

Hackathon Day 6

1. Staging Environment Setup

Objective:

Deploy the application to a staging environment for testing in a setting that mimics production.

Actions Taken:

- Deployed the application using Vercel to verify its functionality prior to the production launch.

Implementation Steps:

- Integrated my GitHub repository with Vercel for streamlined deployment.
- Adjusted build configurations and deployment settings.
- Successfully launched the application and assessed its responsiveness and performance.

Reason for Choosing Vercel:

Vercel is an efficient deployment platform tailored for front-end applications, providing:

- **Automatic Deployments:** Every push to GitHub triggers a deployment.
 - **Global CDN:** Enhances performance with fast content delivery.
 - **Custom Domain Support:** Includes HTTPS and SSL for security.
 - **Environment Variable Management:** Ensures sensitive data is handled securely.
 - **Built-in Analytics:** Allows monitoring of performance and user engagement.
-

2. Configuring Environment Variables

Objective:

Safeguard sensitive information by utilizing environment variables.

Actions Taken:

- Set up API keys and database credentials in a secure manner to prevent exposure.

Implementation Steps:

- Created a **.env** file locally to manage environment variables.
 - Securely uploaded these variables to Vercel via the dashboard.
 - Conducted tests to confirm that the environment variables function correctly in the deployed application.
-

3. Testing (Performance & Security)

Objective:

Conduct tests to validate application functionality, performance, and security.

Actions Taken:

- Performed various performance and security tests using multiple tools to enhance the application.

Implementation Steps:

- Utilized **Lighthouse** to evaluate app performance, accessibility, and SEO metrics.
 - Employed **Postman** to test API requests and responses.
 - Investigated potential vulnerabilities and security concerns.
 - Ensured a seamless user experience across various devices.
-

4. README.md Creation

Objective:

Develop a comprehensive README.md file for the project.

Actions Taken:

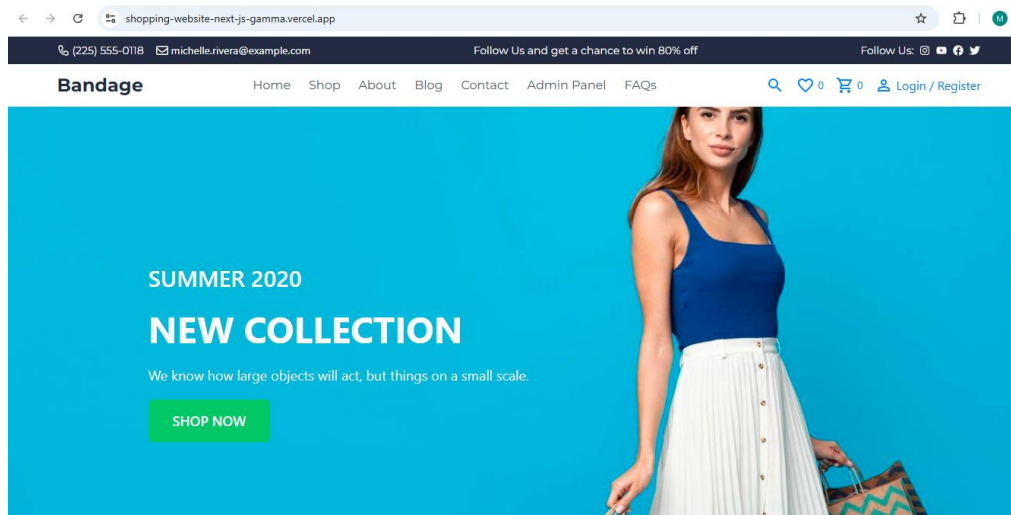
- Documented the entire development process in a clear and organized README file.

Implementation Steps:

- Included a project overview, setup instructions, and deployment guidelines.
 - Provided instructions for testing and configuring the environment.
 - Documented performance testing outcomes to showcase enhancements.
-

Key Takeaways

- ☒ Successfully deployed the application to a staging environment using Vercel.
- ☒ Configured environment variables securely for safe deployment.
- ☒ Conducted thorough performance and security tests to optimize the application.
- ☒ Created a professional README.md to document the entire development journey.



[Start]

|

v

[Staging Environment Setup]

|

v

[Deploy Application to Staging]

|

v

[Is Deployment Successful?] -- No --> [Troubleshoot Deployment Issues]

| Yes

v

[Configure Environment Variables]

|

v

[Set Up Environment Variables]

|

v

[Do Environment Variables Work?] -- No --> [Review Environment Variable Setup]

| Yes

v

[Testing (Performance & Security)]

|

v

[Conduct Performance Tests]

|

v

[Conduct Security Tests]

|

v

[Are Tests Successful?] -- No --> [Identify and Fix Issues]

| Yes

v

[README.md Creation]

|

v

[Document Development Process]

|

v

[Is README.md Comprehensive?] -- No --> [Revise README.md]

| Yes

v

[End]