

## **Key Learning Outcomes:**

Set up and Congure a Staging Environment I have successfully completed the following steps to set up and congure a staging environment for my marketplace Selecting a Hosting Platform Hosting Platform Chosen (Vercel).

#### Rationale:

Vercel oers seamless integration with Next.js, excellent performance, and a userfriendly 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 Veried 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 ope run build for the staging environment.

#### PROFESSIONAL ENVIRONMENT:

#### **Key Learning Outcomes:**

Understanding and Managing Different Stages of Environments I have successfully learned and applied professional environment management, which includes the following stages: TRN (Training Environment).

#### **Purpose:**

Used for onboarding and training team members without impacting active development or production data.

#### IMPLEMENTATION:

Set up a separate environment with sample data for training purposes. Congured restricted access to ensure that trainees cannot aect other environments. DEV (Development Environment) Used for active development of new features and functionality.

#### IMPLEMENTATION ON GIT:

Congured the environment to use local or mocked services for quick iteration. Ensured seamless integration with version control (GitHub

repository). SIT (System Integration Testing) Purpose: Focused on testing integrations between dierent system components.

## UAT User Acceptance Testing:

**Purpose:** Used for end-user testing to validate features and workows before release Created a near-production replica with real-world data Involved stakeholders and testers to identify usability issues.

#### Production Environment:

**Purpose:** The live environment accessed by end-users Deployed fully tested and approved features Congured robust monitoring and alert systems to ensure stability. Additional Practices Version Control: Established branching strategies (eg. main staging feature/") for smooth transitions between environments. Environment-Specic Congurations: Used env les and Vercel's environment variable management to ensure accurate setup for each stage. Monitoring: implemented logging and monitoring tools to track performance and errors in SIT, UAT, and PROD.

## **Testing and Validation:**

Veried that the staging environment Reects the latest changes pushed to the staging branch is accessible and performs as expected on various devices and browsers.

#### Testing:

Test Case Description

**Expected Result** 

**Actual Result** 

## Homepage Load Test:

Homepage should load within 2 seconds

Homepage loaded within 2 seconds

Passed

## Display:

TST-002

**Product display Test** 

All should be displayed correctly on the homepage

All products displayed correctly

Passed

No Issues found

TST-003

## Product details Testing

Product details should display upon selection

Product details displayed correctly

Passed

**Showing Correctly** 

TST-004

#### Checkout Page Testing:

Checkout process should complete without errors

Checkout completed successfully

Passed

Successfully

TST-005

## **API Integration Testing:**

API should fetch and display data correctly

API fetched and displayed data as expected

Passed

**Working Properly** 

TST-006

## **Navigation Test:**

All navigation links should be functional

All navigation links work correctly

Passed

**Working Properly** 

TST-007

## Image Loading Test:

All product images should load correctly

All product images loaded without issues

Passed

**Working Properly** 

TST-009

## **Accessibility Testing:**

Site should meet accessibility standards

Site meets all accessibility standards

Passed

**Working Properly** 

TST-010

## Responsiveness Testing:

Site should adjust properly on various devices

Site adjusted properly on all tested devices

**Passed** 

( NOW THE WEBSITE DISPLAY ON VERCEL )