## Day 6 Report:

#### Deployment Preparation and Staging Environment Setup:

## Objective:

Day 6 focuses on preparing the marketplace application for deployment by setting up a staging environment, configuring hosting platforms, and ensuring the application is ready for a customer-facing release.

## Step 1: Hosting Platform Setup:

#### Vercel (Recommended)

Vercel was selected as the hosting platform due to its seamless integration with Next.js and its ability to automatically deploy projects from GitHub. *Key benefits include:* 

- 1. Easy Integration: Native support for Next.js.
- 2. Automatic Deployment: Deploys automatically from GitHub.
- 3. Scalability: Handles varying traffic loads efficiently.
- 4. Serverless Functions: Enables backend logic without managing servers.

## Step 2: Configure Environment Variables:

Secure API Keys, Database Credentials, and Sensitive Data Using .env Files Sensitive data like API keys and credentials should be stored securely in .env files. This prevents exposing secrets in the codebase.

- 1. NEXT PUBLIC SANITY PROJECT ID
- 2. NEXT\_PUBLIC\_SANITY\_DATASET
- 3. SANITY\_API\_TOKEN
- 4. IMPORT DATA ON SANITY CHEFS
- 5. IMPORT DATA ON SANITY FOODS

# Step 3: Deploy To Staging:

#### 1. Deploy the Application to Staging:

- \* Push the latest code to GitHub.
- \*Set up a Preview Deployment in Vercel (either by linking a staging branch or using the default production branch).
  - \*Vercel will trigger the build and deployment process automatically.

## 2. Validate Deployment:

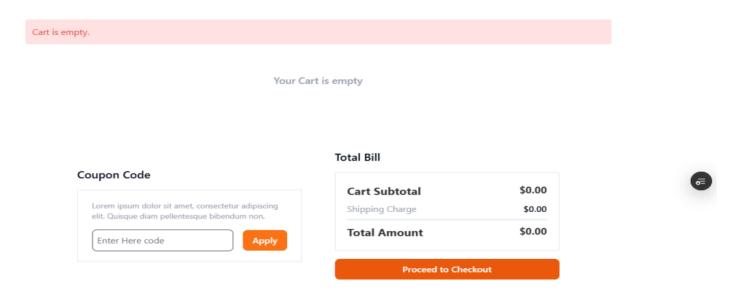
- \* Check Vercel's build logs for a successful deployment.
- \*Access the staging URL and test the site to ensure all features work as expected. o Verify the functionality of backend integrations (e.g., Sanity CMS and APIs).

#### 3. Troubleshoot:

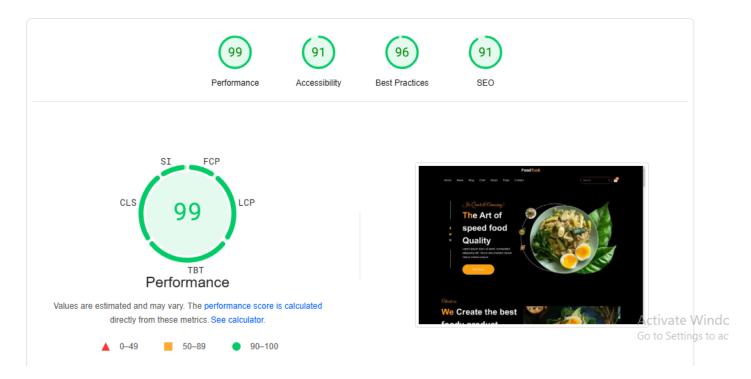
\*If issues arise, review build logs and verify the correct configuration of environment variables.

# Step 4: Staging Environment Testing:

- 1. Conduct Functional Testing
- 2. Perform Performance Testing Lighthouse.
- 3. Verify Responsiveness & Error Handling.



#### 4. Document Test Result.



# Step 5: Documentation Updates:

- 1.Record all test outcomes, including performance benchmarks and functional tests.
- 2. List unresolved issues and prioritize fixes before production deployment.

#### Test Case Reporting

Documenting test cases in a structured format ensures clear tracking of testing progress and issues. Here's how you can document test cases in a CSV file:

Test Case	Description	Steps	Expected Result	Actual Result	Status	Remarks
Id						
TC001	Validate	Open product	Products	Product	Passed	No issue
	product listing	page>Verify products	displayed	displayed		found
TC002	Test API error	Disconnect	Show	Fallback	Passed	Handled
	handling	API >	fallback	message		gracefully
		Refresh page	message	shown		
TC003	Check cart	Add item to	Cart	Cart	Passed	Works as
	functionality	cart > Verify	updates	updates		expected
		cart	correctly	correctly		
TC004	Test form	Submit form	Display	Error	Failed	Missing
	validation	with empty	error	message		validation
		fields	message	displayed		check
TC005						
	Verify HTTPS	Open site >	HTTPS	HTTPS	Passed	Secure
	connection	Check HTTPS status	enabled	enabled		connection