

Day 6 - Deployment Preparation and Staging Environment Setup for Q-Commerce Website

Objective:

Day 6 focuses on preparing the Q-commerce marketplace for deployment by setting up a staging environment, configuring hosting platforms, and testing the application in a production-like environment.

Key Steps Implemented:

Step 1: Hosting Platform Setup

- **Chosen Platform:**
 - Vercel was selected for its seamless deployment with Next.js.
 - **Connecting GitHub Repository:**
 - Linked the GitHub repository with Vercel.
 - Configured the build setup for the repository.
 - **Configuring Build Settings and Deployment:**
 - Set up build scripts and deployment settings for successful staging builds.
-

Step 2: Environment Variables Configuration

- **Creating .env File:**
 - Stored sensitive data like API keys and tokens securely in the .env file.
 - Example variables:
 - NEXT_PUBLIC_SANITY_PROJECT_ID

- NEXT_PUBLIC_SANITY_DATASET
 - API_KEY
 - **Uploading Variables to Hosting Platform:**
 - Uploaded environment variables securely through the Vercel dashboard to ensure secure production deployment.
-

Step 3: Deploying the Application to Staging

- **Deployment:**
 - Deployed the application to Vercel's staging environment.
 - **Deployment Validation:**
 - Ensured that the build process was successful with no errors.
 - Verified that the application loaded correctly.
-

Step 4: Staging Environment Testing

- **Functional Testing:**
 - Major features tested:
 - Product listing
 - Cart functionality
 - Search feature
 - Tools used: Cypress
- **Performance Testing:**
 - Analyzed speed and responsiveness using Lighthouse and GTmetrix.
- **Security Testing:**
 - Ensured HTTPS was enabled.
 - Secured API keys and validated input fields to prevent SQL injection.
- **Responsiveness Testing:**

- Verified layout responsiveness on mobile and desktop screens.