DAY 6 NAME: MUHAMMED ANAS

ROLL NO: 00051245

TIMING: SAT 9-12AM

DAY 6 - DEPLOYMENT PREPARATION AND STAGING ENVIRONMENT SETUP

Objective :

The Mens Apparel marketplace project includes a fully deployed staging environment, with securely configured environment variables to protect sensitive data. Test case and performance reports have been generated, documenting the results of all staging tests to ensure optimal functionality. All project files and documentation are organized in a GitHub repository, providing easy access and collaboration. Additionally, a professional README.md file has been created, summarizing the project's activities and results for clear guidance and reference.

1. Hosting Platform Setup:

• I choose vercel for deployment of my project

Step 2: Configure Environment Variables

•. Create a .env File: ✓

• Include sensitive variables like API keys and tokens. □
NEXT_PUBLIC_SANITY_PROJECT_ID=your_project_id

• NEXT_PUBLIC_SANITY_DATASET=production

• API_KEY=your_api_key

2. Upload Variables to Hosting Platform:

• Use the hosting platform's dashboard to securely add environment variables.

Step 3: Deploy to Staging

 1. Deploy Application:

• Deploy the application to a staging environment through the hostingplatform. ✓

2. Validate Deployment:

• Ensure the build process completes without errors. • Verify basic functionality in the staging environment

4. Staging Environment testing:

• CSV based testing report

Test Case ID	Description	Steps	Expected Result	Actual Result	Status	Remarks
TC001	Validate product listing	Open product Page > verify product	Product Displayed	Product Displayed	Passed	No issue found
TC002	Test API error handling	Disconnect API > Refresh page	Show fallback message	Fallback message shown	Passed	Handled gracefully
TC003	Check Cart functionality	Add item to cart > verify cart	Cart update correctly	Cart update correctly	Passed	Handled gracefully
TC004	Test responsive layout	Resize window layout > browser check	Layout adjust properly	Layout adjust properly	Passed	All device responsive
TC005	Price Display	Open porduct page	Price visibility	Correct price visible	Passed	Successfully displayed
TC006	Checkout page	Proceed to checkout	Checkout page display with selected product	Checkout page display with selected product	Passed	Successfully displayed

• Used Lighthouse to analyze load times and responsiveness.
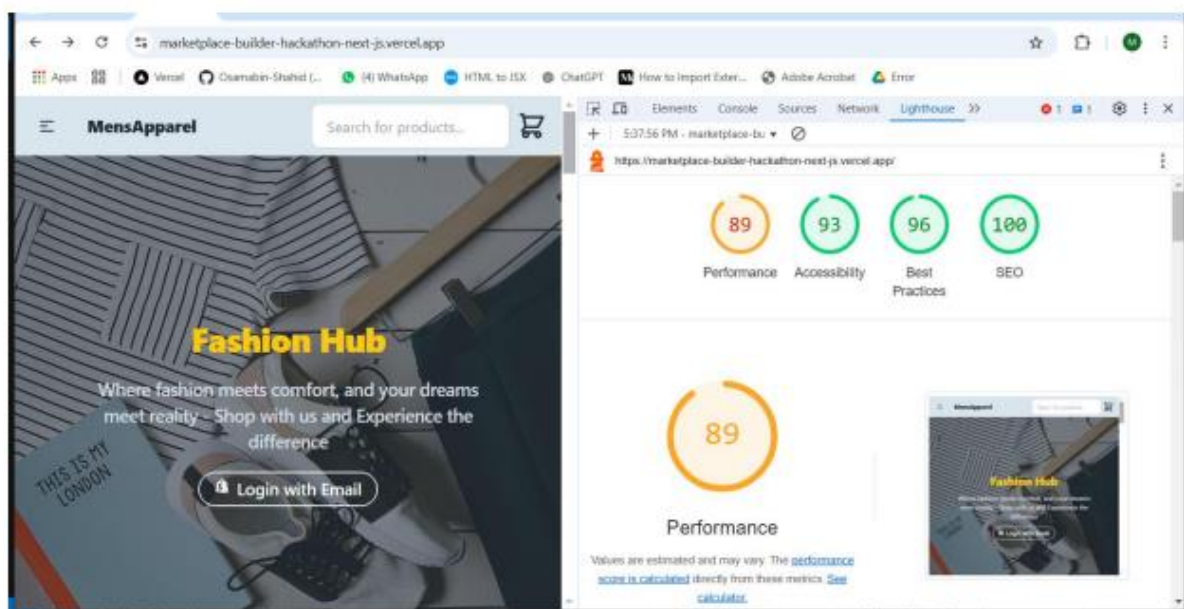
• CSV Content Test Case ID ,Description ,Steps,Expected Result,Actual Result,Status,Remarks, TC001,Validate product listing,Open product Page > verify product,Product Displayed,Product Displayed,Passed ,No issue found, TC002,"Test API error handling","Disconnect API > Refresh page","Show fallback message","Fallback message shown",Passed ,Handled gracefully, TC003,Check Cart functionality, Add item to cart > verify cart,Cart update correctly,Cart update correctly,Passed ,Handled gracefully, TC004,Test responsive layout,Resize window layout > browser check,Layout adjust properly,Layout adjust properly,Passed ,All device responsive, TC005,Price Display,Open porduct page ,Price visibility,Correct price visible,Passed

,Successfully displayed, TC006,Checkout page,Proceed to checkout,Checkout page display with selected product,Checkout page display with selected product,Passed ,Successfully displayed.

5. Documentation: Created a README.md summarizing the project structure and deployment steps.

Conclusion : The deployment of the Men's Apparel Marketplace project was successfully completed with Vercel, ensuring a secure and fully functional staging environment. All sensitive data was properly handled with environment variables, and thorough testing—including functionality, performance, and responsiveness—confirmed that all key features work seamlessly. The project is now fully documented, with a professional README.md file outlining the setup and deployment process, making it ready for future updates and live production deployment.