

Day 6 - Deployment Preparation and Staging Environment Setup

Hosting Platform Setup

Platform Chosen: *Vercel/Netlify (for quick deployment).*

Repository Connection: *Linked the GitHub repository to the hosting platform.*

Build Settings Configuration: *Configured the necessary build settings and added deployment scripts.*

Environment Variables Configuration

.env File Creation: *Set up sensitive variables such as API keys and tokens for secure operations.*

Upload to Hosting Platform: *Added environment variables securely through the hosting platform's dashboard.*

Staging Environment Deployment:

Application Deployment: *Successfully deployed the application to the staging environment.*

Deployment Validation: *Ensured that the build process was completed without errors, and validated the basic functionality of the application in the staging environment.*

Staging Environment Testing:

Functional Testing: Verified the functionality of core features including:

- *Product listing*
- *Search functionality*
- *Cart operations*

Performance Testing: Used tools like GTmetrix to analyze the application's speed and responsiveness.

Security Testing: Ensured secure input handling, HTTPS usage, and proper API security measures were in place

Test Case Reporting:

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Assigned To	Remarks
TC001	Validate API functionality	Send GET request to API endpoint > Verify response	API returns valid JSON data with correct structure	API returns valid JSON data with correct structure	Passed	Medium	-	No issues found
TC002	Test shipment API (POST & GET)	Send POST request > Use label_id for GET request	Shipment created successfully > Label details retrieved	Shipment created and retrieved as expected	Passed	High	-	Works as expected
TC003	Lighthouse report analysis	Run Lighthouse audit > Analyze results	Scores for performance, accessibility, best practices, ↓	Scores analyzed as per task requirements	Passed	Medium	-	Performance optimization recommended

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Assigned To	Remarks
TC003	Lighthouse report analysis	Run Lighthouse audit > Analyze results	Scores for performance, accessibility, best practices, and SEO are displayed	Scores analyzed as per task requirements	Passed	Medium	-	Performance optimization recommended
TC004	Test "Add to Cart" functionality	Add product to cart > Verify cart contents	Cart updates dynamically with accurate product details	Cart updates as expected	Passed	High	-	Works as expected
TC005	Ensure responsiveness on mobile	Resize browser window > Check layout	Layout adjusts properly for different screen sizes	Responsive layout working as intended	Passed	Medium	-	Test successful

The deployment process to the staging environment was successfully completed with all necessary configurations, testing, and validation steps. The application is now ready for further review and final deployment.