Hackathon 22025{Day2}

Car Rental Marketplace Plan

Goals:

The purpose of this plan is to build a reliable, scalable, and user-friendly car rental platform tailored for a seamless rental experience. The core aspects of this project include:
1- **FrontEnd**: user interface for all customer for checking details about their vehicle rental needs.
1. **Sanity CMS**: To manage car listings and rental orders efficiently.
2. **Custom APIs**: To handle car rentals, order tracking user orders,.
3. **Payment Gateway**: For reliable and secure payment processing.
This platform is designed to provide both administrators and end-users with an intuitive, reliable system that aligns with modern web development standards.

1.Technical Requirements:

a)-Frontend Requirements:

I will create User-friendly interface for browsing products Responsive design for mobile and desktop user.
It also include easy navigation by following pages,

Pages:

1-Home- It just like landing page about search bar, Navigation button,and overview about featured car,current promotions etc
2- Contact: This page has information about Contact via email, Social media etc.
3-About Services: We explain all about the company and our services on this page.
4- Car-listing: All types of vehicles and cars listed here.
5- cart: overview of rentals with option for adjustment.
6: Checkout: A easy and secure payment process for booking and payment
7: **Order Confirmation**: A summary of Rental details.

b)-Sanity CMS as Backend:

Sanity CMS will handle all backend data and workflow it include;
Content Management*: it keep track record of all cars details like car name,model, availability customer namelike name, contact, address history etc. and Order data like car ID customer ID rent date,location etc*
Backend workflow *: It supports car listing, order booking record,content update like pricing and promotions etc.*

Third-Party APIs*:*
We will import essential API to improve functionality

Order Tracking:
Get real time update on pickup and return time
Payment Gateway:
To ensure secure payment we use possible gateway like Stripe, Meezan Bank, Paypal, etc
Notification:Receives SMS and emails update from customers for car and rental details inquiries.

2-Car rental Workflow

User/visitor
Visitors simply come on website and will see our home page and car details then e left.

User Registration:
customer signs up on frontend and Data will be stored in by sanity and Confirmation sent to the user via email or phone number.

Product Browsing:
User views cars categories and details when he clicks on any car Sanity API fetches data and Products displayed on frontend.

Order Placement:
User adds items to the cart and Proceeds to checkout Order details saved in Sanity in the backend.

Shipment Tracking:
We can see Order status updates details which will be fetched backend via 3rd-party API or provided API and Displayed to the user.

APIs Requirement
Rental eCommerce;

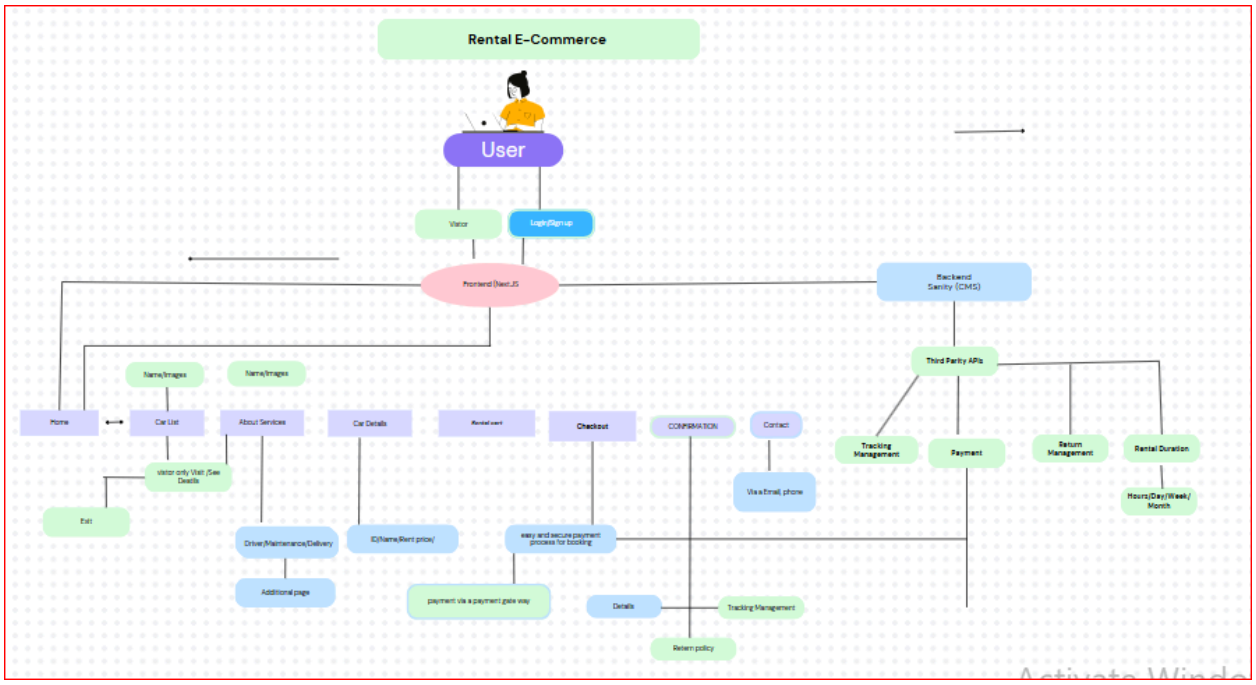
Endpoint Name: Rental-duration
Method: POST
Description: we add rental details for a specific car Like Mehran.
Payload: { "car Id": 356, "duration": "10 days", "deposit": 1000 }
Response : { "confirmationId": 804, "status": "Successful" }

API Endpoints *. Endpoint Name: Car details*
Method: GET
Description: Fetch all available cars from Sanity.
Response: Car details (356, Mahran, 1000, 10, image).

Endpoint Name:orders

Method: POST
Description: wen we click on rent now then it Create a new order in Sanity in te backend side.
Payload: Asif Ali,12653, Mehran, 356, 1000 PKR, Paid.dated:17/01/2025

Endpoint Name:shipment/Rental
Method: GET
Description: Track order status via third-party API.
Response: Shipment ID 12653A1, order ID:12653, status, expected delivery date:18/01/2025



Sanity Schema

```
{/* Sanity Schema for car rental*/}
export default {
    name: 'car',
    title: 'Car',
    type: 'document',
    fields: [
        {
            name: 'title',
```

```
            title: 'Title',
            type:'string',
        },

        {
            name: 'price',
            title: 'Price',
            type:'number',
            options: {
                currency: 'select',
             },
               },
            {
            name: 'paymentType',
            title: 'Payment Type',
            type:'string',
            options: {
                list: [
                    {title: 'Monthly', value:'Monthly'},
                    {title: 'Weekly', value:'Weekly'},
                    {title: 'Daily', value:'Daily'},
                ],

        },

        {
           name: 'location',
            title: 'Location',
            type:'string',
            options: {
                list: [
                    {title: 'Karachi', value:'Karachi'},
                    {title: 'Lahore', value:'Lahore'},
                    {title: 'Islamabad', value:'Islamabad'},
                ],
        },
    }

        {
            name: 'image',
```

```
            title: 'Image',
            type:'image',
            options: {
                hotspot: true,
            },
        },
        {
            name: 'ID',
            title: 'ID',
            type:'string',

        }
        {
            name: 'stock',
            title: 'stock',
            type:'status',
            options: {

                list: [
                    {title: 'Available', value:'Available'},
                    {title: 'Not Available', value:'Not Available'},
                ],
            },

        }
        {
            name: 'return',
            title: 'return',
            type:'text',
            description: 'Return Policy',

            options: {
                isRichText: true,
            }
              },
        ],
      },
```

Collaboration Notes:

During the hackathon, our team primarily collaborated through WhatsApp chat to align on the tasks for Day 1 and Day 2. We discussed the tasks in detail to ensure everyone understood their individual responsibilities. Once we had a clear understanding, we began practicing according to the hackathon requirements, which helped us to start building our solution.

However, as we progressed, we encountered several areas of confusion and uncertainties. To resolve these issues effectively, we decided to arrange a group study session. We organized an online class via Zoom, where everyone could discuss their queries and challenges. This collaborative approach allowed us to share our thoughts and clear up confusion on several technical aspects. As a result, many of our questions were answered, and we gained a better understanding of the project requirements.

Throughout this process, team members provided valuable feedback to each other, which helped improve our individual and collective understanding.