Marketplace Technical Foundation – Nike Ecommerce

This project is e-commerce platform for selling a **wide range of Nike products**. It focuses on providing a seamless shopping experience with wide range of Nike products, user-friendly navigation, responsive design, and secure authentication.

Technologies Used

- Frontend: Built using Next.js and Tailwind CSS for dynamic, responsive user interfaces.
- Backend: Sanity CMS for content management, providing API-based data retrieval.
- Authentication: Clerk for secure and seamless user login/signup.
- **Deployment:** Hosted on Vercel for scalability and performance.

Goals and Objectives

1. Business Goals:

- a. Many customers face problem in searching original Nike Products all in one place.
- b. We will provide wide range of products in multiple categories like shoes, sports clothing and accessories.
- c. We will make website, and make user interface easy to understand and use.

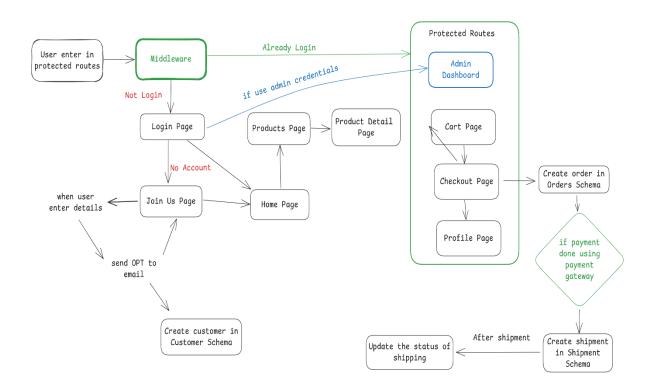
2. Technical Goals:

- a. Implement a scalable system architecture.
- b. Integrate third-party APIs for secure payment and real-time shipment tracking.
- Design user-friendly authentication workflows using Clerk.

System Architecture

Work Flow Diagram:

COMPLETE WORKFLOW OF NIKE ECOMMERCE MARKETPLACE



Key Workflows

1. User Registration:

- o First, User signs up via Clerk.
- o Confirmation email sent to the user..
- After confirmation using OTP user Data stored in Sanity CMS in Customers Schema.

2. Product Browsing:

- User navigates to the home page.
- o Product data fetched dynamically from Sanity CMS from Products Schema.
- o Products displayed with filters and categories.

3. Order Placement:

- User adds products to the cart.
- o Proceeds to checkout.
- Then Order details stored in Sanity CMS in Orders Schema.

4. Payment Workflow:

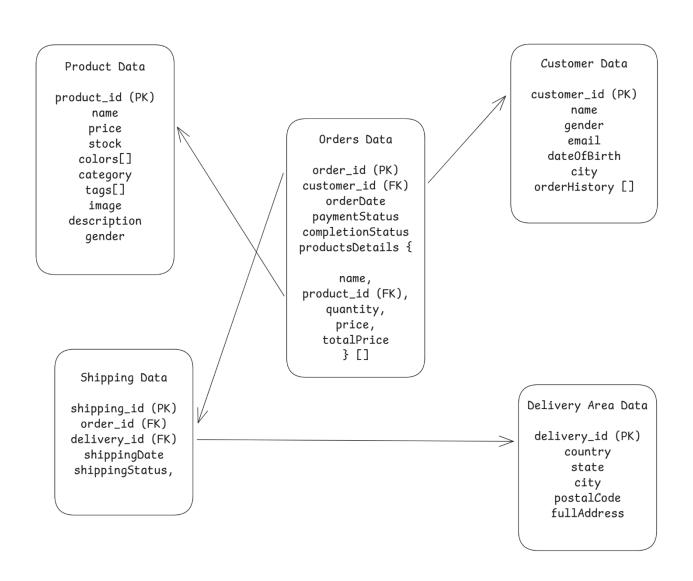
- User select the preferred payment method at checkout.
- o Payment details are securely processed through a third-party payment gateway.
- o Confirmation of successful payment is received and stored in Sanity CMS.

5. Shipment Tracking:

- o Order status fetched via a third-party API.
- o Real-time updates displayed on the user dashboard.

Schema's Relationship Diagram

SCHEMA DIAGRAM



API Requirements

1. Product Management:

• Endpoint: /products

Method: GET,

• **Description:** Fetch product details from Product Schema.

2. Order Management:

• Endpoint: /orders

Method: POST

• **Description:** Create a new order in Orders Schema.

3. Shipment Tracking:

• Endpoint: /shipment

Method: GET

• Description: Fetch real-time shipment updates.

4. Register Customer:

• Endpoint: /register

Method: POST

Description: Create a new customer in Customer Schema

This document serves as a comprehensive submission for the hackathon, showcasing the technical foundation and implementation roadmap for the Nike Ecommerce platform.