

MarketPlace-Builder-Hackathon - Day 6

Deployment Preparation & Staging Environment Setup

Overview

Day 6 focused on preparing the FoodTuck Q-Commerce website for deployment by setting up a staging environment, configuring hosting platforms, and ensuring the application's readiness for real-world use. This was essential for simulating the production environment and identifying potential issues before launching the website live.

Deployment Strategy Planning

Hosting Platform

- **Platform Chosen:** Vercel (selected for its speed, efficiency, and support for both static and dynamic applications).
- **CI/CD Integration:** GitHub and Vercel integration enabled automatic deployments whenever new code was pushed to the repository.
- **Build Configuration:**
 - Configured build scripts in Vercel's dashboard.
 - Optimized bundling, environment setup, and resource compilation.
 - Ensured the staging environment matches production settings.

Environment Variables Configuration

- **Security:** Used .env files to store sensitive credentials (e.g., API keys, Sanity CMS credentials, database connections).
- **Deployment:** Securely uploaded these credentials to **Vercel's environment variable settings**.
- **Result:** The application functioned **correctly in staging**, with **production-ready credentials**.

Testing and Optimization

Performance Testing

- **Tool Used:** Lighthouse (evaluated site speed, accessibility, best practices, and SEO).
- **Metrics Measured:**
 - Page Load Time
 - Page Speed
 - Responsiveness
- **Improvements:** Optimized **site speed** and **navigation flow**.

Security Testing



- **Vulnerability Checks:** Identified and mitigated common security threats.
- **HTTPS Verification:** Ensured **secure data transmission** via HTTPS.
- **Sensitive Data Handling:** Verified API keys were not exposed.
- **Security Headers:** Implemented secure HTTP headers.

Test Case Report

A structured **test report** was created to document all testing activities and issues.

<u>Test Case ID</u>	<u>Description</u>	<u>Steps</u>	<u>Expected Result</u>	<u>Actual Result</u>	<u>Status</u>	<u>Remarks</u>
<u>TC001</u>	<u>Validate Product Listing</u>	<u>Open product page, check if products load from Sanity CMS</u>	<u>Products should display correctly</u>	<u>Products displayed as expected</u>	 <u>Passed</u>	<u>-</u>
<u>TC002</u>	<u>Validate Product Details Page</u>	<u>Click on a product, verify details</u>	<u>Correct product info should load</u>	<u>Data displayed correctly</u>	 <u>Passed</u>	<u>-</u>
<u>TC003</u>	<u>Test Cart Functionality</u>	<u>Add a product to cart</u>	<u>Cart updates correctly</u>	<u>Works as expected</u>	 <u>Passed</u>	<u>-</u>
<u>TC004</u>	<u>Test Checkout Process</u>	<u>Proceed to checkout</u>	<u>Checkout form functions properly</u>	<u>Works correctly</u>	 <u>Passed</u>	<u>-</u>
<u>TC005</u>	<u>Test Search Functionality</u>	<u>Search for a product</u>	<u>Relevant results appear</u>	<u>Search working fine</u>	 <u>Passed</u>	<u>-</u>
<u>TC006</u>	<u>Test Order Placement</u>	<u>Place an order</u>	<u>Confirmation page loads with details</u>	<u>Works as expected</u>	 <u>Passed</u>	<u>-</u>
<u>TC007</u>	<u>Test Responsiveness</u>	<u>Check mobile/tablet/desktop layout</u>	<u>Layout adapts correctly</u>	<u>Responsive as expected</u>	 <u>Passed</u>	<u>-</u>

Summary of Results

-  **All test cases passed**, confirming that the core features are functional and production-ready.
-  **Next Steps:** Fix any **minor UI/UX enhancements** before final deployment.

Conclusion

Day 6 was a **critical milestone** in preparing **FoodTuck's** online marketplace for a **seamless customer experience**. With **staging deployment, performance testing, and security optimizations** completed, the website is now ready for **final deployment**.

 **Next Steps:** Move forward with **final production deployment** and monitor live performance. 