Hackathon 3 - Day 2
Marketplace Technical Foundation
Marketplace Technical Foundation - [Nike]
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Frontend Requirements:

This document outlines the user journey flow for an e-commerce marketplace, highlighting key steps and their technical implementation. It is designed to guide the development of a robust and user-friendly platform.

Flowchart overview

Below is the detailed user journey flow for an e-commerce marketplace:

Home Page:

- The user lands on the homepage.
- The page showcases featured categories, popular products, and a search bar for easy navigation.

Product Details Page:

- The user selects a product to view its details.
- This page provides the product description, price, availability, and user reviews.

Add to Cart:

- The user adds products to the cart.
- The cart is dynamically updated with the selected quantity and total price.

Checkout:

- The user navigates to the checkout page.
- They provide a shipping address and select a delivery option.
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Payments:

- The user enters payment details.

- A secure payment gateway processes the transaction.

Order Confirmation:

- Order details are displayed on the screen and sent to the user via email.
- The order status is updated in the backend system.

Order Confirmation:

- The order details are displayed on the screen and emailed to the user.
- The backend system updates the order status accordingly.

Shipment Tracking:

- The user accesses the "Order History" section.
- Real-time shipment tracking is provided through API integration.

Delivery:

- The product is delivered to the user's specified address.

Frontend Requirement:

- The user will receive a notification and have the option to leave a review.

- A user-friendly interface ensures seamless browsing of products.

- The platform features a responsive design optimized for both mobile and desktop users.

- Essential Pages: Home, Product Listing, Product Details, Cart, Checkout, and Order Confirmation.

Flowchart of Frontend:
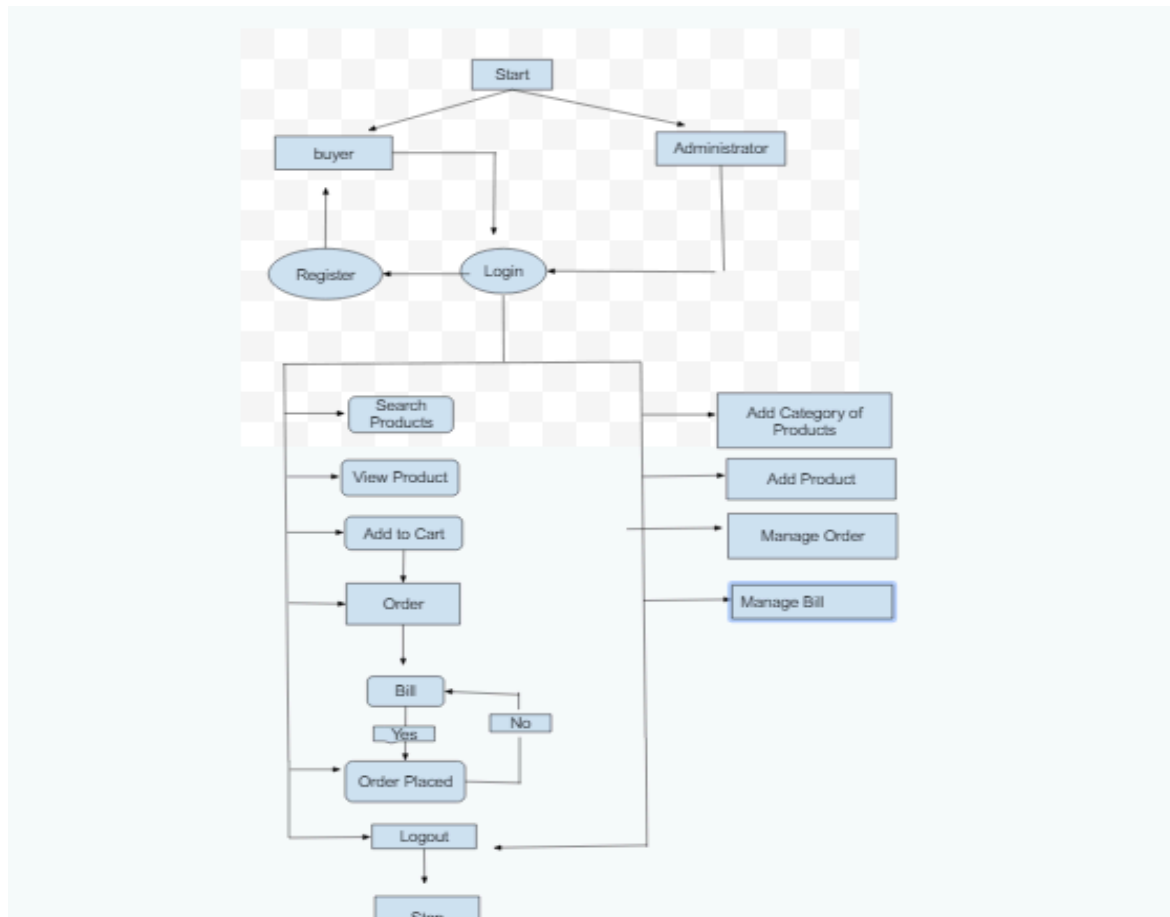
Design System Architecture

System Architecture
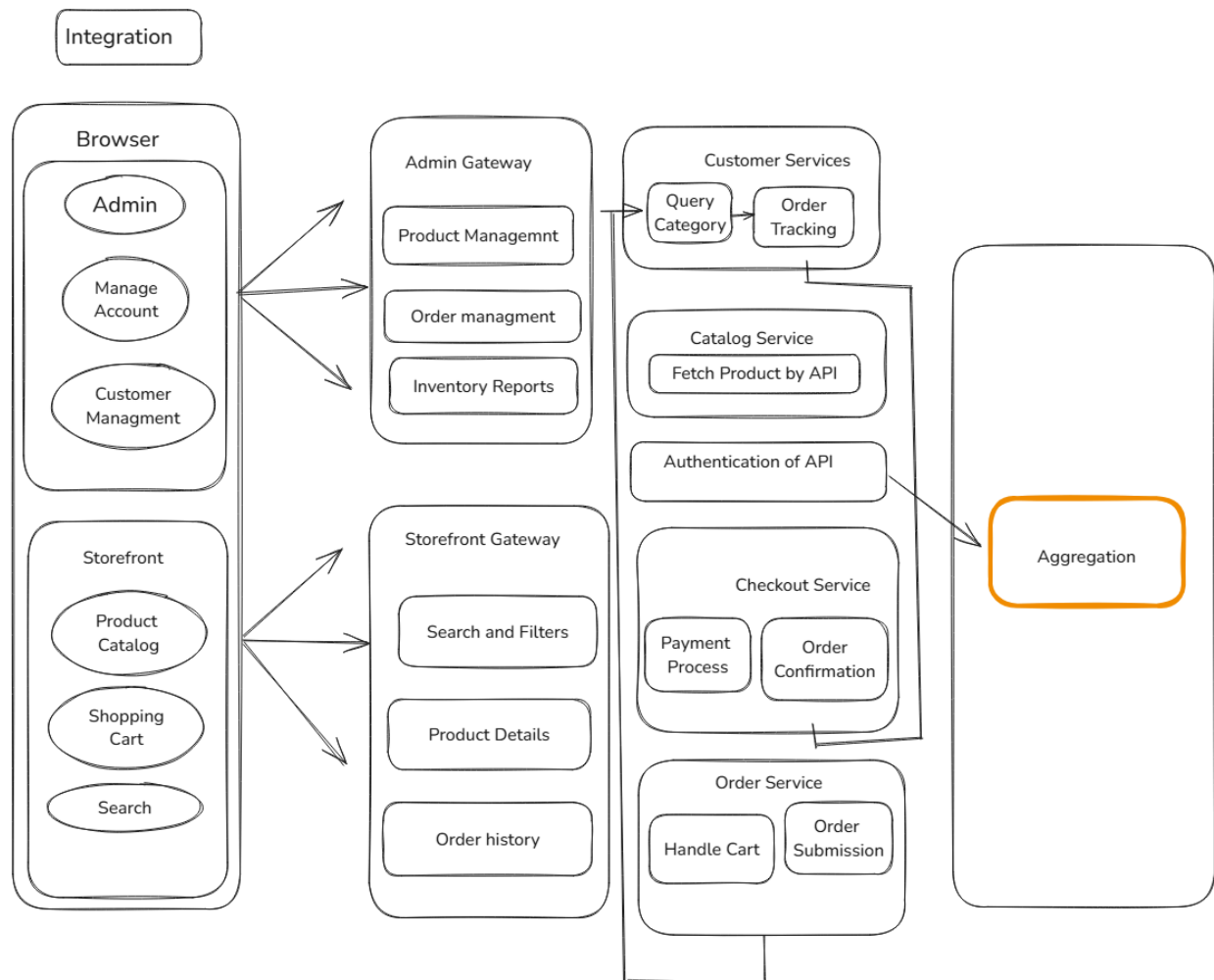
Frontend (Next.js)

User Interface (UI):
Facilitates product browsing, cart management, and order placement.
Handles user interactions while communicating with backend services through APIs.

Sanity CMS:
Serves as the core backend for managing product information, customer details, and order records.
Offers APIs to support data retrieval and updates for the frontend.

Product Data API:
Provides endpoints to access product listings, detailed information, and inventory status.

Third-Party APIs:
Integrates external services such as shipment tracking and payment processing.

Payment Gateway:
Ensures secure payment processing and delivers transaction confirmations.

API Endpoints:

Endpoint	Method	Description	Parameters	Response Example
/api/shoes	GET	Fetch all Shoes items	None	{id:1,name: "Nike"}
/api/shoes/:id	GET	Fetch a single shoes pair	id(path)	{id: 1, name: "Nike"}
/api/shoes	POST	Update a Shoes pair	Name, price, category	{success: true,id:5}
/api/shoes:id	PUT	Delete a Shoes Pair	id(path), Name, price	{success:true }
/api/category	DELETE	Delete an item	id(path)	{success; true}