Hackathon Day 6

DAY 6 - DEPLOYMENT PREPARATION AND STAGING ENVIRONMENT SETUP

Overview

The **E-Commerce Furniture Store** is a fully functional online platform where users can explore and purchase a diverse range of furniture items. This platform has been carefully designed to provide a seamless and secure online shopping experience, ensuring customer confidence and satisfaction.

Over six days, the project evolved from initial brainstorming to successfully setting up a staging environment in preparation for deployment. Each phase focused on specific tasks essential to building the platform, from conceptualization to implementing key features and security measures. The ultimate goal is to deliver a robust and user-friendly online shopping experience that aligns with industry standards.

Day 1

Laying the Foundation of My Marketplace Journey

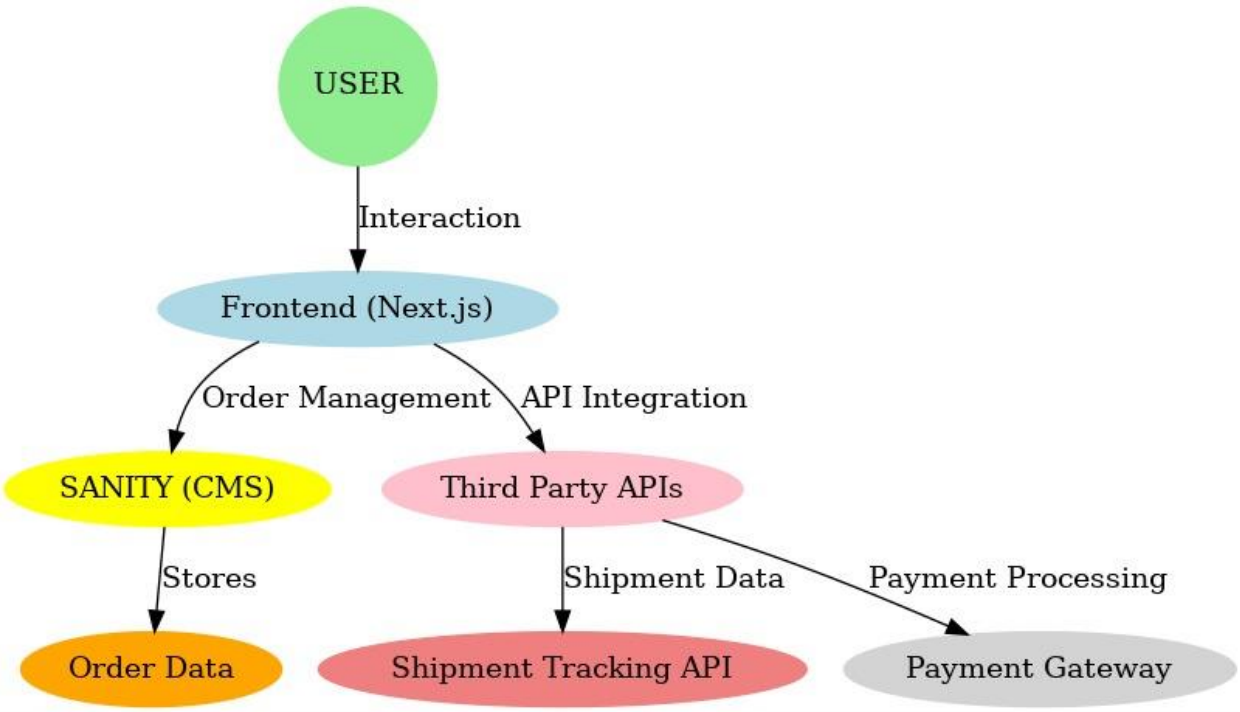
- Selected my marketplace, which is E-Commerce.
- Defined business goals and documented all business requirements.
- Created data schema, including product, order, customer, shipment, and payment.
- Defined relationships between entities.

Conclusion: Successfully implemented my Day 1 Hackathon document.

Day 2

Planning the Technical Foundation

In day 2 I've focused on technical requirement and workflow which is related to my hackathon.



Day 3

API Integration and Data Migration

1. Introduction

This report details the process of integrating product data from an external API into the backend system of **E-commerce Furniture Store**. The integration utilizes **Sanity CMS** for content management and **Next.js** for frontend rendering.

Key Objectives of the Integration:

1. Efficiently store and manage product data in **Sanity CMS**.
2. Retrieve real-time data from an **external API**.

Dynamically render the fetched data on the **frontend** for a seamless shopping experience.

Day 4

Building Dynamic Frontend Components for my Marketplace

In day 4 I focused on building dynamic frontend component and fetch data from sanity CMS.

- Implemented reusable and modular components.
- Applied state management techniques.
- Ensured responsive design and followed UI/UX best practices.
- Prepared for real-world client-side implementation.

Day 5

Enhancing Testing, Debugging, and Backend Optimization

Key Milestones

This phase is dedicated to refining and preparing the E-Commerce Marketplace for deployment. The main focus areas include:

1. Performing thorough testing to ensure optimal system performance.
2. Implementing robust error-handling mechanisms.
3. Enhancing performance metrics and accessibility.
4. Ensuring compatibility across various devices and browsers.
5. Documenting progress and key results in detail.

Testing Summary Table

Test Case ID	Feature Tested	Expected Outcome	Actual Outcome	Status	Priority	Notes
TC001	Navigation consistency	Links direct accurately	Successful	Passed	High	No issues found

TC002	Product visibility	Accurate product rendering	Verified	Passed	Medium	None
TC003	Dynamic Working	Pages Rendering Without Issue	Functional	Passed	High	Handled gracefully
TC004	Cart functionality	Seamless add/remove/Clear operation	Confirmed	Passed	High	Works as expected
TC005	Checkout functionality	Order Place Successful in Sanity	Successful	Passed	High	Works as expected
TC006	API error handling	Show fallback UI with error message	Error message shown	Passed	High	Handled gracefully
TC007	Login/SignUp	Under Construction	working	Failed	Low	None
TC008	Performance benchmarks	Score ≥ 90	Achieved 99	Passed	High	Test Successful
TC009	Accessibility	Score ≥ 90	Reached 81	Failed	Low	None
TC0010	SEO optimization	Score ≥ 90	Achieved 91	Passed	High	Test Successful
TC0011	Ensure responsiveness on mobile	Score ≥ 90	Achieved 92	Passed	High	Test Successful

CSV Format:

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TC001,Navigation consistency,Links direct accurately,Successful,Passed,High,No issues found

TC002,Product visibility,Accurate product rendering,Verified,Passed,Medium,None

TC003,Dynamic Working,Pages Rendering Without Issue,Functional,Passed,High,Handled gracefully

TC004,Cart functionality,Seamless add/remove/Clear operation,Confirmed,Passed,High,Works as expected

TC005,Checkout functionality,Order Place Successful in Sanity,Successful,Passed,High,Works as expected

TC006,API error handling,Show fallback UI with error message, Error message shown,Passed,High,Handled gracefully

TC007,Login/SignUp,Under Construction,Working,Failed,Low,None

TC008,Performance benchmarks,Score ≥ 90,Achieved 99,Passed,High,Test Successful

TC009,Accessibility,Score ≥ 90,Reached 81,Failed,Low,None

TC010,SEO optimization,Score ≥ 90,Achieved 91,Passed,High,Test Successful

TC011,Ensure responsiveness on mobile,Score ≥ 90,Achieved 92,Passed,High,Test Successful

Day 6

Deployment Preparation and Staging Environment Variable

Day 6 focused on deployment by setting up staging environment.

Key Outcomes

1. Set up and configure a staging environment for my marketplace. This includes:

- Selected a hosting platform like vercel.
- Connected GITHUB repository with to the platform.
- Setting up environment variables securely within the hosting platform.
- Validated the functionality in a production like environment.
- Configure sensitive variables (e.g., API keys) in env and uploaded them securely on vercel.

1. Staging Environment Set up

- Deployed a staging build to validate functionality in a production like environment
- **For Example: .**env.local File;
- NEXT PUBLIC SANITY PROJECT ID=" project id"
- NEXT PUBLIC SANITY_DATASET="data set"
- NEXT PUBLIC SANITY APL_ TOKEN="token"

2. Staging Environment Variables

- **Functional Testing:** Verified workflows like product listing and checkout.
- **Performance Testing:** Used GTmetrix for analyzing speed and Performance
- **Security Testing:** Validated HTTPS, input handling and secure APl calls.

Vercel Link

https://marketplace-hackathon-ecommerce.vercel.app/