

Project: Car Rental website

Hackathon Day 2: Planning the Technical Foundation

Step 1: Define Technical Requirements

This step is like drawing the blueprint of a house before construction. It will define how all the parts of my website.

- Frontend Requirements

- This is the part where user interact. It is intuitive, responsive, and visually appealing.

1. User registration

- users can register by providing details like name, email, and password.

How it works:

When the user submits their data, it will be sent to the backend and stored securely in a database in Sanity CMS.

2. Browse Cars

- users will see a catalog of cars available for rent. Filters like car type, price range, and availability will be provided.
 - The frontend will fetch this data dynamically from the Sanity CMS, which stores all car-related data.

How it works: When the users load page, the frontend will make a request to Sanity's API. The API will return all the car listings.

3. Booking Process

- A step-by-step car booking process will guide users through:
 - Selecting a car
 - Choosing rental dates
 - Confirming the booking

How it works: Once the user selects a car & dates, the data is sent to the backend API, which checks availability in real-time. If the car is available, the booking is confirmed, and the data is saved in the database.

4. Dashboard for users

- View past bookings
- Cancel or modify bookings
- Check ongoing rentals.
- Sanity CMS as Backend
 - Here's how Sanity fits into the project

1. Storing Car Data

- All car related information

2. Handling User Data

- user profiles, booking history, & preferences will also be stored in Sanity.

3. Availability and Booking Management

- Sanity can handle car availability status by updating the car's data once it's booked or returned.

• Third-Party APIs

- To enhance functionality & provide additional features.

1. Location Services (e.g. Google Maps API)

- Enable users to search for nearby rental locations or pick-up points.
- Show the distance & estimated time to reach the location.

2. SMS/Email Notifications (e.g. SendGrid)

- Notify users about booking confirmations, receipt, and reminders.