HACKATHON DAY 6

DEPLOYMENT PROCESS & TESTING REPORT

Project Overview

This document outlines the deployment process, staging environment setup, and testing conducted for my **e-commerce website** built with **Next.js**, **Sanity CMS**, and **Stripe payments**.

1. Deployment & Hosting

Hosting Platform:

- Vercel was selected for its seamless integration with Next.js.
- **GitHub** was linked to ensure automatic deployment upon every commit.

Deployment Steps:

- 1. Connect GitHub to Vercel and import the project.
- 2. Configure Environment Variables in .env.local and on Vercel.
- 3. Run Build & Deploy to ensure the website is live.

Environment Variables:

```
NEXT_PUBLIC_SANITY_PROJECT_ID=your_project_id

NEXT_PUBLIC_STRIPE_PUBLISHABLE_KEY=your_stripe_key

STRIPE_SECRET_KEY=your_secret_key
```

2. Staging Environment Setup & Testing

Test	Feature	Test Steps	Expected Outcome	Actual Outcome	Status
ID					
TC001	Product Listing	Open home page &	Products should	Displayed	Passed
		check products	display correctly	correctly	
TC002	Search Function	Search for a product	Relevant results	Works as	Passed
			should appear	expected	
TC003	Add to Cart	Add a product to the	Cart updates	Working correctly	Passed
		cart	instantly		
TC004	Checkout	Initiate payment via	Redirects to Stripe	Payment gateway	Passed
		Stripe	checkout	working	

TC005	Mobile	Resize screen and	Adjusts layout	Mobile-friendly	Passed
	Responsiveness	check UI	correctly		

3. Backend & API Integration

Sanity CMS Setup

```
import { createClient } from '@sanity/client';
const client = createClient({
projectId: process.env.NEXT PUBLIC SANITY PROJECT ID,
 dataset: process.env.NEXT_PUBLIC_SANITY_DATASET,
useCdn: true,
});
Fetching Products from Sanity
export async function fetchProducts() {
return await client.fetch('*[ type == "product"]');
}
Stripe Payment Integration
import { loadStripe } from '@stripe/stripe-js';
const stripePromise = loadStripe(process.env.NEXT_PUBLIC_STRIPE_PUBLISHABLE_KEY);
Handling Payments:
export async function handlePayment(sessionId) {
 const stripe = await stripePromise;
await stripe.redirectToCheckout({ sessionId });
}
```

4. Final Deployment Checklist

- Hosting & domain setup on Vercel √
- All API integrations tested√
- Checkout & payments verified ✓
- Mobile responsiveness ensured √

GitHub repository updated
✓

Live Website:

https://e-commerce-aq.vercel.app/