

Step 2: Design System Architecture

System Components and Workflow

1. **Frontend (Next.js):**
 - Displays car details and handles user interactions.
 - Sends and receives data via APIs.
2. **Sanity CMS:**
 - Stores and retrieves car, user, and booking data.
 - Acts as the backend for content management.
3. **Third-Party APIs:**
 - Payment Gateway: Processes user payments securely.
 - Geo-location API: Assists in pickup/drop-off point selection.

High-Level Diagram

```
[Frontend (Next.js)]
|
[Sanity CMS] -----> [Car Data API]
|
[Third-Party APIs] -----> [Payment Gateway]
                        -----> [Geo-location API]
```

Key Workflows

1. **User Registration:**
 - User signs up on the frontend -> Data sent to Sanity CMS -> Confirmation shown on the frontend.
2. **Car Browsing:**
 - User browses cars -> Frontend fetches data from Sanity CMS -> Cars displayed dynamically.
3. **Order Placement:**
 - User selects a car and provides booking details -> Data sent to Sanity CMS -> Order saved.
4. **Payment:**
 - User completes payment via Payment Gateway -> Payment status recorded in Sanity CMS.
5. **Confirmation:**
 - Order confirmation details fetched from Sanity CMS -> Displayed on the frontend.