

# DAY 6 - DEPLOYMENT PREPARATION AND STAGING ENVIRONMENT SETUP

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## “HomeAura MarketPlace”

### *Objective:*

The objective of the HomeAura project on Day 06 was to ensure the system by setting up a staging environment, configuring hosting platforms, and validating the application in a production-like setting. Building on the testing and optimization work from Day 5, this stage emphasized ensuring the marketplace operates seamlessly in a deployment-ready environment. Additionally, students learned about industry-standard practices for managing different environments like non-production (TRN, DEV, SIT) and production (UAT, PROD, DR).

### *Professional Environment Types:*

1. **TRN (Training):** Used for onboarding and practice.
2. **DEV (Development):** The environment for writing and testing code locally.
3. **SIT (System Integration Testing):** Validates integrations between systems.
4. **UAT (User Acceptance Testing):** Allows stakeholders to test functionality and validate requirements.
5. **PROD (Production):** The live, customer-facing environment.
6. **DR (Disaster Recovery):** A backup environment for critical situations.

### *Key Areas of Focus:*

- Deployed the Application on Vercel for staging and production.
- Integrated with Sanity CMS for dynamic content using token API and ID.

### *.Environment Variable Configuration:*

- Secure API keys, database credentials, and sensitive data using `.env` files.
- Configure environment variables in the hosting platform for secure deployment.

### *Staging Environment Testing:*

- **Functional Testing:** Verify all features, such as product listing, search, and cart operations.
- **Performance Testing:** Use Lighthouse to analyze speed and responsiveness.

- **Security Testing:** Validate input fields, HTTPS usage, and secure API communications.
- **Responsiveness Testing:** Ensure the layout adjusts properly across various devices.
- Document all test results and unresolved issues.

### *Documentation Updates:*

- Create a README.md file summarizing all six days of activities.
- Include all reports, test cases, and deployment instructions in a structured GitHub repository.

## **Steps for Implementation:**

### *Step 1: Hosting Platform Setup:*

- Used platforms like Vercel for quick deployment.
- *Connect Repository:*
  - Linked GitHub repository to the hosting platform.
  - Configured build settings and add necessary scripts for deployment.

### *Step 2: Configure Environment Variables:*

**Create a .env File:** Include sensitive variables like API keys and tokens:

NEXT\_PUBLIC\_SANITY\_PROJECT\_ID=your\_project\_id

NEXT\_PUBLIC\_SANITY\_DATASET=production

API\_KEY=your\_api\_key

#### **Upload Variables to Hosting Platform:**

- Use the hosting platform's dashboard to securely add environment variables.

### *Step 3: Deploy to Staging*

1. **Deploy Application:**
  - Deploy the application to a staging environment through the hosting platform.
2. **Validate Deployment:**
  - Ensure the build process completes without errors.
  - Verify basic functionality in the staging environment.

## ***Step 4: Staging Environment Testing***

### **1. Testing Types:**

- **Functional Testing:** Verify all features like product listing and cart operations.
- **Performance Testing:** Use Lighthouse or GTmetrix for speed analysis.
- **Security Testing:** Validate input fields, HTTPS usage, and secure API communications.

### **Performance Testing:**

- Submit a performance report generated by tools like Lighthouse in your GitHub repository.

## ***Step 5: Documentation Updates***

### **1. Create README.md:**

- Summarize all project activities, including deployment steps and test case results.

### **2. Organize Project Files:**

- Ensure all files from Days 1 to 6 are in a structured folder hierarchy.

## **Expected Output:**

1. A fully deployed staging environment for the marketplace.
2. Environment variables securely configured.
3. Test case and performance reports documenting staging tests.
4. All project files and documentation organized in a GitHub repository.
5. A professional README.md file summarizing project activities and results.

## ***My HomeAura Marketplace Vercel Link:***

<https://uiux-figma-hackathon-gamma.vercel.app/>

## ***My HomeAura Github Repo:***

<https://github.com/DUAAPIRZADA22/-UIUX-Figma-Hackathon>

***My 01-06 Days Marketplace Journey Github Repo:***

<https://github.com/DUAAPIRZADA22/Marketplace-Builder-Hackathon-2025>

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