Day 6 - Deployment

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

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### **Objective:**

Day 6 focuses on preparing my marketplace for deployment by setting up a **staging environment**, configuring hosting platforms, and ensuring readiness for a customer-facing application. This includes:

* Ensuring the marketplace operates seamlessly in a production-like environment.
* Learning about **industry-standard practices** for managing different environments

### **Key Learning Outcomes:**

1. **Set up and configure a staging environment:**
   * Select a hosting platform like **Vercel** or **Netlify**.
   * Connect your **GitHub repository** to the platform.
   * Configure build and deployment settings.
   * Securely set up **environment variables**.
   * Validate the application functionality in a **production-like environment**.

**Conduct staging environment testing and document results.**

1. **Create professional deployment documentation.**
2. **Organize all project files and documents in a structured GitHub repository.**

## **Key Areas of Focus:**

### **1. Deployment Strategy Planning**

* Choose a **hosting platform** (**Vercel** recommended, or alternatives like Netlify, AWS, Azure).
* Ensure backend services like **Sanity CMS** and third-party APIs are integrated properly.

### **2. Environment Variable Configuration**

* Secure API keys, database credentials, and sensitive data using **.env** files.
* Upload **environment variables** securely to the hosting platform.

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

NEXT\_PUBLIC\_SANITY\_DATASET=production

API\_KEY=your\_api\_key

### **3. Staging Environment Setup**

* Deploy the application to a **staging environment**.
* Ensure the deployment **builds successfully** and the site loads correctly.

### **5. Documentation Updates**

* **Create README.md** summarizing all six days of activities.

**Organize all files** in GitHub with a structured folder hierarchy:  
 /documents (Test reports, deployment docs, etc.)

/src (Source code)

/public (Static assets)

README.md (Project summary)

## **Steps for Implementation:**

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

1. **Choose a platform:**
   * Vercel (recommended) or Netlify for quick deployment.
   * AWS or Azure for advanced configurations.
2. **Connect Repository:**
   * Link **GitHub** to the hosting platform.
   * Configure **build settings** and deployment scripts.

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

1. **Create a .env file** (as shown above).
2. **Upload variables to hosting platform** securely.

### **Step 3: Deploy to Staging**

1. **Deploy Application** - Push the latest code to the hosting platform.
2. **Validate Deployment** - Ensure the build completes without errors.

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

* Conduct **functional, performance, and security tests**.
* Document all results (CSV test case reports, performance metrics).

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

1. **Create README.md** summarizing the project and deployment steps.
2. **Organize files properly in GitHub**.

## **Expected Output:**

* ✅ Fully deployed **staging environment**.
* ✅ Environment variables securely **configured**.
* ✅ **Test case and performance reports** documented.
* ✅ **GitHub repository** structured with all necessary files.
* ✅ **README.md file** summarizing all project activities.