

Day2 Planning The Technical Foundation

Technical Roadmap

- Frontend (Next.js): The user interface where customers browse products, add items to the cart, and complete purchases.
- Headless CMS (Sanity): Manages product data, customer orders, and inventory.
- Stripe: Handles secure payment processing.
- ShipEngine/Shippo: Provides shipment tracking and delivery updates.
- Clerk: Manages user authentication (sign-up, login)

How it works

1. User signs up using Clerk. Clerk stores user data securely and sends a confirmation email. User logs in to access their account.
2. User browses product categories. The frontend fetches product data from Sanity. Products are displayed dynamically on the website.
3. User adds items to the cart. User checkout and enters payment details. Order details (customer info, product details, payment status) are saved in Sanity CMS.
4. After the order is placed, ShipEngine generates a shipment ID. The frontend fetches shipment tracking details via the Shipment API and shipment status is displayed to the user.

Product Data API

Endpoint Name: /products Method: GET Description: Fetches all available products from Sanity

Schemas

1.Product Schema

```
export const productSchema = ({
  name: "products",
  title: "Products",
  type: "document",
  fields: [
    {
      name: "title",
      title: "Product Title",
      type: "string",
    },
    {
      name: "price",
      title: "Price",
      type: "number",
    },
    {
      title: "Price without Discount",
      name: "priceWithoutDiscount",
      type: "number",
    }
  ]
})
```

```
},  
  
{  
  name: "badge",  
  title: "Badge",  
  type: "string",  
},  
  
{  
  name: "image",  
  title: "Product Image",  
  type: "image",  
},  
  
{  
  name: "category",  
  title: "Category",  
  type: "reference",  
  to: [{ type: "categories" }],  
},  
  
{  
  name: "description",  
  title: "Product Description",  
  type: "text",  
},  
  
},
```

```
});
```

2. Category Schema

```
export const categorySchema = {  
  name: 'categories',  
  title: 'Categories',  
  type: 'document',  
  fields: [  
    {  
      name: 'title',  
      title: 'Category Title',  
      type: 'string',  
    },  
    {  
      name: 'image',  
      title: 'Category Image',  
      type: 'image',  
    },  
    {  
      title: 'Number of Products',  
      name: 'products',  
      type: 'number',  
    }  
  ],  
};
```

});