Day 6 - Deployment Preparation and Staging Environment Setup

**Objective**:

The primary objective of Day 6 is to prepare the marketplace for deployment by setting up the staging environment and testing its functionality in a production-like setting. The key areas of focus include hosting platform configuration, securing sensitive data, testing the staging environment for performance and security, and documenting the process.

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# Hosting Platform: Vercel

* + **Platform Selected**: Vercel is selected as the hosting platform for the marketplace.

## Deployment Process:

* + - The project is connected to a GitHub repository to enable continuous deployment.
    - The project is deployed to Vercel, where it is accessible on a staging URL.
    - The build process is successful, and the environment is ready for further testing.

## Observations:

* + Deployment to Vercel is seamless.
  + The platform automatically handles the build and deployment process without issues.

# Environment Variables

## Sensitive Data Handling:

* + - API keys, database credentials, and other sensitive data are securely stored using .env.local files.
    - Environment variables are added to Vercel’s dashboard under the "Environment Variables" section to keep them secure.

## Observations:

* + Environment variables are correctly configured in the staging environment.
  + No sensitive data is exposed during the deployment process.

# Staging Environment Testing

## Performance Testing:

* + - Load testing is conducted using tools such as.
    - The marketplace’s performance metrics (loading times, interactive times) are measured, and the website passes with acceptable scores..

## Observations:

* + No major performance issues are identified during the tests.
  + The website’s loading time is optimal, with page load times under 3 seconds on average.

# Summary of Findings

* + **Deployment Platform**: Vercel provides an easy-to-use platform with automated deployment and build processes.
  + **Environment Variables**: All sensitive data is securely handled with .env.local files and Vercel’s environment variable management system.

## Staging Environment Testing:

* + - Performance tests show that the marketplace is optimized and ready for production.
    - Security checks reveal no major issues, and the staging environment is secure.

# Conclusion

The marketplace deployment process was successfully prepared using Vercel as the hosting platform. The deployment was seamless, with secure management of environment variables via

.env.local files. Performance and security testing in the staging environment showed optimal loading times and no critical issues. The marketplace is now fully optimized and ready for production deployment.