
Day 6 – Deployment Preparation and Staging Environment Setup

Project Name: Hekto: Building the Future of Furniture Shopping

Application Overview

Hekto is an innovative, user-centric e-commerce platform designed to provide an intuitive and seamless furniture shopping experience. Backed by robust performance and advanced security measures, it uses modern web technologies and is deployed on **Vercel** for fast, reliable, and scalable service delivery.

Performance Metrics

Performance testing was conducted using **Lighthouse**, a trusted tool for assessing web application quality. Below are the results for key pages:

Shop Page Performance

□ **Mobile:**

- Performance: 90 (Good) ○
Accessibility: 81 (Satisfactory)
- Best Practices: 100 (Excellent)
- SEO: 100 (Excellent)

The shop page performs well on mobile, with minor areas for optimization. The accessibility score suggests slight improvements are needed.

□ **Desktop:**

- Performance: 100 (Excellent) ○
Accessibility: 81 (Satisfactory)
- Best Practices: 100 (Excellent)
- SEO: 100 (Excellent)

On desktop, the shop page achieves perfect performance, but accessibility improvements are still required for better inclusivity.

Product Page Performance

□ **Mobile:**

- Performance: 85 (Good) ○
Accessibility: 78 (Moderate) ○
Best Practices: 100 (Excellent)
- SEO: 100 (Excellent)

The product page performs well on mobile, but accessibility could be improved for better navigation.

□ **Desktop:**

- Performance: 100 (Excellent)
- Accessibility: 78 (Moderate) ○

Best Practices: 100 (Excellent)

- SEO: 100 (Excellent)

The product page delivers perfect performance on desktop. Accessibility improvements are needed to enhance **usability for all users.**

Overall Performance Insights

Hekto excels in speed, best practices, and SEO. Minor adjustments are needed to improve accessibility across both mobile and desktop versions.

Steps for Implementation

Step 1: Hosting Platform Setup

Why Vercel?

Vercel was selected due to its simplicity, strong GitHub integration, and automatic scaling features. It provides seamless deployment for modern web applications.

Connecting the Repository

- The GitHub repository was linked to Vercel.
- Build settings were configured to enable automated deployment, ensuring updates are deployed in real-time with minimal manual intervention.

Step 2: Configure Environment Variables

Environment variables were configured to manage sensitive data securely, including API keys and project configurations.

1. Creating a .env File

The `.env` file includes essential keys:

```
NEXT_PUBLIC_SANITY_PROJECT_ID=your_project_id
NEXT_PUBLIC_SANITY_DATASET=production
API_KEY=your_api_key
```

2. Uploading Variables to Vercel

Variables were securely uploaded to Vercel's dashboard to ensure smooth operation without exposing sensitive information.

Step 3: Deploy to Staging

1. Deploying the Application

The application was deployed to a staging environment via Vercel's intuitive deployment process.

2. Validating Deployment

Key functionalities, including navigation, search, and checkout, were tested in the staging environment to ensure a seamless user experience. Issues were resolved before the production release.

Conclusion

Hekto sets a new benchmark in the e-commerce industry, delivering a fast, accessible, and highly efficient platform. Its deployment via Vercel ensures unmatched reliability and scalability, while Lighthouse performance metrics highlight its strength in performance, best practices, and SEO. Future accessibility improvements will further enhance the platform’s inclusivity and user satisfaction.

Day 6 Checklist

Task	Completed
Deployment Preparation	✓
Staging Environment Testing	✓
Documentation	✓
Form Submission	✓
Final Review	✓
