## **HACKATHON DAY 06:**

# **Deployment Preparation and Staging Environment Setup:**

## **Deployment Strategy Planning:**

For my marketplace eCommerce website, I have successfully deployed two separate projects on Vercel:

- 1. **Admin Panel** A dedicated interface for managing products, orders, users, and other administrative functionalities.
- 2. **Customer-Facing Marketplace** The main eCommerce platform where users can browse products, add them to the cart, make purchases, and track their orders.

### **Deployment Approach**

Our deployment strategy ensures a **modular architecture**, allowing independent updates and maintenance of both the **admin panel** and **marketplace** without affecting each other.

#### 1. Environment Setup

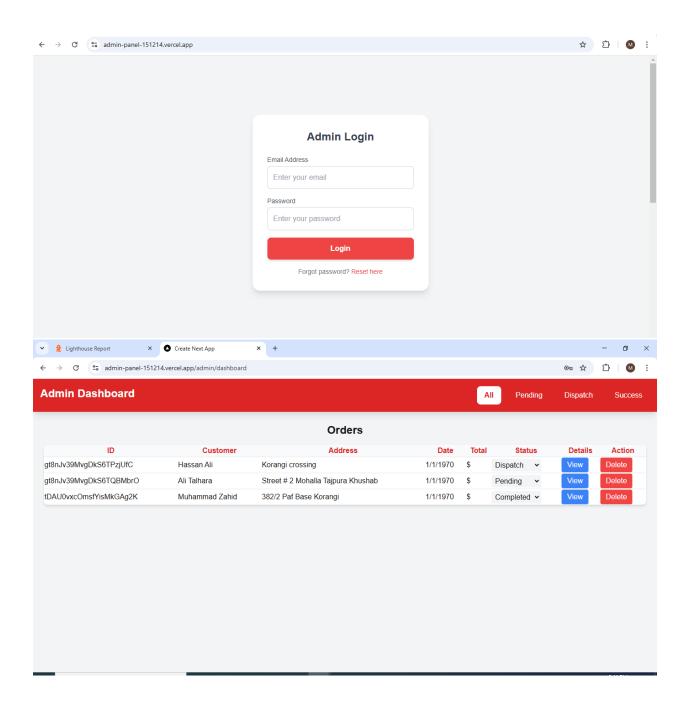
- We configured Vercel CLI for seamless integration with our repository.
- Environment variables were securely stored in Vercel's settings to manage API keys, database connections, and other sensitive configurations.
- Branching strategy: We use **main (production)** and **dev (testing/staging)** branches for smooth CI/CD.

### 2. Deployment Process

- Admin Panel Deployment
  - Built using Next.js for a fast and dynamic dashboard experience.
  - o Connected to the backend API for real-time data updates.
  - Hosted on a dedicated Vercel instance to ensure secure access for authorized users only.
- Customer Marketplace Deployment
  - Developed using Next.js and optimized for SEO & performance.
  - Integrated with APIs for product management, cart functionality, order processing, and user authentication.
  - o Configured caching and image optimization for **fast-loading pages**.

#### 3. Vercel Links

- o admin-panel-151214.vercel.app
- o hackathon-05-51214.vercel.app



# **Environment Variable Configuration:**

To ensure security, scalability, and maintainability, our **marketplace eCommerce website** uses environment variables to manage sensitive configurations across both deployments (**Admin Panel** and **Customer Marketplace**).

### 1. Storing Environment Variables

- All environment variables are stored securely in Vercel's Environment Variables Settings under Project Settings → Environment Variables.
- We maintain different environments:
  - o **Development (.env.local)** Used for local testing.
  - o **Production (Vercel)** Stored securely on Vercel for live deployment.

### 2. Key Environment Variables

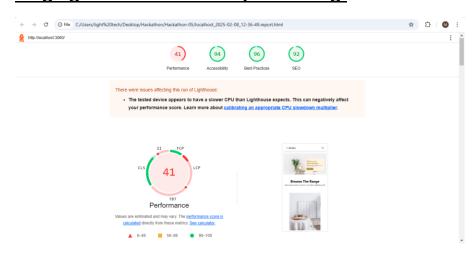
Variable Name	Purpose	Applies To	Example Value (Masked)
NEXT_PUBLIC_API_URL	Base API URL for fetching data	Admin Panel & Marketplac e	https://api.example.com
DATABASE_URL	Database connection string	Admin Panel & Marketplac e	postgres://user:password@host:port /db
JWT_SECRET	Secret key for user authenticatio n	Admin Panel & Marketplac e	******
STRIPE_SECRET_KEY	Payment gateway secret key	Marketplac e	sk_live_*******
NEXT_PUBLIC_STRIPE_PUBLIC_ KEY	Stripe public key for frontend	Marketplac e	pk_live_********
NEXT_PUBLIC_CLOUDINARY_UR L	Cloudinary for image storage	Admin Panel & Marketplac e	https://res.cloudinary.com/example/

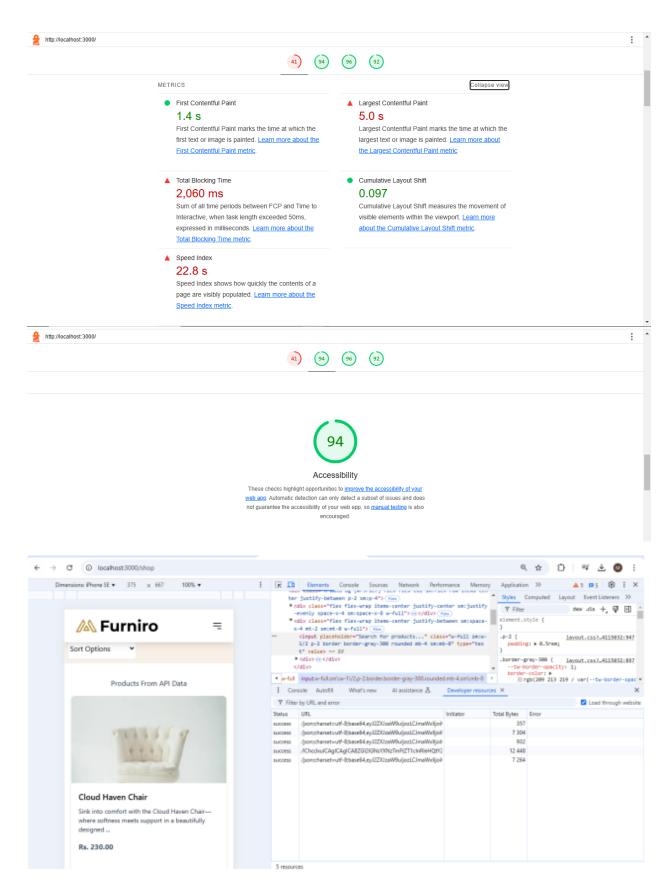
EMAIL_SMTP_HOST	SMTP server for sending emails	Marketplac e	smtp.mailprovider.com
EMAIL_SMTP_USER	SMTP username for email authenticatio n	Marketplac e	*****
EMAIL_SMTP_PASSWORD	SMTP password (kept secret)	Marketplac e	******

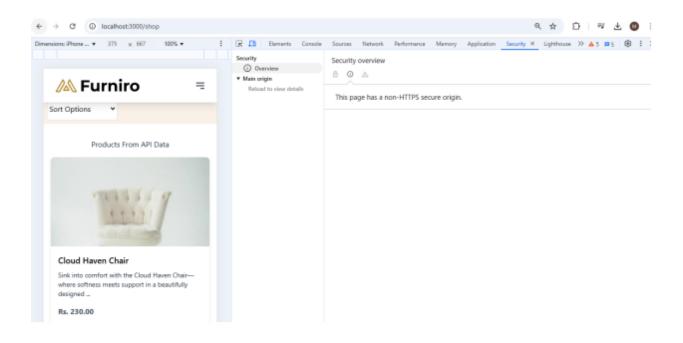
# 3. Configuration in Vercel

- Go to Vercel → Project Settings → Environment Variables.
- Add each environment variable under the correct **Scope** (Production, Preview, Development).
- Deploy changes to apply updated variables.

# **Staging Environment Setup & Testing:**







### "HACKATHON DAY 06 ENDS HERE THANK U"