Key Learning Outcomes

Set up and Configure a Staging Environment

I have successfully completed the following steps to set up and configure a staging environment for my marketplace.

Selecting a Hosting Platform

Hosting Platform Chosen: Vercel

Rationale: Vercel offers seamless integration with Next.js, excellent performance, and a user-friendly interface.

Connecting GitHub Repository to the Hosting Platform

Action Taken:

- Linked my GitHub repository to Vercel
- Enabled automatic deployments for the main branch and staging branches
- Verified that all changes in the repository trigger deployment processes on Vercel

Configuring Build and Deployment Settings

Configured the following settings to ensure successful staging builds:

Environment Variables: Added required variables, such as API keys and secrets, in the Vercel dashboard

under the Environment Variables section.
Build Commands: Used the default Next.js build command `npm run build` for the staging environment.
Professional Environment
Key Learning Outcomes:
Understanding and Managing Different Stages of Environments:
1. TRN (Training Environment):
- Purpose: Used for onboarding and training team members without impacting active development o
production data.
- Implementation: Set up a separate environment with sample data for training purposes and configured
restricted access.
2. DEV (Development Environment):
- Used for active development of new features and functionality.
3. SIT (System Integration Testing):
- Purpose: Focused on testing integrations between different system components.
4. UAT (User Acceptance Testing):
- Purpose: Used for end-user testing to validate features and workflows before release.

- Created a near-production replica with real-world data and involved stakeholders to identify usability issues.

5. Production Environment:
- Purpose: The live environment accessed by end-users. Deployed fully tested and approved features.
- Configured robust monitoring and alert systems to ensure stability.
Testing and Validation
Verified that the staging environment:
- Reflects the latest changes pushed to the staging branch.
- Is accessible and performs as expected on various devices and browsers.
Testing Results
1. Homepage Load Test:
- Homepage should load within 2 seconds.
- Status: Passed
2. Product Display Test:
- All products should display correctly on the homepage.
- Status: Passed
3. Product Details Testing:
- Product details should display upon selection.
- Status: Passed

4. Checkout Page Testing:

- Checkout process should complete without errors.
- Status: Passed
5. API Integration Testing:
- API should fetch and display data correctly.
- Status: Passed
6. Navigation Test:
- All navigation links should be functional.
- Status: Passed
7. Security Testing:
- All API calls should be secure and use HTTPS.
- Status: Passed
8. Image Loading Test:
- All images should load correctly.
- Status: Passed
9. Accessibility Testing:
- Site should meet accessibility standards.
- Status: Passed
10. Responsiveness Testing:

- Site should adjust properly on various devices.

- Status: Passed