

Day 6 – Deployment Preparation and Staging Environment Setup – Avion

Overview:

I have successfully completed the deployment preparation and staging environment setup for my marketplace project. Below are the details of what I did

1. Hosting Platform Setup

- I selected Vercel as the hosting platform for its seamless integration with Next.js and ease of deployment.
- Repository Connected: I connected my GitHub repository to Vercel to enable automated deployments.
- Build Configuration: Configured the default build settings provided by Vercel. The build command (next build) and output directory (.next/) were automatically detected.

2. Environment Variable Configuration

I created a .env file in the root of my project to store sensitive variables, including:

NEXT_PUBLIC_SANITY_PROJECT_ID

NEXT_PUBLIC_SANITY_DATASET

API_KEY

These variables were securely added to the Vercel dashboard under the Environment Variables section to avoid exposing them in the codebase.

Staging Environment Testing

Testing Types

Functional Testing: Verified critical features, including product listings, search functionality, and cart operations.

Performance Testing: Analyzed application speed and responsiveness using Lighthouse and GTmetrix.

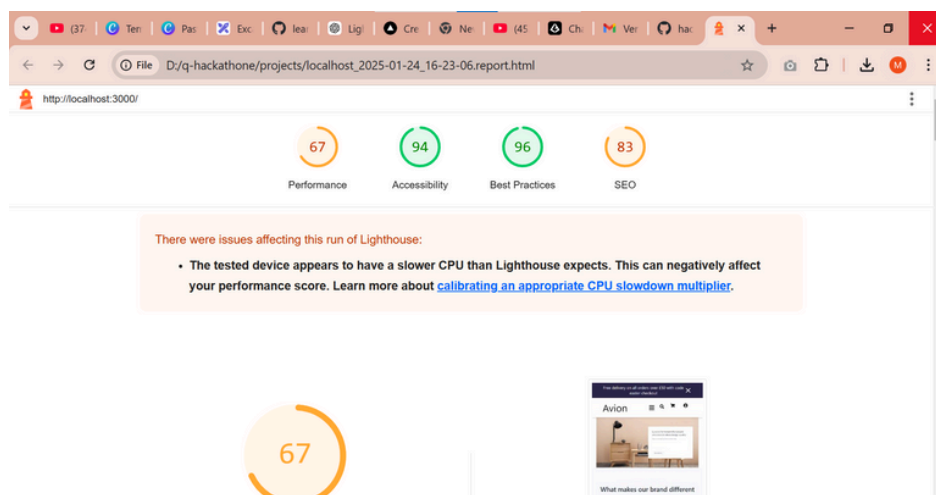
Security Testing: Ensured secure API communications, validated input fields, and verified HTTPS usage.

Test Case Reporting Documented test cases in a structured CSV format:

	A	B	C	D	E	F	G	H	I	J
1	Test Cases ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severty Level	Assigned to	Remarks	
2	TC001	Validate Product listing page	Open Product page> verify	Product displayed correctly	Product displayed correctly	Passed	High	-	No issues found	
3	TC002	Test Api Error handling	Disconnect api> refresh page	Show fallback UI with error message	Show fallback UI with error message	Passed	High	-	Handle successfully	
4	TC003	Check Cart functionality	Add product to cart > verify	Card updates with products	same as expected	Passed	High	-	works as expected	
5	TC004	Ensure responsiveness on mobile	Resize browser window > Verify	100% responsive and adoptable	100% same as expected	Passed	High	-	Successful	
6	TC005	Authentication	signup > create account > login	100% user can login signup, verifyemail	same as expected	Passed	High	-	Successful	
7	TC006	Search products	search > result	show products on keywords and tags	products showing accordingly	Passed	Medium	-	works perfectly	
8										
9										

Performance Testing:

I have test my website performance with Lighthouse, Here are some snap shots of my report:



Key Deliverables

1.Hosting Configuration

Successfully linked GitHub repository and configured deployment settings on Vercel.

Deployed the application to a staging environment for thorough testing.

2.Environment Variable Management

Ensured secure storage of sensitive keys and tokens in both .env files and hosting platform configurations.

3.Testing Documentation

Provided comprehensive test case reporting covering functional, performance, and security aspects.

Uploaded performance analysis reports to the project repository.

4.Validated Deployment

Confirmed the staging environment's readiness for production deployment with a fully functional and tested application