Day 6: Deployment Preparation and Staging Environment Setup

Overview

This report details the steps taken to prepare the marketplace application for deployment in a staging environment. It includes setup, testing, and documentation to ensure the application is stable and secure for further deployment stages.

Key Achievements

1. **Staging Environment Setup**
   - **Hosting Platform:** Vercel
   - **GitHub Repository:** Successfully linked to the Vercel deployment.
   - **Environment Variables:** Configured securely within the Vercel dashboard using `.env` file.
   - **Deployment Validation:** Ensured that the application deployed successfully and passed initial tests.
2. **Testing Conducted**
   - **Functional Testing:** Validated critical workflows such as product listing, adding/removing items from the cart, and checkout operations.
   - **Performance Testing:** Conducted speed and responsiveness tests using Lighthouse to ensure fast load times and smooth user experience.
   - **Security Testing:** Ensured all input fields are properly validated, HTTPS is enforced, and sensitive data is protected through secure practices.
3. **Documentation**
   - Created a `README.md` file with a summary of the project and detailed deployment steps.
   - Organized test cases and reports in the GitHub repository for easy access and reference.

Deployment Process

1. **Hosting Platform Setup**
   - Chose Vercel as the platform for deployment.
   - Linked the GitHub repository with Vercel and configured the build settings.
2. **Environment Variables**
   - Used the Vercel dashboard to securely manage environment variables, ensuring sensitive data such as API keys and secrets are not exposed.
3. **Deployment Validation**
   - Conducted a series of tests to verify that the build was successful and the application functions as expected after deployment.
4. **Testing Overview**
   - **Tools Used:**
     - **Cypress:** For functional and end-to-end testing.
     - **Lighthouse:** For performance testing and identifying optimization opportunities.

- **Postman:** For API testing and ensuring data integrity.

Resources

- **Deployment Link:** uiux-hackathon-pink.vercel.app/
- **Repository Link:** https://github.com/syedalsudes