E-Commerce Website Development Using Next.js and TailwindCSS

Overview

This study project focused on creating an e-commerce website using Next.js and TailwindCSS. The project was completed in two phases: setting up the backend and implementing the frontend functionality.

Phase 1: Setting Up the Backend

1. **Installing Next.js and Sanity:**

   - Installed Next.js for building the frontend framework.

   - Initialized Sanity for managing and storing product data.

2. **Creating Product Schema:**

   - Defined the schema for available products in Sanity.

   - Schema included fields such as product name, price, category, image, and description.

3. **Fetching Data:**

   - Used the provided API key to fetch data from Sanity.

   - Dynamically retrieved and displayed the data on the localhost server at port 3000.

Phase 2: Building the Frontend

1. Navigation Bar and Footer:

- Ensured the presence of a responsive navigation bar and footer.

- Navigation bar links included:

  - **Home**

  - **Shop**

  - **About**

  - **Contact**

  - **Icons for registration, search, favorites, and cart.**

- Footer contained:

  - Important links.

  - Miscellaneous information like warranty and free delivery on purchases above $500.

2. Main Home Page:

- Divided into several sections:

  - Featured special products for furniture.

  - Miscellaneous information such as warranty and delivery offers.

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3. **Shop Page:**

- Displayed all products dynamically in card format with details like name, price, and category.

- Clicking on a product's image or "Order Now" button opened an individual product details page.

4. **Add to Cart Functionality:**

- Used JavaScript/TypeScript to implement dynamic cart functionality:

  - Added selected products with details like name, image, and price.

  - Allowed users to add multiple products (same or different).

5. **Cart Page:**

- Displayed all added products with a summary.

- Included "Checkout" and "All Products" buttons.

6. **Checkout Page:**

- Contained two sections:

    - **Order Summary**: Listed selected products.

    - **Billing Details**: Form to collect customer information.

- Buttons:

    - "Submit Information"

    - "Place Order"

- After clicking these buttons, a popup displayed a thank-you message.

7. **Images:**

- Stored in the public folder.

- Included external URLs for some images.

8. **UI/UX Design:**

- Designed an intuitive and visually appealing interface for the best user experience.

Line Diagram of Workflow

1. Home Page

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  +--> Featured Products Section

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  +--> Links to Shop Page

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    +--> Product Cards (Dynamic)

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      +--> Product Details Page

        |

        +--> Add to Cart

          |

          +--> Cart Page

            |

            +--> Checkout Page

              |

              +--> Thank You Message