





Day 2 Activities: Transitioning to Technical Planning

FRONTEND REQUIREMENTS:

1)Technologies:

- Next JS
- Tailwind CSS
- React JS
- UI Libraries like (Shadcn and daisy UI)

Using these technologies to provide seamless and user friendly interface .

2) Pages included:

- **Home** : The landing page where users can discover our latest product collections and exclusive deals in one convenient place.
- **Product listing**: The page where all the products are available.
- **Product detail**: A detailed view of a specific stationery product, showcasing its features, specifications, and option.
- **Cart** : A page allowing users to review, update, and manage the items they have added to their shopping cart by selecting products.
- **About** : An informational page that highlights our mission and dedication to providing high-quality products.
- **Checkout** : A page including payment and shipping details that displays after cart page.
- **Order confirmation** : A confirmation page providing users with a summary of their order that displays after checkout page.

System Architecture:

Homepage:

The user visits the website. upon accessing the homepage, product data is dynamically fetched from the backend, powered by Sanity CMS, utilizing efficient GROQ queries

Product Details Page:

When a user selects a product, they are navigated to the product details page. Here, detailed product information, such as additional images, specifications, and customer reviews, is fetched directly from Sanity CMS.

Add to Cart:

The "Add to Cart" process adapts to the user's authentication status. If the user is authenticated, the selected product is added to their cart , For unauthenticated users, they are redirected to the Authentication API to log in or register. Once authentication is successfully completed, the user is redirected back, and the product is seamlessly added to their cart.

Checkout Page:

The checkout page is where the user provides their billing and shipping details. During this step, the entered information, along with the cart contents, is validated and saved to Sanity CMS. Additionally, the checkout page provides an opportunity for the user to review the contents of their cart to confirm accuracy before proceeding to the next step.

Order Confirmation:

Once the user confirms the order, the complete order details are saved to Sanity CMS. The system then triggers the Shipment API to create a shipment. Shipment generates a unique tracking ID, which is stored in the order record in Sanity CMS. This enables real-time order tracking for the user.

Payment Gateway:

Payment details are securely processed through the Payment Gateway, and a confirmation is sent back to the user and recorded in Sanity CMS.

Plan API Requirements:

1. Endpoint Name: /products

- **Method:** GET
- **Description:** Fetch all product details.

2. Endpoint Name: /product/id

- **Method:** GET
- **Description:** Fetch details of a specific furniture item by its ID.

3.Endpoint Name: /auth/register

- **Method:** POST
- **Description:** Register a new user

4.Endpoint Name: /shipment/get-rates

- **Method:** GET
- **Description:** Get the rates for shipping

5.Endpoint Name: /shipment/create-label

- **Method:** POST
- **Description:** Make a label for shipping

6.Endpoint Name: /shipment/track-orders

- **Method:** GET
- **Description:** Retrieve the tracking details for an order.

7.Endpoint Name: /customers

- **Method: POST**
- **Description: Creates customer in sanity**

8.Endpoint Name: /orders

- **Method: POST**
- **Description: create a new order in sanity**

9.Endpoint Name: /orders/order-id

- **Method: GET**
- **Description: Retrieve single order detail**

10. Endpoint Name: /payments/process

- **Method: POST**
- **Description: Process payment for an order.**