**Day 6 - Deployment Preparation and Staging Environment Setup**

**Project Name: Reliable Furniture Hub**

**Date: 4 Feb, 2025**

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**1. Objective**

The objective of Day 6 was to successfully deploy the marketplace application to a live environment while ensuring that all functionalities work as expected. This phase also included setting up a staging environment, running deployment tests, and preparing the necessary documentation.

**2. Deployment Process**

The application was deployed on **Vercel**, following these steps:

1. **Code Finalization:** Ensured all components were functional and ready for deployment.
2. **Repository Preparation:**
   * Updated the GitHub repository.
   * Ensured a proper folder structure.
   * Added a README.md file summarizing the project.
3. **Vercel Deployment:**
   * Connected the GitHub repository to Vercel.
   * Configured necessary environment variables.
   * Selected the production branch for deployment.
4. **Domain Configuration:**
   * Verified the Vercel-provided domain.
5. **Staging Environment:**
   * Deployed a separate branch for testing before production.

**3. Deployment Testing**

After deployment, a series of tests were conducted to ensure the marketplace functions correctly in a live environment.

**✅ Performance Testing:**

* Lighthouse audit performed.
* Verified page load speed and asset optimization.
* Checked caching and lazy loading implementation.

**✅ Security Testing:**

* Ensured API keys are securely stored in environment variables.
* Verified that sensitive user data is not exposed.
* Tested against potential security vulnerabilities.

**✅ Cross-Browser and Device Testing:**

* Tested on Chrome, Firefox, Edge, and Safari.
* Verified mobile responsiveness on different screen sizes.

**✅ Staging vs. Production Verification:**

* Compared staging and production versions for consistency.
* Identified and resolved any last-minute deployment issues.

**4. GitHub Repository & Documentation**

* The **GitHub repository** for **Day 6** includes:
  + Source code.
  + Deployment reports.
  + Performance test results.
  + A well-structured README.md file with instructions.

🔗 **GitHub Repository Link:** <https://github.com/owais-ai/NextJS-Design-JAM-2024/tree/main/day-06>

🔗 **Live Deployment Link:** <https://furniro-nextjs-hackathon.vercel.app/>

**5. Key Achievements**

* ✅ Successfully deployed on **Vercel**.
* ✅ Passed all functional, performance, and security tests.
* ✅ Set up a **staging environment** for testing before production.
* ✅ Improved **performance optimizations** for faster loading times.
* ✅ Ensured full **cross-browser and mobile compatibility**.
* ✅ Documented all processes and included test reports in GitHub.

🚀 **Milestone Completed Successfully!** 🎉