DAY 6 - DEPLOYMENT PREPARATION AND STAGING ENVIRONMENT SETUP

"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:**
   - o **Functional Testing:** Verify all features like product listing and cart operations.
   - o **Performance Testing:** Use Lighthouse or GTmetrix for speed analysis.
   - o **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:**
   - o Summarize all project activities, including deployment steps and test case results.
2. **Organize Project Files:**
   - o 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-woad.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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