotel room with a double bed and a chair.

10. Department

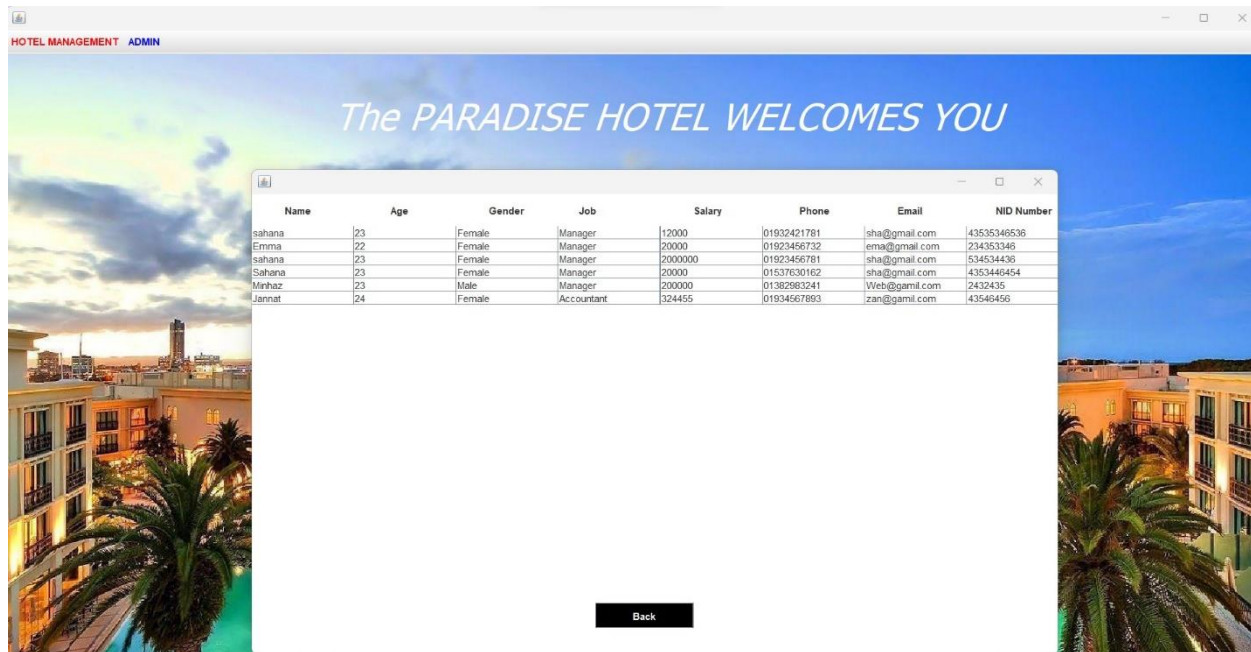
Department

Department	Budget
Front Office	500000
Housekeeping	40000
Food and Beverage	23000
Kitchen or Food Production	540000
Security	320000

[Back](#)

The screenshot also shows a background image of a hotel building at night with a swimming pool in the foreground.

11. Employee Details

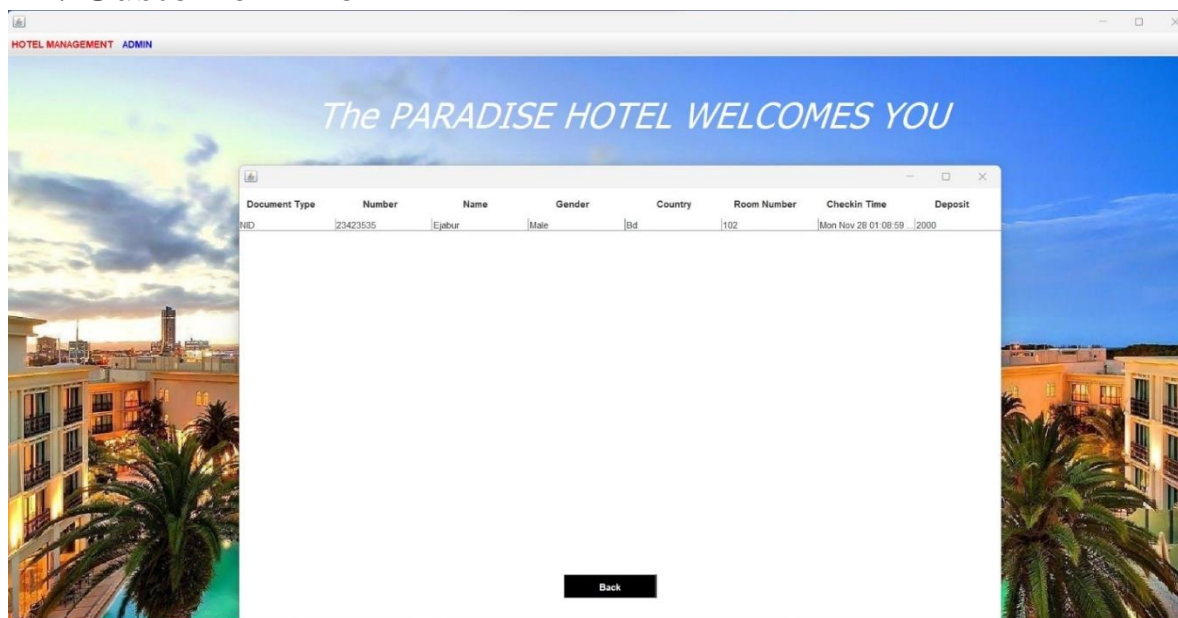


The screenshot shows the 'Employee Details' window in the HOTEL MANAGEMENT ADMIN interface. The window has a title bar with a logo and the text 'HOTEL MANAGEMENT ADMIN'. The main content area features a large background image of a hotel building at night with palm trees. Overlaid on this is a table with the following data:

Name	Age	Gender	Job	Salary	Phone	Email	NID Number
sahana	23	Female	Manager	12000	01932421781	sha@gmail.com	43535346536
Emma	22	Female	Manager	20000	01923456732	ema@gmail.com	234533346
sahana	23	Female	Manager	2000000	01923456781	sha@gmail.com	534534436
Sahana	23	Female	Manager	20000	01537630162	sha@gmail.com	4353446454
Manhaz	23	Male	Manager	200000	01382983241	Web@gmail.com	2432435
Jannat	24	Female	Accountant	324455	01834567893	zan@gmail.com	43546456

Below the table is a 'Back' button.

12. Customer Info



The screenshot shows the 'Customer Info' window in the HOTEL MANAGEMENT ADMIN interface. The window has a title bar with a logo and the text 'HOTEL MANAGEMENT ADMIN'. The main content area features a large background image of a hotel building at night with palm trees. Overlaid on this is a table with the following data:

Document Type	Number	Name	Gender	Country	Room Number	Checkin Time	Deposit
NID	23423535	Ejabur	Male	Bd	102	Mon Nov 28 01:08:59 2000	

Below the table is a 'Back' button.

13. Manager Info

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Name	Age	Gender	Job	Salary	Phone	Email	NID Number
sahana	23	Female	Manager	12000	01932421781	sha@gmail.com	43535346536
Emma	22	Female	Manager	20000	01923456732	ema@gmail.com	234353346
sahana	23	Female	Manager	2000000	01923456781	sha@gmail.com	534534436
Sahana	23	Female	Manager	20000	01537630162	sha@gmail.com	4353446454
Minhaz	23	Male	Manager	200000	01382983241	Web@gmail.com	2432435

Back

14. Check In Details

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Update Status

Customer Id: 23423636

Room Number: 102

Name: Ejabur

Checkin Time: Nov 28 01:08:59 BDT 2022

Amount Paid: 2000

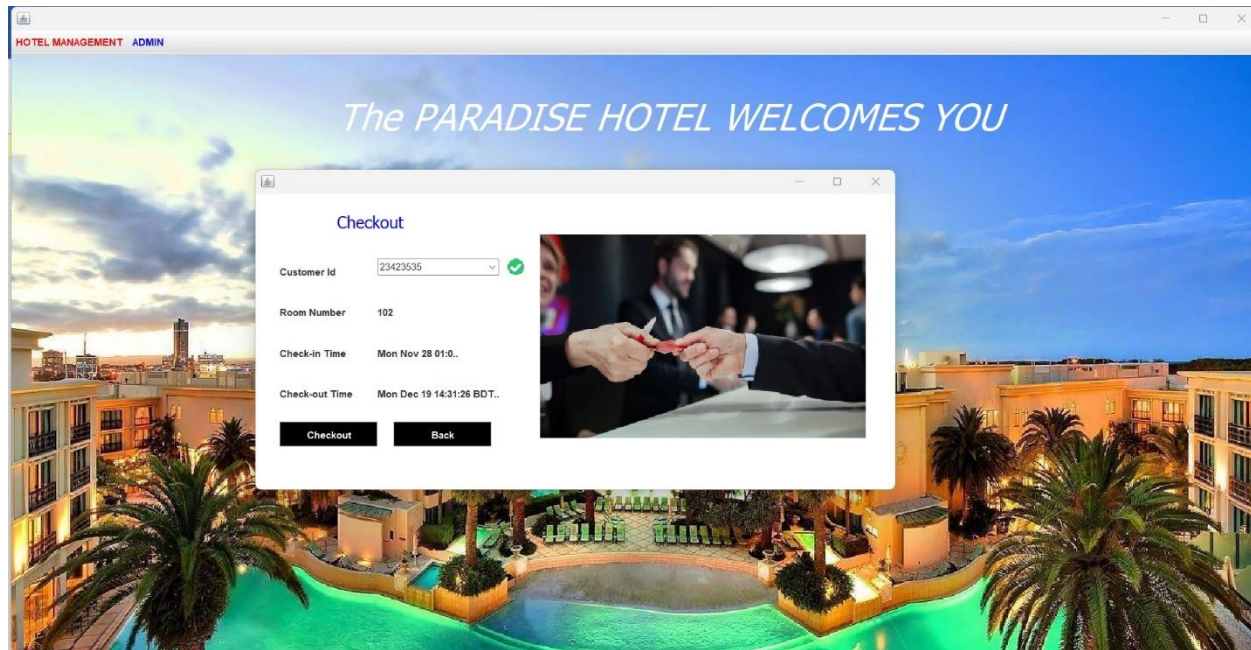
Pending Amount: 0

Check In

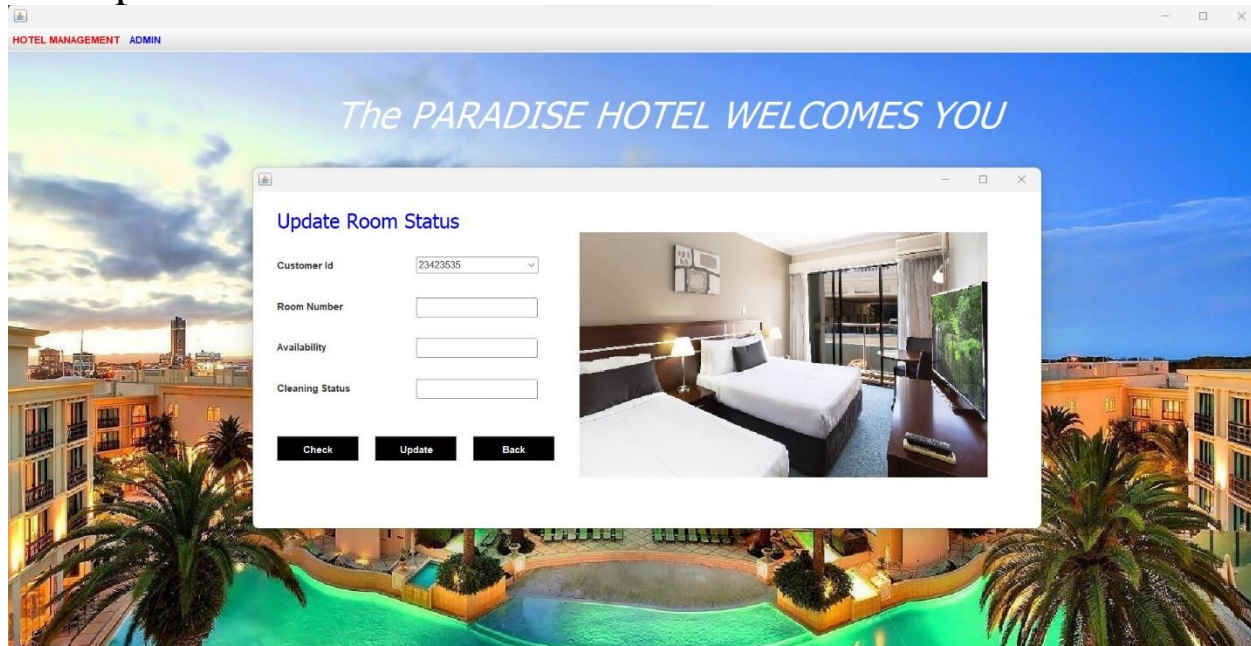
Check Out

Check Update Back

15. Check out



16. Update room status



17. Pickup service

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Pickup Service

Type of Car:

Name	Age	Gender	Company	Brand	Availability	Location
Rahim	21	Male	dc	de32	Available	x
Kabir	25	Male	dg3	dgs	Available	Kalamabazar
Kabir	25	Male	dg3	dgs	Available	Kalamabazar
Hasan	25	Male	fg	de2	Available	Bondarhat
Luhan	27	Male	dsg	s3	Busy	potanga

18. Search for room

HOTEL MANAGEMENT ADMIN

The PARADISE HOTEL WELCOMES YOU

Search for Room

Bed Type: ☐ Only display Availabl...



Room Number	Availability	Status	Price	Bed Type
101	Available	Cleaned	2000	Double Bed
102	Available	Dirty	2000	Single Bed
103	Available	Cleaned	3000	Single Bed
104	Available	Cleaned	3000	Single Bed
104	Available	Cleaned	5000	Double Bed
105	Available	Dirty	4900	Double Bed
106	Occupied	Dirty	3900	Single Bed

Database Table

1. Customer


Field	Datatype	Constraint
document	Varchar(30)	NN
number	Numeric(30)	PK
name	Varchar(30)	NN
gender	Varchar(30)	NN
country	Varchar(30)	NN
room	Numeric(30)	NN
checkintime	Varchar(30)	NN
deposit	Numeric(30)	NN

Result Grid





Filter Rows:

Export:



Wrap Cell Content:



	document	number	name	gender	country	room	checkintime	deposit
▶	NID	1232345	jhana	Female	bd	1	Fri Nov 18 20:05:53 BDT 2022	23445
	NID	23434456	mithun	Male	india	444	Fri Nov 18 20:06:18 BDT 2022	2343450

2. Room

Field	Datatype	Constraint
roomnumber	Numeric(30)	PK
availability	Varchar(30)	NN
cleaning_ status	Varchar(30)	NN
price	Number(30)	NN
bed_type	Varchar(30)	NN

Result Grid						Filter Rows:	Export:	Wrap Cell Content:
	roomnumber	availability	cleaning_status	price	bed_type			
▶	1	Occupied	Dirty	1000	Single Bed			
	2	Occupied	Dirty	1000	Single Bed			
	3	Occupied	Cleaned	12235	Double Bed			
	4	Occupied	Cleaned	23365	Double Bed			
	444	Occupied	Cleaned	5555555555	Single Bed			
	6	Occupied	Cleaned	455	Single Bed			
	101	Occupied	Cleaned	23243	Double Bed			
	109	Available	Cleaned	6000	Single Bed			
	205	Occupied	Dirty	20000	Double Bed			

3. Employee

Field	Data Type	Constraint
Name	Varchar(30)	NN
Age	Numeric(30)	NN
Gender	Varchar(30)	NN
Job	Varchar(30)	NN
Salary	Number(30)	NN
Phone	Number(30)	NN
Email	Varchar(30)	NN
Nid	Number(30)	PK

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	n	age	gender	job	salary	phone	email	nid
▶	raisa aha	23	Female	Front Desk Clerks	1232346	0123345452233	r@gmail.com	344637
	test	23	Male	Chefs	2344456	01412233456	t@gmail.com	34355676
	Fariha	23	Male	Front Desk Clerks	300000	01910373832	f@gmail.com	1423682394
	Tester	30	Female	Chefs	123456	01718190812	tester@gmail.com	14367789890
	Preetom	23	Female	Manager	500000	01817233456	p@gmail.com	2343454765
	Tehsim	60	Male	Manager	100000	0171037373	tt@gmail.com	36534534

4. Driver

Field	Data Type	Constraint
Name	Varchar(30)	NN
Age	Numeric(30)	NN
Gender	Varchar(30)	NN
Company	Varchar(30)	NN
Brand	Varchar(30)	NN
Available	Varchar(30)	NN
Location	Varchar(30)	NN

Result Grid							
				Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 	
	name	age	gender	company	brand	available	location
▶	eman	24	Male	macedes	sdgh	Available	potenga
	test	12324	Male	huwai	df23	Available	badda
	test	12324	Male	huwai	df23	Available	badda
	emas	30	Male	hundai	AG848	Available	Doha
	Habib	40	Male	Walton	AMN345	Available	Doha
	Habib	40	Male	Walton	AMN345	Available	Doha

5. Login

Field	Data Type	Constraint
Username	Varchar(30)	PK
Password	Varchar(30)	NN

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
username	password				
▶ admin	12345				

6. Department

Field	Data Type	Constraint
Department	Varchar(30)	PK
Budget	Numeric(30)	NN

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
department	budget				
▶ Front Office	500000				
Housekeeping	40000				
Food and Beverage	23000				
Kitchen or Food Production	540000				
Security	320000				

Conclusion

In this project I have tried my best to make user friendly software. This software can be handled by any person who has little bit of idea of computers. In this software I have tried to meet most of the requirements of the present hotel management system including maintaining details of customers, rooms, employees and drivers. I also keep provision to update the details of customers, rooms and employees. In my effort I have tried to make my software all the more user friendly but there may some features which I would like to include in my continuous attempts.

FUTURE SCOPE

The world is changing rapidly and so is the meaning of the Hotel Management System. Today hotel management is not only confined to hotels but has gone deep into tourism, catering, clubs, etc making it a very paying and an exciting career option.

With the rapid growth of the hotel industry pushed forward by foreign and domestic tourism and business travels, the demand for well trained and quality personnel too has gone up high. India is one of the preferred tourist and travel destinations. Approx 4.4 million tourists visit our country every year. The growth of 20% has been recorded in the tourist and hospitality industry over a few years and more growth is expected in coming years. At present, there are about 200 millions of jobs available in the industry, out of which 20% of the job opportunities are in India.

The Hotel Management System has a lot of enhancement options. In future more features may be added category-wise. It may try to analyze the user behaviour and preferences and accordingly suggest. All concepts can be applied to make the Hotel Management System more efficient.

REFERENCE

www.youtube.com

www.google.com
