

RESPONSIVE DESIGNS (TAILWIND CSS)

I make my website responsive with Tailwind, use classes like `sm:`, `md:`, `lg:`, and `xl:` for different screen sizes..

SIGN UP

1. User enters name, email, phone number, and password.
2. System validates the input (checks for errors, duplicate email, etc.).
3. A unique ****User ID**** is generated for the new account.
4. User data is securely stored in the ****database (e.g., Sanity CMS.)****.
5. User enters OTP to verify their phone number.
6. After successful verification, the user is redirected to the shop rout.
7. A ****confirmation email/SMS**** is sent with login details.

Signup Schema (Sanity CMS)

- **userId** (Unique User ID)
- **name** (Full Name)
- **email** (User Email)
- **phone** (Phone Number)
- **password** (Hashed Password)
- **createdAt** (Account Creation Date)
- **role** (User Role: Admin, Customer)

PRODUCT WITH DATABASE

- 1)Sanity CMS is integrated into Next.js.
- 2) Products are defined in the schema and added via Sanity Studio.
- 3) Next.js fetches product data dynamically from Sanity.

Product Schema Fields

- **id** (Unique Product ID)
- **name** (Product Name)
- **description** (Product Description)
- **price** (Product Price)
- **currency** (Currency Type)
- **image** (Product Image)
- **category** (Product Category)

- **stock** (Available Stock)
- **rating** (Product Rating)
- **reviews** (Total Reviews)

Add to Cart Process

1. **User Clicks "Add to Cart"**
 - A **unique order ID** is generated.
 - The **user ID** is linked to the order.
 - Product details (**id, name, price, quantity, image, etc.**) are stored in cms.
2. **Check for Duplicates**
 - If the product **already exists in the cart**, only the **quantity is updated** instead of adding a duplicate entry.
 - If it's a **new product**, it gets added as a **new cart item**.
3. **Store Data in Sanity CMS**
 - The **cart details** (order ID, user ID, product info, total price, timestamp) are saved in **Sanity CMS**.
 - The cart remains stored even if the user refreshes the page.

Cart Schema Fields

- **orderId** (Unique Order ID)
- **userId** (User who added the product)
- **products** (List of products in the cart)
- **totalPrice** (Total amount for all cart items)
- **createdAt** (Cart creation timestamp)
- **updatedAt** (Last modification timestamp)

Checkout & Shipment Process (Using ShipEngine)(3rd-party API -)

1. User Proceeds to Checkout

- After adding items to the cart, the user clicks "**Checkout**".
- The system **validates** the cart (ensuring items are in stock).
- The user **enters shipping details** (Name, Address, Phone, Email).
- A **unique shipment ID** is generated via **ShipEngine**.

2. Integrating ShipEngine in the Project

- Install **ShipEngine API** in the backend:
- Configure API with **ShipEngine credentials** to create and track shipments.
- Send **user shipping details** to **ShipEngine**, which returns:
 - **Tracking ID**
 - **Estimated Delivery Date**
 - **Shipment Status (Pending, Shipped, Delivered, etc.)**

3. Store Shipment Data in Sanity CMS

- Once ShipEngine generates a shipment, the details are **saved in Sanity CMS**.
- The order's status updates based on **ShipEngine's response**.

4. How It Appears to the User

- The **order confirmation page** displays:
 - Order ID
 - Shipping Details (Name, Address, Contact)
 - Tracking ID
 - Shipment Status (**Pending → Shipped → Out for Delivery → Delivered**)

Shipment Schema (Sanity CMS)

- **shipmentId** (Unique ID from ShipEngine)
- **orderId** (Order ID from checkout)
- **userId** (User who placed the order)
- **trackingId** (Tracking code from ShipEngine)
- **shippingAddress** (User's address details)
- **status** (Pending, Shipped, Delivered, etc.)
- **estimatedDelivery** (Expected delivery date)
- **carrier** (Shipping provider: FedEx, UPS, etc.)