

Day 6 – Deployment Preparation and Staging Environment Setup

1. Staging Environment Setup

Hosting Platform Configuration

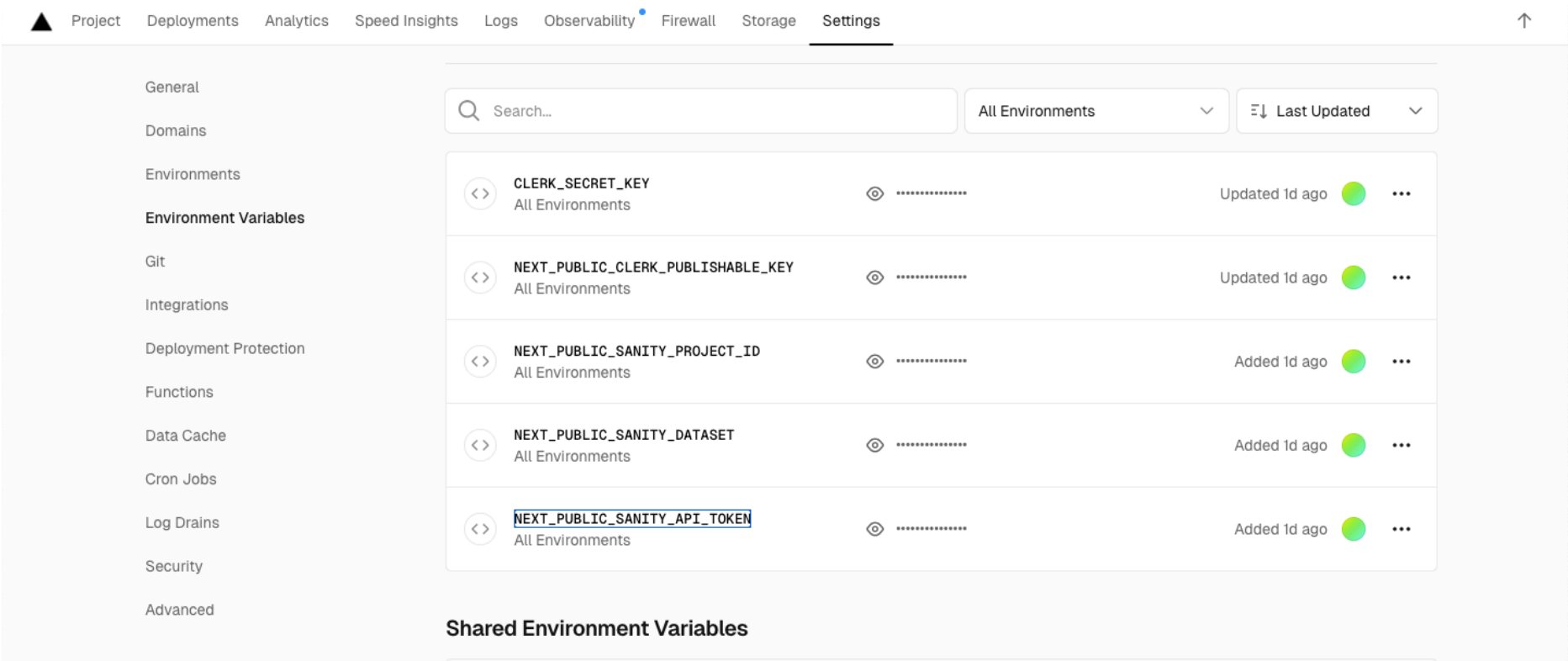
- **Platform Used:** Vercel
- **Steps Taken:**
 1. Connected the GitHub repository to Vercel.
 2. Configured build and deployment settings for the staging environment.
 3. Added environment variables securely within the Vercel dashboard:

Clerk Secret

- CLERK_SECRET_KEY=<your secret key>
- NEXT_PUBLIC_CLERK_PUBLISHABLE_KEY=<your publishable key>

Sanity Secret

- NEXT_PUBLIC_SANITY_PROJECT_ID=your__project__id
- NEXT_PUBLIC_SANITY_DATASET=production
- NEXT_PUBLIC_SANITY_API_TOKEN=your__api__key



2. Testing in Staging Environment

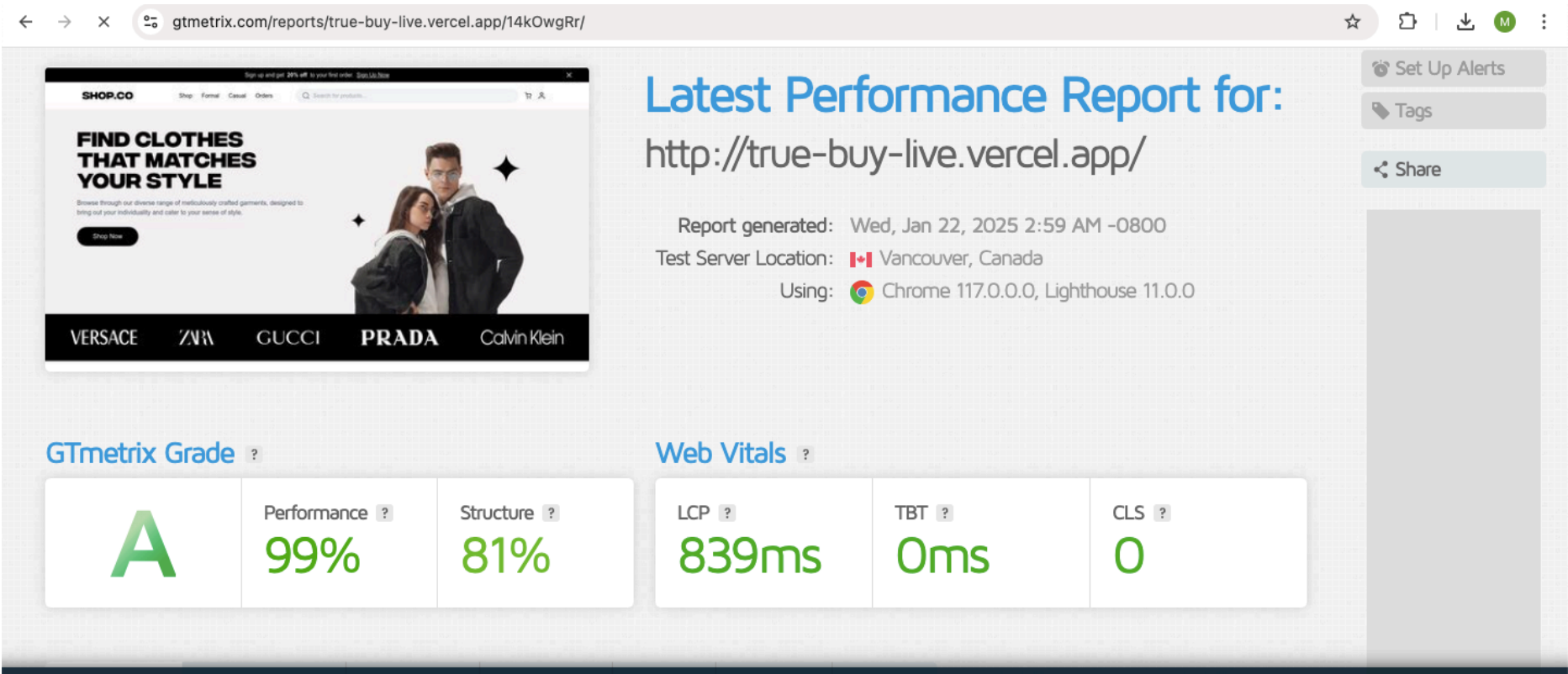
Functional Testing

- **Tests Conducted:**
 - Verified product listing and filtering functionality.
 - Tested cart operations, including adding and removing items.
 - Checked navigation between pages to ensure seamless transitions.

SUCCESSFULL

Performance Testing

- **Tool Used:** GTmetrix
- **Results:**
 - **Performance Score:** 99
 - **Key Metrics:**
 - **LCP:** 839ms
 - **TBT:** 0ms
 - **CLS:** 0



Security Testing

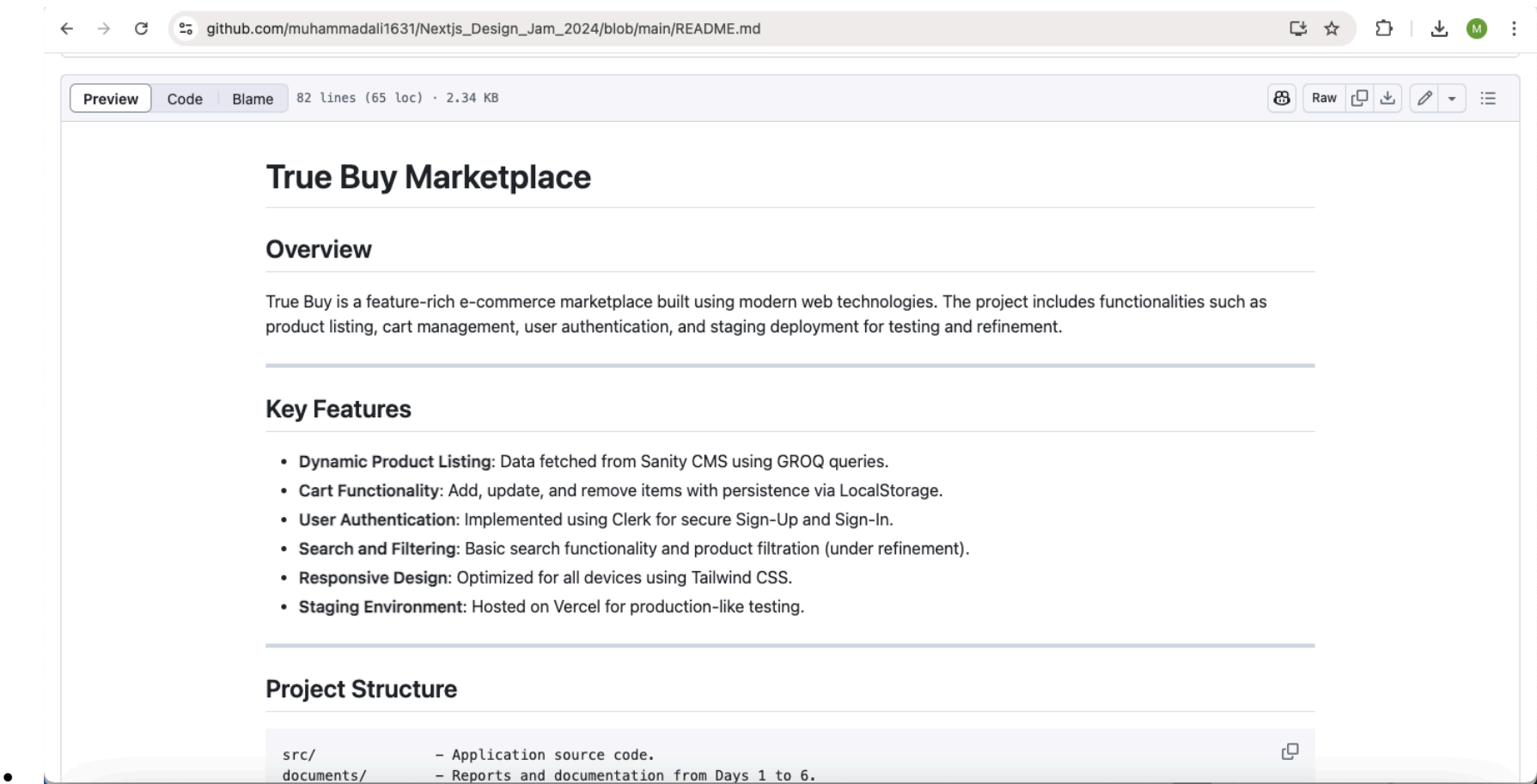
- **Tests Conducted:**
 - Input validation for all forms to prevent XSS and SQL injection.
 - Verified that API keys and sensitive data are securely hidden.
 - Ensured HTTPS is enabled for secure communication.

SUCCESSFULL

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.



Installation Instructions

- ### 1. Clone the repository:

```
git clone https://github.com/muhammдали1631/Nextjs_Design_Jam_2024
```



- ## 2. Install dependencies:

```
npm install
```



- ### 3. Add environment variables:

- Create a `.env` file in the root directory.
- Add variables as per `.env.local`.

4. Run the application locally:

```
npm run dev
```



Testing

- ### 1. Functional Testing:

- Verified workflows: product listing, cart operations, and navigation.

- ## 2. Performance Testing:

- Used GTmetrix to achieve a performance score of 99.



Project Structure

- src/ - Application source code.
- documents/ - Reports and documentation from Days 1 to 6.
- README.md - Summary of the project.
- .env.local - Example of environment variables used.



Deployment Details

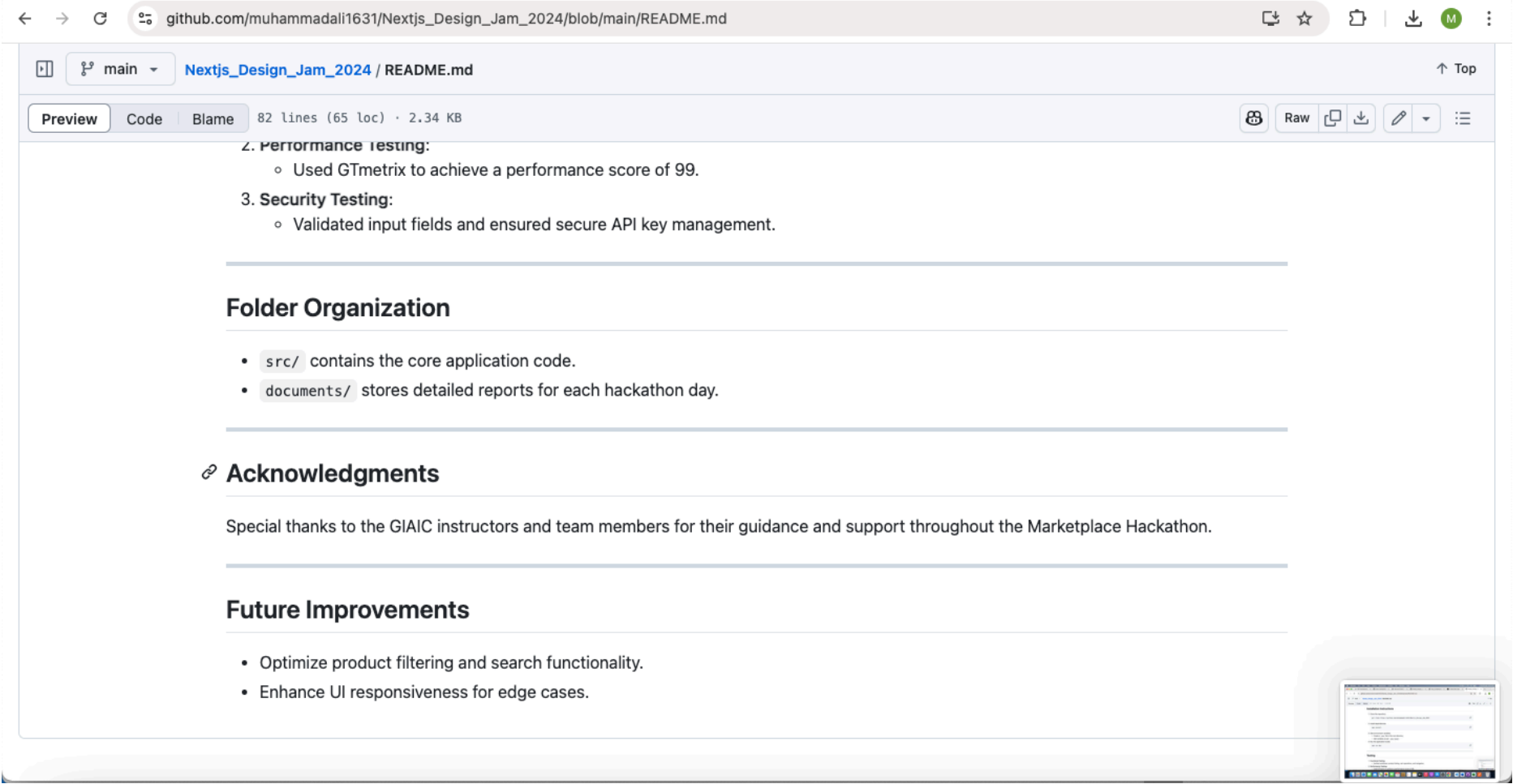
- **Hosting Platform:** Vercel
- **Staging Link:** [Insert Staging Link Here]
- **Environment Variables:**

```
NEXT_PUBLIC_SANITY_PROJECT_ID=your_project_id
NEXT_PUBLIC_SANITY_DATASET=production
API_KEY=your_api_key
```



Installation Instructions

- ### 1. Clone the repository:



4. CSV Testing Report

- Created a detailed CSV report with fields :
 - Test Case ID, Description, Steps, Expected Result, Actual Result, Status, Severity, and Remarks .

	A	B	C	D	E	F	G	H	I	J	K
1	Test Case ID	Description	Steps	Expected Result	Actual Result	Status	Severity	Remarks			
2	TC001	Validate staging deployment	Deploy to Vercel, load homepage	Homepage loads without errors	Homepage loads successfully	Passed	Low	Deployment successful.			
3	TC002	Test navigation	Navigate between pages	Pages load quickly without errors	Navigation works as expected	Passed	Low	No issues found.			
4	TC003	Validate API in staging	Trigger product API calls	API returns correct data	API returns correct data	Passed	Medium	Verified data integrity.			
5	TC004	Check Gtmetrix	Run Lighthouse in staging	Performance score above 90	Performance score 99	Passed	Low	Excellent performance.			
6	TC005	Test input validation	Submit malicious input	Input is sanitized	Input sanitized successfully	Passed	High	Security measures verified.			
7											

5. Submission Checklist

- Staging environment deployed successfully .
- GitHub repository updated with organized files and README . md .
- Functional, performance, and security testing completed .
- Test case report (CSV) created .
- Performance testing results included .

This document outlines the activities and results of Day 6, focusing on staging environment setup, testing, and deployment readiness .