Market Place Technical Foundation [Emaan Malik]

Flowchart Overview

This document describes the user journey flow for an eCommerce marketplace, focusing on key steps and their technical implementation. It is tailored for building a robust and user-friendly platform.

Home Page

- User lands on the homepage.
- Displays featured categories, popular products, and a search bar.

Product Browsing

- User selects a category or uses the search bar.
- Products are displayed with options to filter by price, brand, or ratings.

Product Details

- User clicks on a product to view its details.
- Page includes product description, price, availability, and user reviews.

Add to Cart

- User adds the product to the cart.
- Cart updates dynamically with quantity and price.

Checkout

- User proceeds to the checkout page.
- Provides shipping address and selects a delivery option.

Payment

- User enters payment details.
- Secure payment gateway processes the transaction.

Order Confirmation

- Order details are displayed and sent via email.
- Order status is updated in the backend.

Shipment Tracking

- User visits the 'Order History' section.
- Real-time shipment tracking is enabled via API integration.
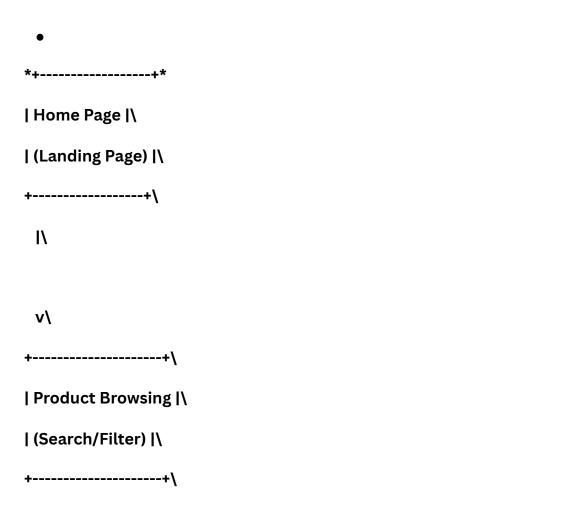
Delivery

- Product is delivered to the user's address.
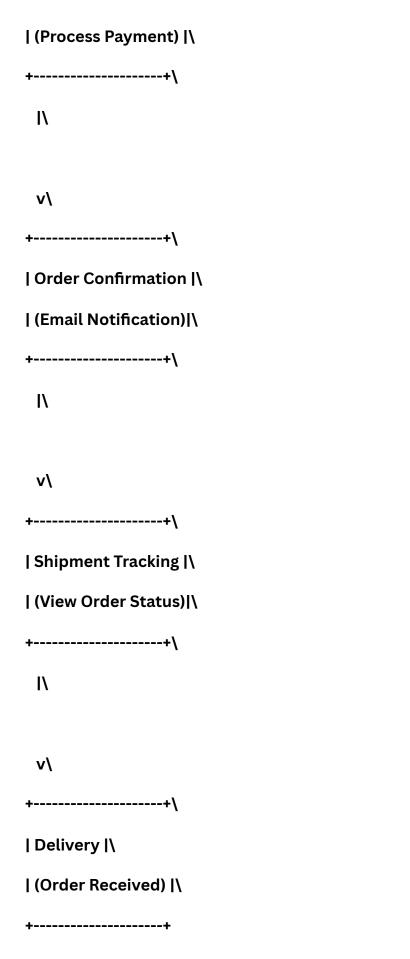
System Architecture Overview

- Frontend (Next.js)
- Sanity CMS
- Product Data API
- Third-Party API (Shipment Tracking API)
- Payment Gateway
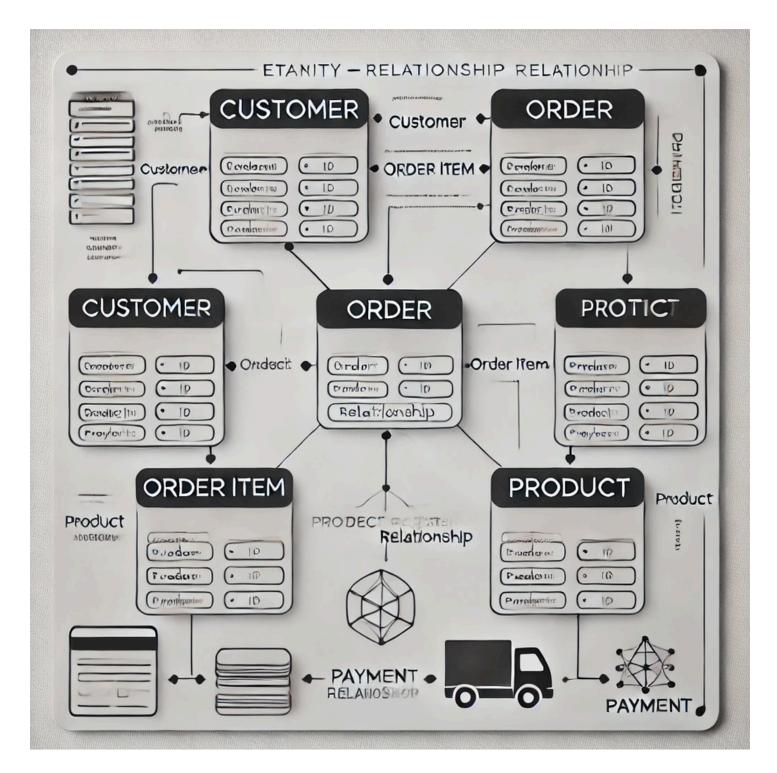
Example Entities

- Product Items: ID, name, price, description, image, category_id
- Categories: ID, name
- Users: ID, name, email, password
- Orders: ID, user_id, order_date, status

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| Home Page |\

| (Landing Page) |\

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| Product Browsing |\

| (Search/Filter) |\

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| Product Details |\

| (View Description) |\

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| Add to Cart |\

| (Update Cart) |\

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| Checkout |\

| (Enter Address) |\

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| Payment |\
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| (Process Payment) |\

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| Order Confirmation |\

| (Email Notification)|\

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| Shipment Tracking |\

| (View Order Status)|\

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| Delivery |\

| (Order Received) |\

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Simplified ER Diagram for eCommerce

API Endpoints

API Endpoints

Endpoint	Method	Description	Parameters	Response Example
/api/foods	GET	Fetch all food items	None	[{id: 1, name: 'Pizza'}]
/api/foods/:id	GET	Fetch a single food item	id (Path)	{id: 1, name: 'Pizza'}
/api/foods	POST	Add a new food item	name, price, category (Body)	{success: true, id: 5}
/api/foods/:id	PUT	Update a food item	id (Path), name, price (Body)	{success: true}
/api/foods/:id	DELETE	Delete a food item	id (Path)	{success: true}
/api/categories	GET	Fetch all categories	None	[{category: 'Drinks'}]

Workflow diagram Visual Representation