

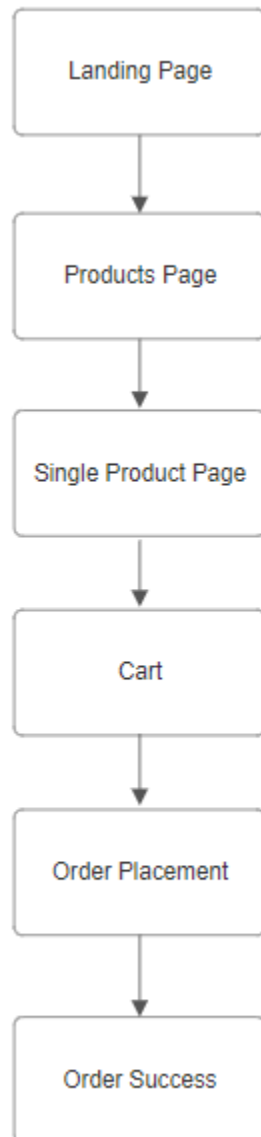
E-Commerce Website Documentation

Introduction

This project is a fully functional e-commerce website built with React, designed to provide users with an engaging shopping experience. The objective is to streamline product selection, and purchase processes, solving the common problem of complicated online shopping interfaces.

Architecture

The system architecture follows a component-based structure, utilizing React for the frontend and fakestore API for the products, the interaction of the components are given in the following diagram.



Features

- User-Friendly Landing Page: Displays featured products and category selection.
- Category Selection: Filter products by various categories.
- Product Listing: View products with images, descriptions, and prices.

- Product Detail Page: Access detailed information and add items to the cart.
- Shopping Cart: Manage selected items, including updating quantities and removing products.
- Checkout Process: Input shipping and payment information for order completion.

Testing

All the testing was done manually, the testing for responsiveness was done using the inspect functionality. The proper working of the cart was checked using the console.

Challenges and Learnings

Development challenges included implementing state management and ensuring responsive design. Overcoming these involved utilizing React's built-in hooks effectively. Key learnings included the importance of component reusability..

Future Enhancements

- User Authentication: Implement user login and registration features.
- Search Functionality: Enable functional search to enhance product discovery.
- Admin Dashboard: Create an interface for managing products and orders.
- Payment Gateway: Integrating an payment gateway for purchasing products