# Day 6 - Deployment Preparation and Staging Environment Setup

**Project Name: Reliable Furniture Hub** 

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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:

 Code Finalization: Ensured all components were functional and ready for deployment.

### 2. Repository Preparation:

- Updated the GitHub repository.
- o 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.
  - o Deployment reports.
  - Performance test results.
  - A well-structured README.md file with instructions.
- Ø GitHub Repository Link: <a href="https://github.com/owais-ai/NextJS-Design-JAM-2024/tree/main/day-06">https://github.com/owais-ai/NextJS-Design-JAM-2024/tree/main/day-06</a>
- Live Deployment Link: <a href="https://furniro-nextjs-hackathon.vercel.app/">https://furniro-nextjs-hackathon.vercel.app/</a>

## 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.
- Z Ensured full cross-browser and mobile compatibility.
- Documented all processes and included test reports in GitHub.

