3. Deploy to Staging

Deploy your application in a staging environment Push your latest code to GitHub, triggering an automatic deployment.

Verify that the deployment completes without errors.

Open the staging link and check if all functionalities work as expected.

4. Staging Environment Testing

Conduct testing to ensure everything works correctly Perform the following tests:

Functional Testing (Ensure all features work properly)

- Product Listings, Categories, Add to Cart, Checkout, and API interactions.
- Authentication (Login/Register using Clerk).
- Admin Dashboard functionalities.

Performance Testing

- Ose Google Lighthouse or GTmetrix to analyze:
- Page Load Speed
- Responsiveness
- SEO & Accessibility

Security Testing

- Validate HTTPS is enabled.
- Check for SQL injection and input validation issues.
- Ensure API keys are secured (No exposure in browser console).

2

3. Deploy to Staging

Deploy your application in a staging environment Push your latest code to GitHub, triggering an automatic deployment.

Verify that the deployment completes without errors.

Open the staging link and check if all functionalities work as expected.

4. Staging Environment Testing

Conduct testing to ensure everything works correctly Perform the following tests:

Functional Testing (Ensure all features work properly)

- Product Listings, Categories, Add to Cart, Checkout, and API interactions.
- Authentication (Login/Register using Clerk).
- Admin Dashboard functionalities.

Performance Testing

- Ose Google Lighthouse or GTmetrix to analyze:
- Page Load Speed
- Responsiveness
- SEO & Accessibility

Security Testing

- Validate HTTPS is enabled.
- Check for SQL injection and input validation issues.
- Ensure API keys are secured (No exposure in browser console).

2

Test Case Reporting

Prepare a CSV file for test cases with the following structure:

The Case ID	Description	Steps	Expected Result	Actual Result	Status	Remarks
TC001	Validate product listing	Open product page	Products displayed correctly	Products displayed correctly	✓ Pass	-
TC002	Test API error handling	Disconnect API, refresh page	Show fallback message	Fallback message shown	✓ Pass	-
TC003	Check cart functionality	Add item to cart, verify cart updates	Cart updates correctly	Cart updates correctly	✓ Pass	-

5. Documentation Updates

Ensure proper documentation in GitHub Structure your GitHub repository:

```
document/
     day_1_report.pdf
     day_2_report.pdf
3
     day_3_api_integration.pdf
4
     day_4_frontend_development
5
     day_5_testing.pdf
6
      — day_6_development_report.pdf
8
9
     app/
10
     Readme.md
11
```

Update README.md

- Write a summary of your project.
- Include deployment steps, test case results, and performance testing reports.
- Add Live Staging Link.

Final Submission Checklist

- Staging Deployment Live Link
- GitHub Repository with organized files
- Test Case Report (CSV format)
- Performance Testing Reports (Lighthouse, GTmetrix screenshots)
- README.md with documentation and project summary