Problem Statement

Design a **Test Drive Booking System** for a car-selling company that operates multiple hubs across multiple cities. The system should allow users to book test drives for specific cars available at a hub within predefined, configurable 1-hour slots. If a slot is booked for a particular car, it should be blocked to prevent overbooking.

Requirements

Functional Requirements

1. Users can view available test drive slots for a specific car at a hub.
2. Users can book a test drive for a car at a selected time slot.
3. If a slot is booked for a car, it should not be available for others.
4. Admins should be able to configure available time slots per hub.
5. Users should receive confirmation upon successful booking.
6. Users should be able to cancel a booking (optional).

Non-Functional Requirements

1. The system should be scalable to handle multiple cities and hubs.
2. Performance should be optimized to handle high user traffic.
3. Data consistency should be maintained (avoid double booking).
4. The system should support API-based integration for mobile/web apps.