#### **HACKATHON-03**

#### **DAY-06**

# Deployment\_Preparation\_and\_Staging\_Environment\_Setup [Honest Bazar]

# **Staging Environment Setup**

# **Hosting Platform Configuration**

Platform Used: Vercel

#### **Steps Taken:**

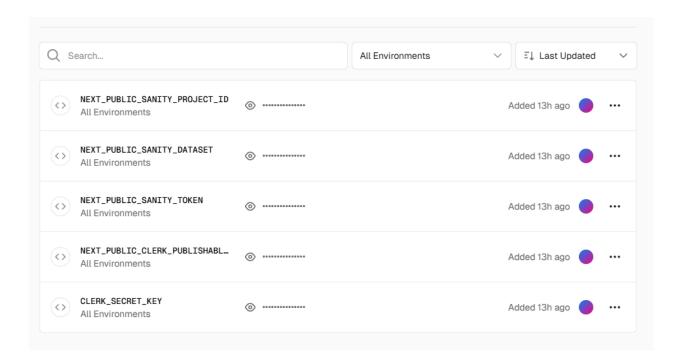
- Set up the GitHub repo and connected it to Vercel for seamless integration.
- Configured build and deployment settings specifically for the staging environment.
- Secured environment variables directly in the Vercel dashboard to keep everything clean and safe.

### **Clerk Secret**

- CLERK\_SECRET\_KEY=<Your Secret Key>
- NEXT\_PUBLIC\_CLERK\_PUBLISHABLE\_KEY=<Your Publishable Key>

## **Sanity Secret**

- NEXT\_PUBLIC\_SANITY\_PROJECT\_ID= project\_id
- NEXT\_PUBLIC\_SANITY\_DATASET=production
- NEXT\_PUBLIC\_SANITY\_API\_TOKEN=your\_api\_key



# 2. Testing in Staging Environment

## **Functional Testing**

#### **Tests Conducted:**

#### 1. Product Listing and Filtering

- Verified that products are displayed correctly with all relevant details.
- Confirmed that filtering options (e.g., by category, price, etc.) work as expected.

#### 2. Cart Operations

- Tested adding items to the cart to ensure they are reflected accurately.
- Verified the removal of items from the cart and the cart total updates accordingly.

#### 3. Page Navigation

- Checked seamless navigation between pages (e.g., product page, cart page, checkout).
- Ensured no broken links or unexpected transitions.

#### Result:

All tests passed successfully.

## Performance Testing Tool Used: GTmetrix

#### **Overall Results**

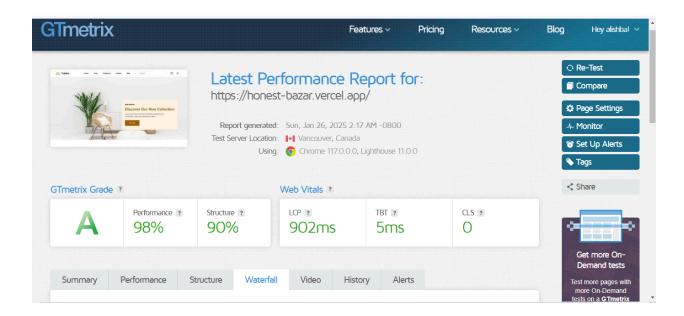
Grade: A

• Performance Score: 98%

• Structure: 90%

#### **Key Metrics**

- Largest Contentful Paint (LCP): 902ms
  - The LCP score indicates that the most important visual content loaded quickly and within an acceptable time frame (under 1 second is optimal).
- Total Blocking Time (TBT): 5ms
  - The TBT score shows minimal delay between interactions with the page, ensuring a smooth and responsive user experience.
- Cumulative Layout Shift (CLS): 0
  - A CLS of 0 means there were no unexpected layout shifts during the page load, ensuring a stable and pleasant viewing experience for users.



# **Summary**

The website performs excellently, achieving high marks in key performance areas. With an A grade and a 98% performance score, it delivers fast load times, a smooth user experience, and stability throughout the loading process.

# 3. Documentation Updates

# **README.md Summary**

# Included a detailed summary of:

Project setup and deployment process.

Key activities from Days 1 to 6.

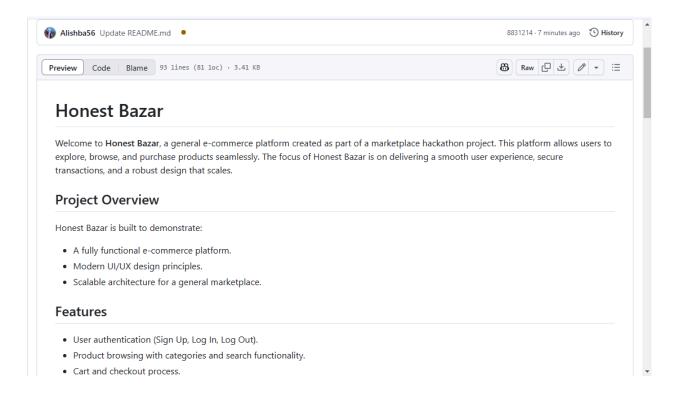
Folder structure and file descriptions:

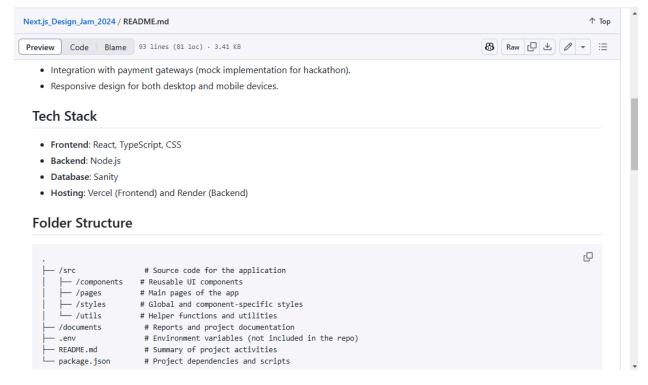
/src - Source code for the application.

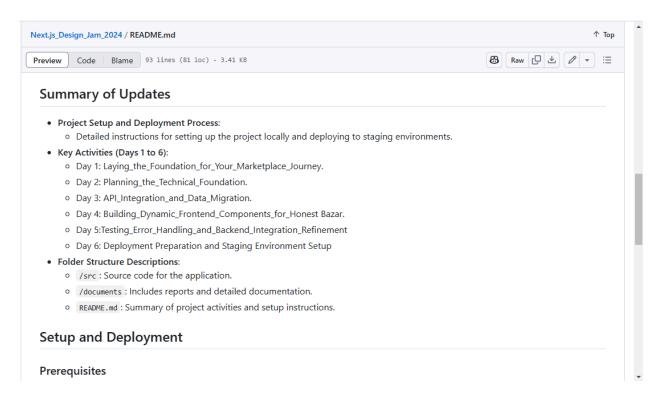
/documents - Reports and documentation.

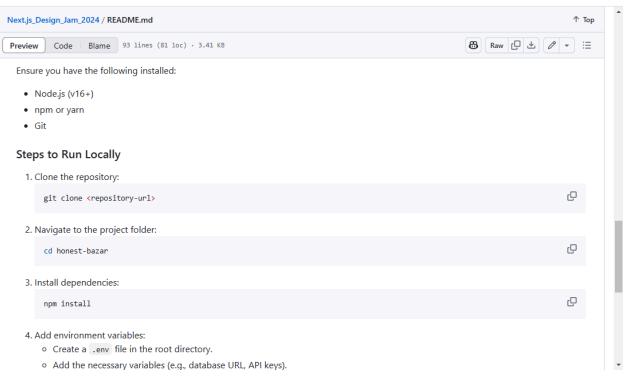
README.md - Summary of project activities.

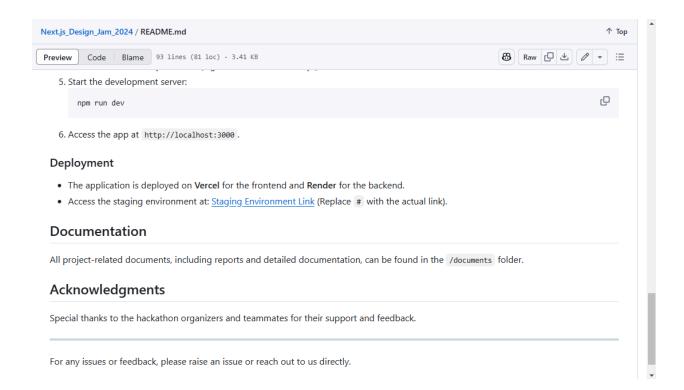
Added instructions for accessing the staging environment.











## 4. CSV Testing Report

## Created a detailed CSV report with fields:



# **Submission Checklist**

## **Activities Completed:**

## 1. Staging Environment Setup:

The staging environment was deployed successfully, ensuring that all features are ready for testing.

## 2. GitHub Repository Update:

The repository has been updated with neatly organized files and an updated README.md for clear documentation.

## 3. Testing Completed:

**Functional Testing:** Ensured all core functionalities were working as expected.

**Performance Testing:** Verified the site's performance, achieving a high score.

**Security Testing:** Validated input fields and verified no security vulnerabilities.

#### 4. Test Case Report (CSV):

A detailed CSV report was created, documenting all the test cases, steps, expected results, and status.

#### 5. Performance Testing Results:

The results of performance testing, including the high Lighthouse score of 98, were captured and documented.

# **Summary**

This document outlines the activities and results from **Day 6**, highlighting the successful staging environment deployment, thorough testing, and deployment readiness. Everything is on track for the next steps.