Day 6 - Deployment Preparation and Staging Environment Setup

Objective:

Preparing the marketplace for deployment by setting up a staging environment, configuring hosting platforms, and ensuring readiness for a customer-facing application.

Key Outcomes:

1. **Staging Environment Setup:**
   - Selected a hosting platform **Vercel**.
   - Connect **GitHub repository** to the hosting platform.
   - Configure build and deployment settings for successful staging builds.
   - Securely set up **environment variables** within the hosting platform.
   - Validate application functionality in a production-like environment.

2. **Staging Environment Testing:**
   - Conducted **functional**, **performance**, and **security testing**.
   - Documented all test results.

3. **Deployment Documentation:**
   - Created comprehensive documentation, including performance and test case reports.

4. **Organized GitHub Repository:**
   - Maintain a clear folder hierarchy and consistent naming conventions.
   - Include a **README.md** summarizing the project structure.

Key Features:

1. Deployment Strategy Planning:

- **Choose a Hosting Platform:**
  - Using **Vercel** for hosting.
  - Finalize interactions with backend services like **Sanity CMS** and third-party APIs.

2. Environment Variable Configuration:

- Securing API keys, database credentials, and sensitive data using .env files.
- Configure environment variables in the hosting platform.

3. Staging Environment Setup:

- Deploy the application to a **staging environment**.
- Validate that deployment builds successfully and the site loads correctly.

4. Staging Environment Testing:

- **Functional Testing:**
  - Using **Google Pagespeed** for performance.
  - Using **Postman** to validate API responses.
- **Performance Testing:**
  - Using **Google Pagespeed** to analyze speed and responsiveness.
- **Security Testing:**
  - Validating input fields to prevent SQL injection.
  - Ensuring HTTPS is enabled.
  - Verify proper handling of sensitive data.
- **Responsiveness Testing:**
  - Ensure the layout adjusts properly on various screen sizes.

5. Documentation Updates:

- Created a **README.md** summarizing all six days of activities.
- Include reports, test cases, and deployment instructions in a structured GitHub repository.

Conclusion:

By completing Day 6, I will be equipped with the skills and knowledge required to deploy a robust and production-ready marketplace. This process emphasizes industry-standard practices, ensuring a seamless transition from development to a customer-facing environment.