


Day 6 - Launch Readiness & Staging Setup

Modern Furniture E-Commerce Platform – Furniro



Key Functionalities:

- ◆ Product Catalog – Browse & explore furniture with detailed views.
- ◆ Cart & Wishlist – Seamless management of favorites & purchases.
- ◆ Smart Search & Sorting – Find products effortlessly.
- ◆ Secure Checkout – Hassle-free & encrypted transactions.
- ◆ Custom User Profiles – Personalization at its best.
- ◆ Feedback & Ratings – Real user insights for better shopping.
- ◆ Real-Time Alerts – Stay updated with order & deal notifications.
- ◆ Cross-Device Compatibility – Smooth experience on mobile, tablet, & desktop.



 Objective: Build a high-performance, scalable platform with intuitive navigation for an effortless shopping experience!

Pre-Launch Readiness: Critical Actions Completed



1. Code Audit

-  Reviewed code for efficiency & best practices.
-  Eliminated unnecessary packages & obsolete code.



2. Configuration Security

-  Protected API tokens & credentials via environment files.
-  Validated staging/production environment variables.

3. Bundle Refinement

-  Optimized output size by streamlining third-party libraries.
-  Ran npm run build to fix compilation errors.

4. Quality Assurance


-  Unit, Integration, & E2E tests ensured system reliability.
-  Checked responsive design across multiple devices.


5. Progress Documentation

-  Created an error-tracking CSV with performance benchmarks & fixes.

Staging Environment Setup

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 Hosting via Vercel

 Why Vercel? Instant deployments, speed, & analytics!

◆ Dedicated Staging Branch – Isolated environment variables for security.

◆ Automated CI/CD – Smooth & efficient updates.

◆ Vercel Insights – Real-time performance tracking.

⚠ Deployment Challenges & Solutions

✖ 1. Configuration Errors

🔴 Issue: Staging variables failed to load.

🔍 Root Cause: Incorrect .env formatting & missing keys.

✅ Fix: Reconfigured environment files & secured variables in Vercel.

🛑 2. Unexpected Client-Side Errors

⚠ Issue: Console errors in cart & favorites.

🔍 Root Cause: Unhandled edge cases.

✅ Fix: Integrated Sentry for monitoring & improved validation logic.

📱 3. Mobile Layout Issues

✖ Issue: Design misalignment on smaller screens.

✅ Fix: Adjusted Tailwind breakpoints & tested on real devices.

🔧 Validation Workflow

✅ 1. Feature Testing

🔍 Confirmed core functionalities:

✓ Cart item addition/removal.

✓ Wishlist updates.

✓ Accurate product search results.

✓ Smooth page transitions.

🚀 2. Speed & SEO Audit

📊 Lighthouse Scores:

⚡ Performance: Faster load times via code splitting.

🎨 Accessibility: Improved color contrast & ARIA labels.

🔍 SEO: Enhanced metadata & image alt tags.

📈 Metrics tracked via Vercel's analytics dashboard.

📱 3. Cross-Device Testing

📱 Tested layouts on mobile, tablet, & desktop.

✅ Fixed overflow & alignment issues.

Deployment Pipeline

Pre-Launch Checklist

- ✓ Database Backup completed.
- ✓ Environment Variables revalidated.
- ✓ Final Build executed without errors (npm run build).

Vercel Deployment Steps

- 1 Merged staging branch to GitHub.
- 2 Enabled auto-deployments from the production branch.
- 3 Monitored logs to confirm a successful build.

Post-Launch Verification

- ✓ Tested live features: Cart, filters, & wishlist.
- ✓ Ran scripted tests for checkout & user workflows.

Key Resolutions

1. Build Failures

- 🚨 Issue: Missing dependencies blocked deployment.
- ✓ Fix: Updated package.json & rebuilt the project.

2. UI Glitches

- ✗ Issue: Overlapping UI elements on mobile.
- ✓ Fix: Fine-tuned CSS grid configurations.

Final Results

- 🚀 Successfully deployed a scalable furniture e-commerce platform!
- 👁️ Live Demo: UI/UX Hackathon Project
- 📊 Lighthouse Scores: 90%+ in Performance & Accessibility!
- 📱 Consistent functionality across all devices.

Future Roadmap

- 📊 Monitor uptime with Vercel & Sentry integrations.
- ★ Introduce user-generated reviews & AI-powered recommendations.
- 🛡️ Schedule quarterly security audits & performance tests.

Closing Remarks

This furniture e-commerce platform merges a robust backend with a sleek frontend, ensuring a smooth shopping experience. Overcoming challenges like variable mismanagement & mobile