Day 6 — Deployment Preparation & Staging Environment Configuration
Marketplace: HECTO - E-commerce Marketplace

Prepared By: Zeenat Yameen
Class Slot: Tuesday, 2:00 PM to 5:00 PM

---

1. Hosting Platform Setup & Configuration

- **Hosting Platform:** VERCEL

- **Deployment URL:**

  https://hackathon3-e-commerce-website-lm98nupfm-zeenat-yameens-projects.vercel.app/

- **GitHub Repository:**

  Zistaza/Hackathon3--E-Commerce-Website (github.com)

- **Build Settings:** Custom build configurations applied for enhanced performance and security.

- **Environment Variables:** Securely configured to ensure smooth deployment.

Deployment Tips:

- Ensure that the **.env** file is correctly configured and securely uploaded to VERCEL.

- Verify all environment variables in **VERCEL Project Settings** before final deployment to avoid configuration issues.

---

2. Secure Environment Variables Configuration

A .env file was created containing the following key variables:

- **NEXT_PUBLIC_SANITY_PROJECT_ID → Unique identifier for Sanity project.**

- **NEXT_PUBLIC_SANITY_DATASET → Dataset name for production.**

- **API_KEY → Authentication key for third-party integrations**.

Why It's Important:

- Ensures secure handling of sensitive information.

- Prevents unauthorized access and improves application security.

---

3. Sanity Deployment URL Configuration

For seamless Sanity CMS integration, the deployment URL was added to the CORS (Cross-Origin Resource Sharing) settings:

Steps to Configure:

1. **Navigate to Sanity Project Settings → API → CORS Origins.**

2. **Add the deployment URL: https://hekto-e-commerceeight.vercel.app/.**

Why It's Important:

- **Allows secure communication between the deployed application and Sanity CMS.**

- **Prevents CORS-related errors while fetching data.**

---

4. Clerk Webhook Setup

If Clerk is used for authentication, webhooks were configured to ensure secure user operations.

Steps Taken:

- **Generated a webhook URL in the Clerk Dashboard.**

- **Added the webhook endpoint to VERCEL Environment Variables:**

Example:
CLERK_WEBHOOK_URL=https://hekto-e-commerceeight.vercel.app/api/webhook

Key Considerations:

- **The application securely verifies the webhook signature provided by Clerk.**

- **Webhooks were tested to ensure real-time updates for user creation, deletion, and authentication events.**

Why It's Important:

- **Ensures seamless synchronization between Clerk and the application.**
- **Provides real-time updates for user management.**

---

5. Clean Code Practices Before Deployment

To maintain code quality, the following best practices were implemented:

- **Removal of Unused Imports & Functions:**
  - **Reviewed the codebase to eliminate unnecessary variables and functions.**
  - **Used tools like ESLint and Prettier for automated code cleanup.**
  - **Ran npm build locally to detect and resolve any warnings or dependency issues.**

Why It's Important:

1. **Prevents unexpected errors during deployment.**
2. **Reduces unnecessary bundle size, improving performance.**
3. **Ensures a well-optimized and error-free application.**

---

6. Error Checks Before Deployment

Before deploying, a comprehensive build check was conducted:

- **Ran npm build locally to identify and resolve any potential build errors.**
- **Verified that all dependencies and configurations were correctly set up.**

Outcome:

- **The build process was completed successfully, ensuring a smooth deployment.**

---

7. Staging Deployment & Verification Process

- **Staging Environment: Successfully deployed the application on VERCEL.**

- **Deployment Status:** Completed without any issues.

Final Thoughts

The deployment process was meticulously planned and executed, ensuring a stable, secure, and optimized staging environment for HECTO Marketplace. All essential configurations, environment variables, and security measures were properly set up, paving the way for a successful production release.