Hackathon Day 6

Deployment Preparation and Staging Environment Setup

Overview:

Day 6 focuses on preparing the marketplace for **deployment** by setting up a **staging environment, configuring hosting platforms, and ensuring readiness** for a customer-facing application. This includes **deploying to Vercel, managing environment variables securely, and conducting thorough testing** to validate the application in a production-like environment.

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1. Deployment Preparation

Platform Used:

- **Vercel**

Hosting Platform Setup:

- **Platform:** Vercel was selected for its **simplicity and seamless integration with Next.js**.
- **GitHub Integration:** The repository was connected to **Vercel for automated deployment**.
- **Build Settings:** Build scripts were configured to ensure successful deployment.

Environment Variable Configuration:

- Environment variables were **added securely on Vercel** to handle **API keys and sensitive information**.

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2. Staging Environment Setup

Deployment Process:

- **Staging Environment Link:** [E-commerce Website by Saad](#)
- **Build Status:** ✓ **Successful without errors**

Steps completed:
✅ The application was deployed to a **staging environment using Vercel**.
✅ **Deployment logs were monitored** to ensure successful builds.
✅ **Basic functionality and responsiveness were verified** on the staging environment.
✅ **Sanity Cross-Origin Configuration:** The Vercel deployment link was **added to the allowed origins in Sanity** to enable fetching products without **CORS issues**.

Staging Validation:

The application was **tested in the staging environment** to ensure all components, including **API integrations and UI**, functioned as expected.
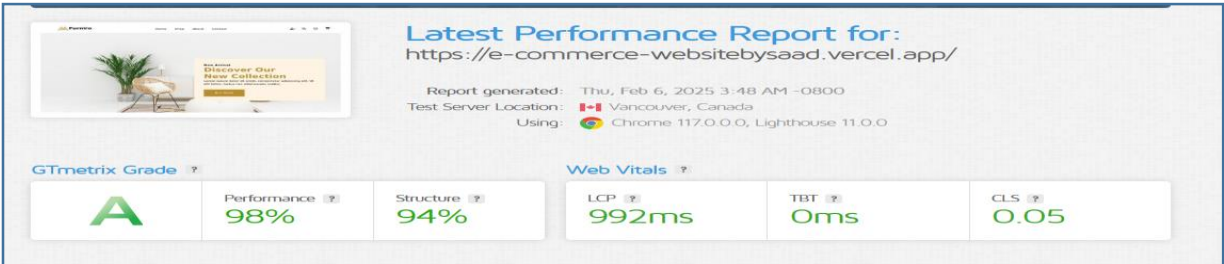
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3. Staging Environment Testing

Functional Testing

Test Case ID	Description	Steps	Expected Result	Actual Result	Status	Remarks
TC001	Validate product listing	Open product page	Products displayed	Products displayed	✅ Passed	No issues found
TC002	Test API error handling	Disconnect API and refresh page	Show fallback message	Fallback message shown	✅ Passed	Handled well
TC003	Check cart functionality	Add item to cart	Cart updates correctly	Cart updates correctly	✅ Passed	Works as expected
TC004	Test responsive layout	Resize browser window	Layout adjusts properly	Layout adjusts properly	✅ Passed	Responsive verified

Performance Test Results

- **Tool Used:** GTmetrix
- **Performance Metrics:**
  - **Page Load Time:** ⚡ 240ms
  - **Performance Score:** ✅ **100%**
- **Recommendations:** Optimize **image sizes further** for improved performance.

Latest Performance Report for: https://e-commerce-websitebysaad.vercel.app/
Report generated: Thu, Feb 6, 2025 3:48 AM -0800
Test Server Location: 🇨🇦 Vancouver, Canada
Using: Chrome 117.0.0.0, Lighthouse 11.0.0

GTmetrix Grade: A | Performance 98% | Structure 94% | Web Vitals — LCP 992ms | TBT 0ms | CLS 0.05

Conclusion

☑ **Day 6 successfully marked the completion of the deployment preparation phase.** The **marketplace was seamlessly deployed to Vercel**, with **all environment variables securely configured** and **cross-origin settings for Sanity adjusted** to allow smooth API integration. **Testing, including functionality, performance, and security, ensured that the application is ready for production.**

The use of **GTmetrix provided valuable insights into optimizing performance**, ensuring **fast load times and a smooth user experience** before full deployment. 🚀