

Deployment Preparation and Staging Environment Setup

Objective:

Day 6 focuses on preparing your marketplace for deployment by setting up a staging environment, configuring hosting platforms, and ensuring readiness for a customer-facing application. Building on the testing and optimization work from **Day 5**, this stage emphasizes ensuring the marketplace operates seamlessly in a production-like environment. Students will also learn about industry-standard practices for managing different environments like non-production (TRN, DEV, SIT) and production (UAT, PROD, DR).

1. Staging Environment Deployed Link:

Provide the link to your deployed staging environment, where the marketplace application is hosted and accessible.

- **Staging Environment Link:** [Insert your staging link here]
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2. GitHub Repository Structure:

The following structure has been created for the project repository:

- **Root Folder:**
 - **README.md:** A summary of the project, deployment steps, testing, and key results.
 - **Documents/:** Contains all project-related documentation from Days 1 to 6.
 - **Project/:** The source code of the marketplace.
 - **/Project/public/:** Static assets for the marketplace application (images, icons, etc.).
 - **Test reports/:** Contains all testing results, including test cases and performance reports.

3. Documents Folder:

All project-related documents for Day 1 to Day 6 are placed in the **documents/** folder. This includes the following files:

- **Day_1:** laying the foundation for my marketplace Journey.
- **Day_2:** Outlines the technical foundation plan for my marketplace.
- **Day_3:** API Integration and Migration report.
- **Day_4:** A detailed overview of Building Dynamic Frontend Components for My Marketplace.
- **Day_5:** Describes Testing, Error Handling, and Backend Integration Refinement.
- **Day_6:** Detailed document explaining the staging environment setup, deployment strategy, and testing procedures.

4. Test Case Report (CSV Format):

The test case report is included as a **CSV** file containing detailed results of functional, performance, and security testing done in the staging environment.

- **Test Case Report:** [Test_Case_Report.csv]

The report includes the following columns:

- Test Case ID
- Description
- Steps
- Expected Result
- Actual Result
- Status (Pass/Fail)
- Remarks

5. Performance Testing Results:

Performance testing results have been generated using tools like **Lighthouse** and **GTmetrix** to analyze load times, speed, and responsiveness of the application.

- **Performance Test Report:** [Performance_Test_Report.pdf]

Example of Performance Insights:

- **Lighthouse Score:**

Desktop:

- Performance: 89/100
- Accessibility: 96/100
- Best Practices: 98/100
- SEO: 100/100
- Speed Index: 0.4s.

Mobile:

- Performance: 72/100
- Accessibility: 96/100
- Best Practices: 100/100
- SEO: 100/100
- Speed Index: 0.8s.

6. Organized Project Files:

- The project files are organized in the following structure:

```
/root
  /documents
    /Day_1
    /Day_2
    /Day_3
    /Day_4
    /Day_5
    /Day_6
  /project
    /src /app
      / components
      / utils
      /public
  /test reports
    /Test_Case_Report.csv
    /Performance_Test_Report.pdf
```

7. README.md:

The **README.md** file summarizes the project's structure and activities across all six days. It includes:

- **Project Overview:** Purpose of the marketplace and core features.
- **Setup Instructions:** Detailed instructions for setting up the project locally, including environment variables and dependencies.
- **Deployment Instructions:** Steps to deploy the application to a staging or production environment.
- **Testing Instructions:** How to run tests locally and the results from staging environment testing.
- **Link to Staging:** A direct link to the deployed staging environment.
- **Deployment**
 - The application is deployed to Staging Environment.
- **Testing**
 - Testing was conducted using functional, performance, and security tests. Detailed reports are available in the **test_reports/** folder.