Vasavi College of Engineering

DBMS

Assignment 3

Thallapalli Suhaas Rao

1602-23-737-181

Katta Vibhas Reddy

1602-23-737-189

IT-C

Car Dealership Management System

Car Dealership Management System

Abstract

This project presents the design and implementation of a Comprehensive Management System for a Car Dealership, developed using Java Swing and AWT for the front-end and SQLPlus with JDBC for the back-end. The system aims to streamline all major activities in a car dealership by integrating them into a centralized desktop application.

The application supports modules for inventory management, sales and purchase tracking, customer and employee records, service scheduling, and financial reporting. A user-friendly interface developed with Java Swing and AWT ensures ease of use, while robust data handling and storage are managed through SQLPlus via JDBC, enabling efficient and secure data transactions.

Key features include real-time data updates, role-based access control, and intuitive navigation across different operations within the dealership. By automating manual processes and providing detailed insights through data-driven dashboards, the system enhances operational efficiency, minimizes errors, and supports better decision-making.

This solution is ideal for medium to large-scale dealerships looking to modernize their workflow and improve customer service through technology-driven management.

Technology Stack:

Front End: Java Swing and AWT

Back End: Oracle SQLPlus

Connection: JDBC

Modules Overview:

MainFrame: Landing Page for users

CustomerLoginPage: Login Page for Customers

EmployeeLoginPage: Login Page for Customers

CustomerDash: Dashboard for Customers

CustomerVisitSchedule: Page to schedule dealership Visit

CustomerBookServicng: Page to book services by customer for the car

EmployeeRecordSale: Page for customers to record sale of cars

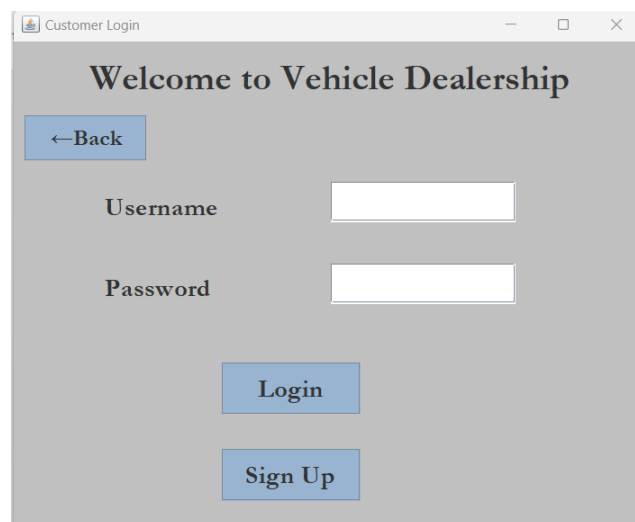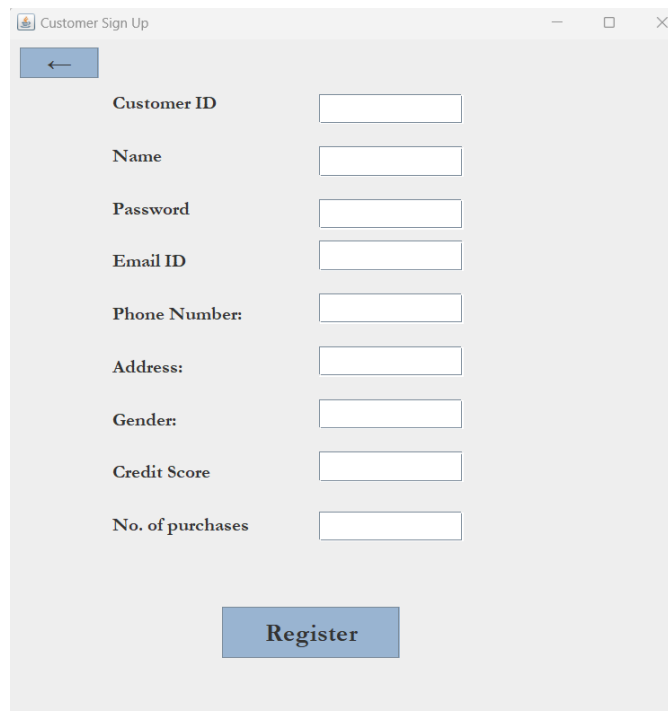**EmployeeAssignServiceWorkers:** Page for Employee to give tasks to other workers

Output:

Welcome to Vehicle Dealership

[Employee]   [Customer]

Customer Login — □ ✕

Welcome to Vehicle Dealership

[←Back]

Username   [   ]

Password   [   ]

[Login]

[Sign Up]

Customer Sign Up — □ ✕

[←]

Customer ID   [   ]

Name   [   ]

Password   [   ]

Email ID   [   ]

Phone Number: [   ]

Address: [   ]

Gender: [   ]

Credit Score   [   ]

No. of purchases   [   ]

[Register]

Customer Dash

Book a Visit

Book Servicing

VIN	Vehicle Name	Purchase Date
401	Tata Nexon-X	2025-01-10
404	Hyundai i20 Sport	2025-03-26

←Back

Schedule Visit

Cancel Visit

Scheduled Visits

Dealership	Date of Visit
501	2025-02-01 00:00:00
502	2025-06-09 00:00:00

Choose Dealership: Reddy Cars

Choose Visiting Date: 11-Apr-2025

Book Visit

Choose Dealership: Reddy Cars ▼

Choose Visiting Date: 11-Apr-2025

Cancel Visit

Book Service   Cancel Service

Service Type	Booking Date
Oil Change	2024-02-03
Battery Check	2025-10-02

Choose Service Type: Oil Change ▼

Choose Service Date: 18-Apr-2025

Book Visit

Choose Service Type: Oil Change

Choose Servicing Date: 18-Apr-2025

Cancel Visit

Employee Login — □ ×
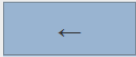
Welcome to Vehicle Dealership

←Back

Username

Password

Login

Employee Dash — □ ×

Record Sale

Assign Service Workers

VIN	Sale Date
401	2025-03-26 00:00:00
404	2025-04-03 00:00:00
404	2025-04-14 00:00:00
405	2025-04-23 00:00:00

Employee ID	Service Type
301	Oil Change
301	Tire Replace
301	Battery Check
302	Tire Replace
302	Battery Check

←

VIN   703

Choose Visiting Date: 19-Apr-2025

Record

←
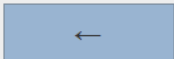
Employee ID: 303

Service ID: 701

Assign