

JAVA Project:- Parking Lot Management System

Objective:-

The objective of this project is to design and implement an efficient **Parking Lot Management System** that automates the management of parking facilities. This system will ensure seamless parking operations by providing features for **vehicle registration, spot allocation, ticketing** while also offering role-based access and dashboards for different users. The primary goals include:

1. **User-Friendly Registration and Login System:**

- Allow users (Admin, Attendant, and Customer) to create accounts, log in securely, and access role-specific features.

2. **Integration and Accessibility:**

- Build a system that can integrate with payment gateways for seamless fee collection.
- Ensure the application is accessible via both desktop and mobile platforms.

3. **Comprehensive Ticketing System:**

- Generate tickets with details such as issue time, exit time, parking duration, and fees.
- Maintain a history of tickets for each user.

4. **Data-Driven Insights:**

- Provide analytics such as occupancy rates, revenue generation, and user activity.

5. **Secure and Scalable Design:**

- Use encrypted passwords for user authentication.
- Ensure scalability to handle multiple parking lots and a growing number of users and vehicles.

ER-Diagram:-

