

Hackathon 3-Day 2

Marketplace Technical Foundation

1. Technical Requirements

Frontend

Technology Stack

- **Framework:** [Next.js](#)
A React-based framework that enables server-side rendering (SSR) and static site generation (SSG), perfect for building high-performance and SEO-friendly applications.
- **UI Library:** shadcn/ui
Provides pre-built, customizable UI components that work seamlessly with Tailwind CSS.
- **Styling Framework:** [Tailwind CSS](#)
A utility-first CSS framework for fast and responsive design.

1. Rental Listing Page

- Features: Display all rentable Car with filters for availability and pricing.
- Libraries/Features to Use:
- Dynamic routes (pages/rentals/[id].tsx) for individual Car details.
- shadcn/ui components like Card and Filter.

1. Rental Details Page

- Features: Show detailed information about the selected Car, including pricing and rental terms.
- Libraries/Features to Use:
- shadcn/ui components like Modal and Accordion.

1. Rental Cart Page

- Features: View selected rental items and finalize booking details.
- Libraries/Features to Use:
- shadcn/ui components for form handling and summary display.

Rental Schema:

```

export default {
  name: 'rental',
  type: 'document',
  fields: [
    { name: 'name', type: 'string', title: 'Car Name' },
    { name: 'rentalPrice', type: 'number', title: 'Rental Price per Hour' },
    { name: 'availability', type: 'boolean', title: 'Availability' },
    { name: 'description', type: 'text', title: 'Description' },
    { name: 'image', type: 'image', title: 'Car Image' },
    { name: 'rentalTerms', type: 'text', title: 'Rental Terms' }
  ]
};

```

Rental Order Schema:

```

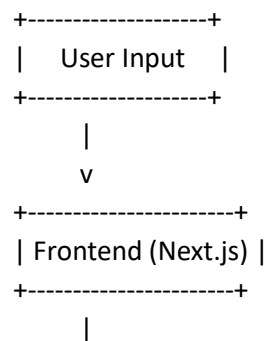
export default {
  name: 'rentalOrder',
  type: 'document',
  fields: [
    { name: 'customer', type: 'reference', to: [{ type: 'customer' }], title: 'Customer' },
    { name: 'Car', type: 'reference', to: [{ type: 'rental' }], title: 'Car' },
    { name: 'rentalDuration', type: 'number', title: 'Rental Duration (Hours)' },
    { name: 'total', type: 'number', title: 'Total Amount' },
    { name: 'status', type: 'string', title: 'Rental Order Status' }
  ]
};

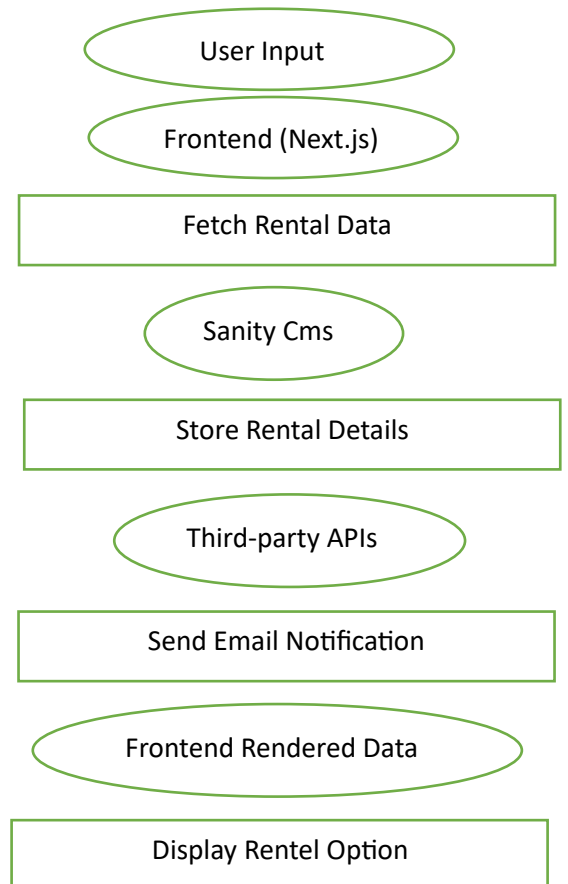
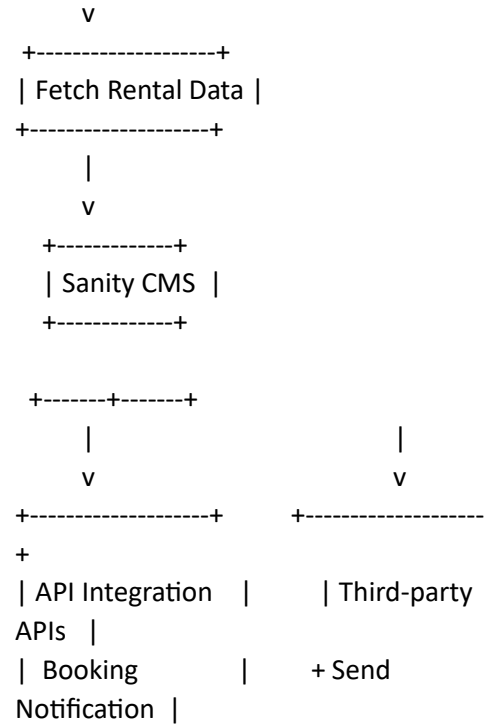
```

Third-Party APIs

APIs Required:

1. **Payment Gateway API:** For secure transaction processing.
2. **Shipment Tracking API:** To provide real-time shipment updates.
3. **Email Notification API:** For sending order confirmations.
4. **Booking Availability API:** To check Car rental availability.





Workflows:

Rental Data Fetching:

1. Frontend requests rental car data from Sanity CMS.
2. Sanity CMS retrieves and returns the data in JSON format.

Rental Booking Processing:

1. Frontend sends rental booking details to the API endpoint.
2. API saves the booking in Sanity CMS.
3. Notification and payment processing APIs are triggered.

Planned Endpoints:

/rentals (GET)

- **Description:** Fetch all available rental Cars.
- **Response Example:**

```
[  
  {  
    "id": "1",  
    "name": "Car A",  
    "rentalPrice": 500,  
    "availability": true  
  }  
]
```

/rentalOrders (POST)

- **Description:** Save new rental booking details.
- **Request Example:**

```
{  
  "customerId": "123",
```

```
"Car": "1",
"rentalDuration": 5,
"total": 2500
}
```

/shipment (GET)

- **Description:** Fetch the shipment status for an order.
- **Response Example:**

```
{
  "orderId": "123",
  "status": "In Transit"
}
```

About Cars

MARK Rent A Car is an innovative platform offering rental-commerce solutions for luxury Cars. Whether you want Car rent one for special occasions, MARK provides a seamless experience with detailed listings, transparent pricing, and reliable customer support. Our mission is to redefine convenience and exclusivity in the luxury aviation market.

