HACKATHON 3

Day 6 - Deployment Preparation and Staging Environment Setup

Objective:

- *Preparing your marketplace for deployment by setting up;*
- *a staging environment,*
- *Configuring hosting platforms, and,*
- *Ensuring readiness for a customer facing application.*

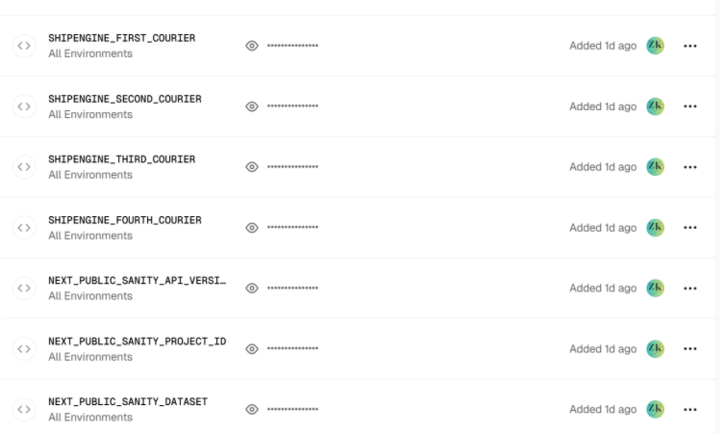
Steps for Implementation:

Step 1: Hosting Platform Setup

Deployment Process

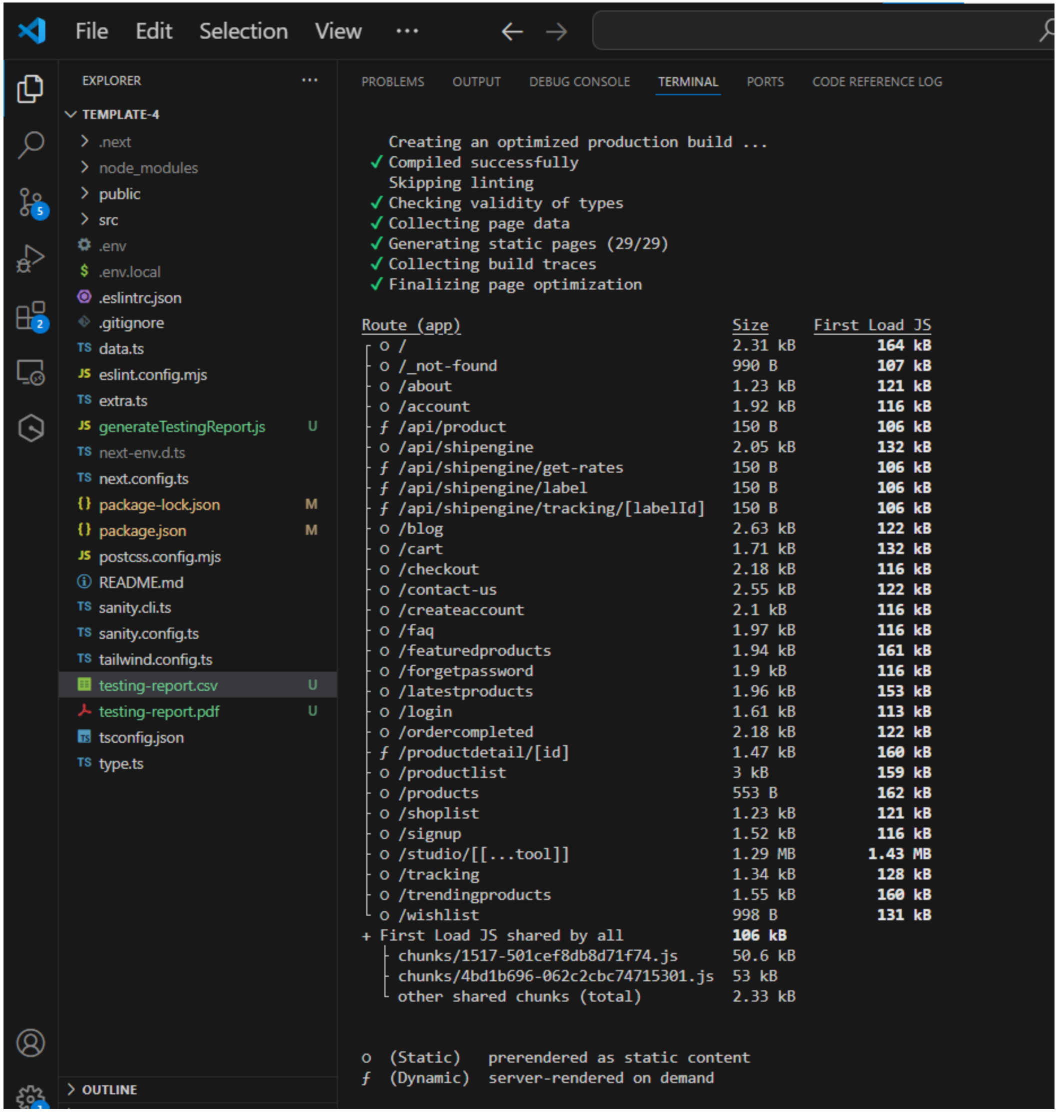
Platform:
The project is deployed using Vercel, a platform optimized for Next.js applications, offering seamless integration and fast deployments.

Steps Followed:

1. *Repository Connection:*
   - *Linked the GitHub repository to Vercel for automatic deployment.*
   - Hekto
2. *Configuration:*
   - *Verified the framework preset as* Next.js.
   - *Configured the build command (*npm run build*) and ensured the output directory is* .next.
3. *Environment Variables:*
   - *Added all necessary environment variables through the Vercel dashboard to ensure secure data handling.*
   - 

SHIPENGINE_FIRST_COURIER All Environments	•••••••••••••••	Added 1d ago	ZK
SHIPENGINE_SECOND_COURIER All Environments	•••••••••••••••	Added 1d ago	ZK
SHIPENGINE_THIRD_COURIER All Environments	•••••••••••••••	Added 1d ago	ZK
SHIPENGINE_FOURTH_COURIER All Environments	•••••••••••••••	Added 1d ago	ZK
NEXT_PUBLIC_SANITY_API_VERSI… All Environments	•••••••••••••••	Added 1d ago	ZK
NEXT_PUBLIC_SANITY_PROJECT_ID All Environments	•••••••••••••••	Added 1d ago	ZK
NEXT_PUBLIC_SANITY_DATASET All Environments	•••••••••••••••	Added 1d ago	ZK

4. *Deployment:*
    - *Completed the deployment process, resulting in a live URL provided by Vercel.*



```
   Creating an optimized production build ...
 ✓ Compiled successfully
   Skipping linting
 ✓ Checking validity of types
 ✓ Collecting page data
 ✓ Generating static pages (29/29)
 ✓ Collecting build traces
 ✓ Finalizing page optimization

Route (app)                              Size     First Load JS
┌ ○ /                                    2.31 kB         164 kB
├ ○ /_not-found                          990 B           107 kB
├ ○ /about                               1.23 kB         121 kB
├ ○ /account                             1.92 kB         116 kB
├ ƒ /api/product                         150 B           106 kB
├ ○ /api/shipengine                      2.05 kB         132 kB
├ ƒ /api/shipengine/get-rates            150 B           106 kB
├ ƒ /api/shipengine/label                150 B           106 kB
├ ƒ /api/shipengine/tracking/[labelId]   150 B           106 kB
├ ○ /blog                                2.63 kB         122 kB
├ ○ /cart                                1.71 kB         132 kB
├ ○ /checkout                            2.18 kB         116 kB
├ ○ /contact-us                          2.55 kB         122 kB
├ ○ /createaccount                       2.1 kB          116 kB
├ ○ /faq                                 1.97 kB         116 kB
├ ○ /featuredproducts                    1.94 kB         161 kB
├ ○ /forgetpassword                      1.9 kB          116 kB
├ ○ /latestproducts                      1.96 kB         153 kB
├ ○ /login                               1.61 kB         113 kB
├ ○ /ordercompleted                      2.18 kB         122 kB
├ ƒ /productdetail/[id]                  1.47 kB         160 kB
├ ○ /productlist                         3 kB            159 kB
├ ○ /products                            553 B           162 kB
├ ○ /shoplist                            1.23 kB         121 kB
├ ○ /signup                              1.52 kB         116 kB
├ ○ /studio/[[...tool]]                  1.29 MB        1.43 MB
├ ○ /tracking                            1.34 kB         128 kB
├ ○ /trendingproducts                    1.55 kB         160 kB
└ ○ /wishlist                            998 B           131 kB
+ First Load JS shared by all            106 kB
  ├ chunks/1517-501cef8db8d71f74.js      50.6 kB
  ├ chunks/4bd1b696-062c2cbc74715301.js  53 kB
  └ other shared chunks (total)          2.33 kB


○  (Static)   prerendered as static content
ƒ  (Dynamic)  server-rendered on demand
```

Result:
The project is now live and fully functional, with continuous deployment enabled for every new commit.

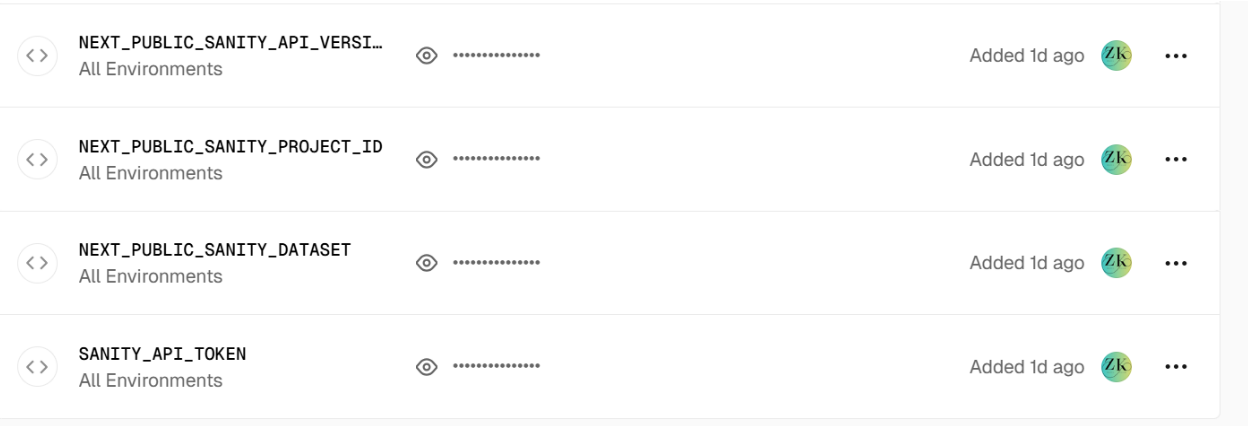
Step 2: Configure Environment Variables

1. *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:*



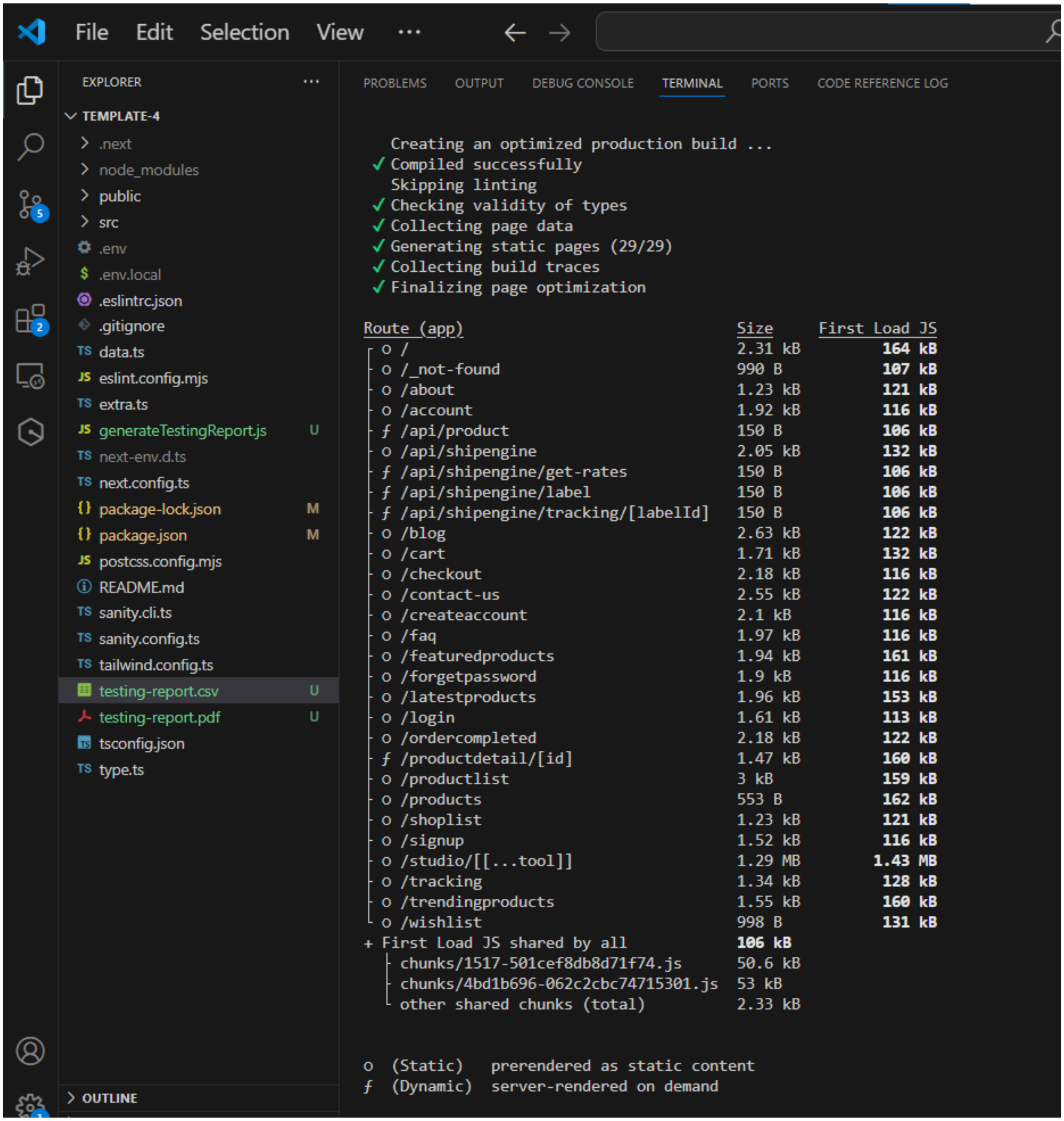
NEXT_PUBLIC_SANITY_API_VERSI…
All Environments
•••••••••••••••
Added 1d ago

NEXT_PUBLIC_SANITY_PROJECT_ID
All Environments
•••••••••••••••
Added 1d ago

NEXT_PUBLIC_SANITY_DATASET
All Environments
•••••••••••••••
Added 1d ago

SANITY_API_TOKEN
All Environments
•••••••••••••••
Added 1d ago

Step 3: Deploy to Staging



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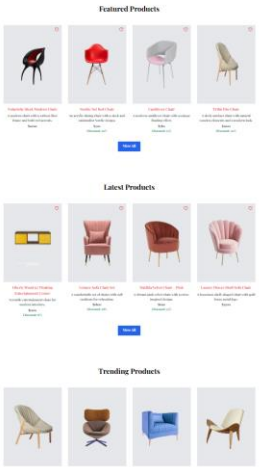
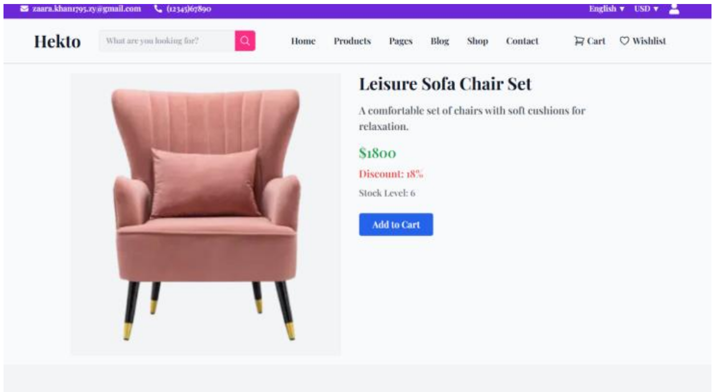
```

Step 4: Staging Environment Testing

1. ***Testing Types:***

   - *Functional Testing: Verify all features, such as product listing, search, and cart operations.*





Leisure Sofa Chair Set

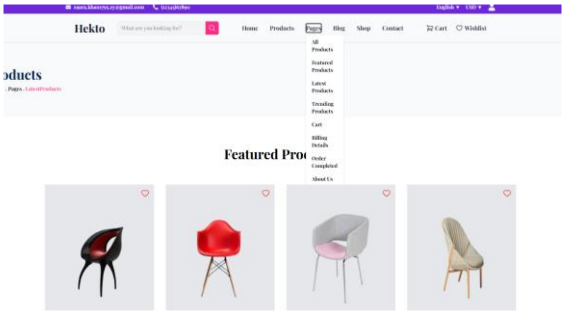
A comfortable set of chairs with soft cushions for relaxation.

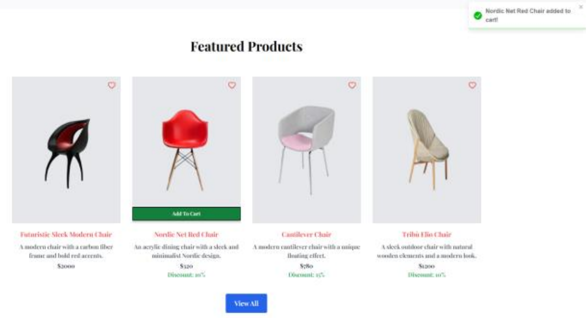
$1800

Discount: 18%

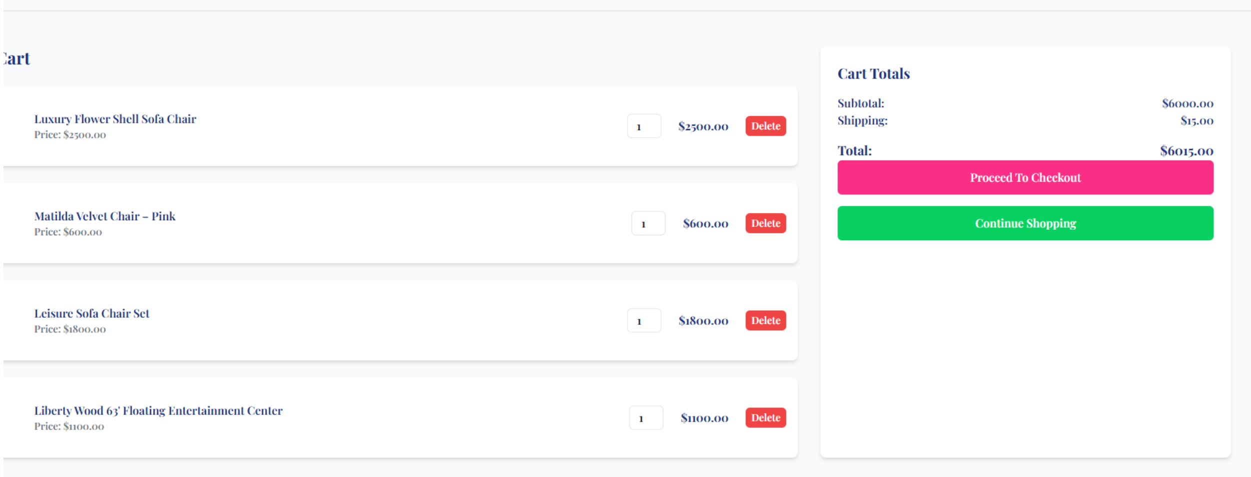
Stock Level: 6

Add to Cart





Futuristic Sleek Modern Chair	Nordic Net Red Chair	Cantilever Chair	Tribù Elio Chair
A modern chair with a carbon fiber frame and bold red accents.	An acrylic dining chair with a sleek and minimalist Nordic design.	A modern cantilever chair with a unique floating effect.	A sleek outdoor chair with natural wooden elements and a modern look.
$2000	$120	$780	$1200
	Discount: 10%	Discount: 15%	Discount: 10%



Cart

Luxury Flower Shell Sofa Chair Price: $2500.00	1	$2500.00	Delete
Matilda Velvet Chair - Pink Price: $600.00	1	$600.00	Delete
Leisure Sofa Chair Set Price: $1800.00	1	$1800.00	Delete
Liberty Wood 63' Floating Entertainment Center Price: $1100.00	1	$1100.00	Delete

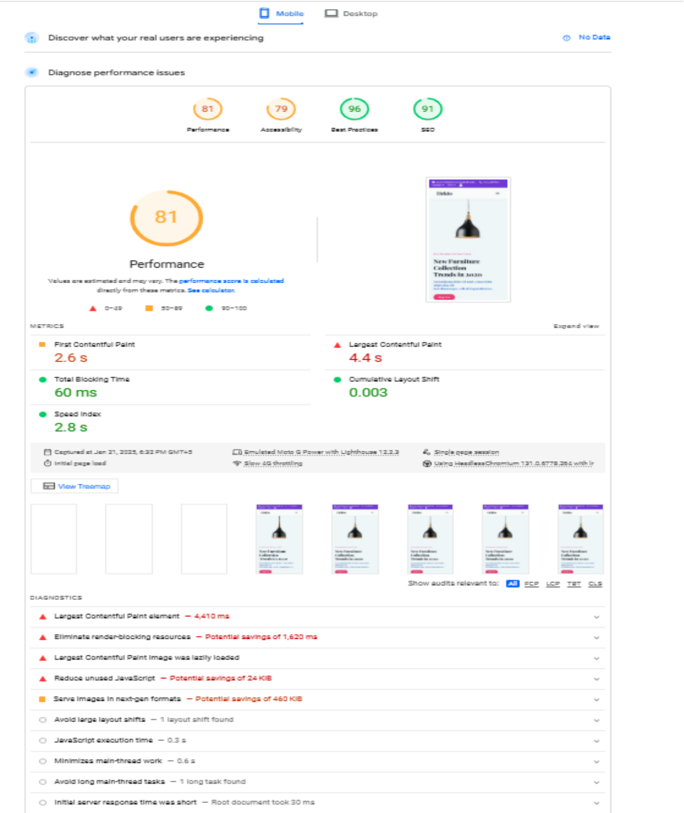
Cart Totals

Subtotal:	$6000.00
Shipping:	$15.00
Total:	$6015.00

Proceed To Checkout

Continue Shopping

- *Performance Testing: Use Lighthouse or GTmetrix to analyze speed and responsiveness.*



Discover what your real users are experiencing — No Data

Diagnose performance issues

81	79	96	91
Performance	Accessibility	Best Practices	SEO

81

Performance

Values are estimated and may vary. The performance score is calculated directly from these metrics. See calculator.

▲ 0–49 ■ 50–89 ● 90–100

METRICS — Expand view

■ First Contentful Paint 2.6 s

▲ Largest Contentful Paint 4.4 s

● Total Blocking Time 60 ms

● Cumulative Layout Shift 0.003

● Speed Index 2.8 s

Captured at Jan 21, 2025, 6:32 PM GMT+5 — Emulated Moto G Power with Lighthouse 12.2.3 — Single page session

Initial page load — Slow 4G throttling — Using HeadlessChromium 131.0.6778.264 with lr

Show audits relevant to: All FCP LCP TBT CLS

DIAGNOSTICS

▲ Largest Contentful Paint element — 4,410 ms

▲ Eliminate render-blocking resources — Potential savings of 1,620 ms

▲ Largest Contentful Paint image was lazily loaded

▲ Reduce unused JavaScript — Potential savings of 24 KiB

■ Serve images in next-gen formats — Potential savings of 460 KiB

○ Avoid large layout shifts — 1 layout shift found

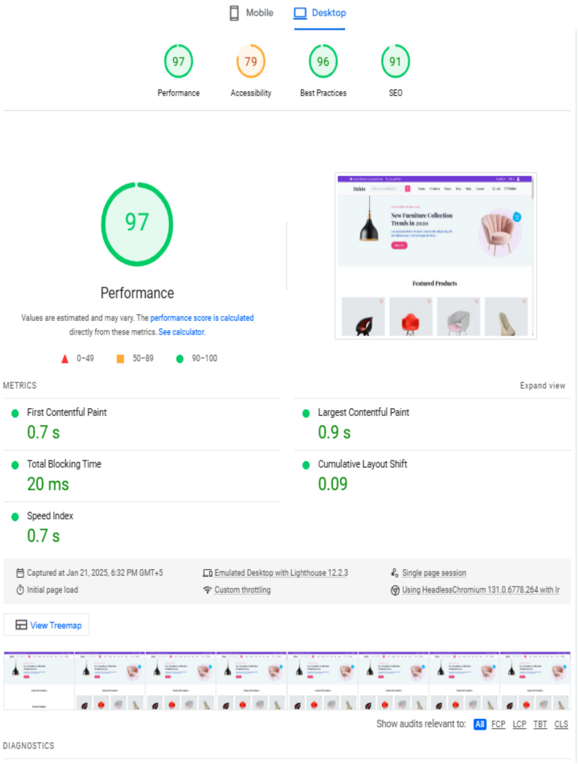
○ JavaScript execution time — 0.3 s

○ Minimizes main-thread work — 0.6 s

○ Avoid long main-thread tasks — 1 long task found

○ Initial server response time was short — Root document took 30 ms

o



97	79	96	91
Performance	Accessibility	Best Practices	SEO

97

Performance

Values are estimated and may vary. The performance score is calculated directly from these metrics. See calculator.

▲ 0–49 ■ 50–89 ● 90–100

METRICS — Expand view

● First Contentful Paint 0.7 s

● Largest Contentful Paint 0.9 s

● Total Blocking Time 20 ms

● Cumulative Layout Shift 0.09

● Speed Index 0.7 s

Captured at Jan 21, 2025, 6:32 PM GMT+5 — Emulated Desktop with Lighthouse 12.2.3 — Single page session

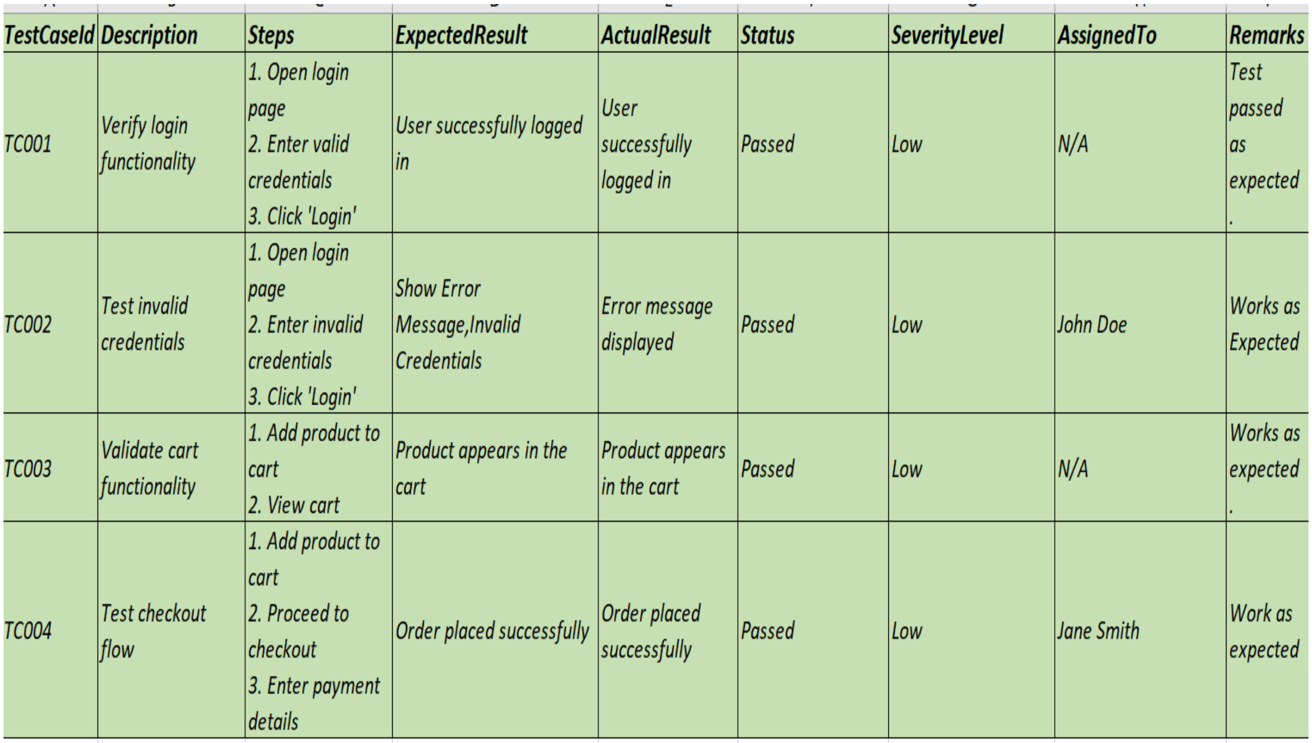
Initial page load — Custom throttling — Using HeadlessChromium 131.0.6778.264 with lr

Show audits relevant to: All FCP LCP TBT CLS

DIAGNOSTICS

3.Test Case Reporting:

- *Document all test cases in a CSV file with fields like Test Case ID, Description, Steps, Expected Result, Actual Result, Status, and Remarks.*
  For example:



TestCaseId	Description	Steps	ExpectedResult	ActualResult	Status	SeverityLevel	AssignedTo	Remarks
TC001	Verify login functionality	1. Open login page 2. Enter valid credentials 3. Click 'Login'	User successfully logged in	User successfully logged in	Passed	Low	N/A	Test passed as expected.
TC002	Test invalid credentials	1. Open login page 2. Enter invalid credentials 3. Click 'Login'	Show Error Message,Invalid Credentials	Error message displayed	Passed	Low	John Doe	Works as Expected
TC003	Validate cart functionality	1. Add product to cart 2. View cart	Product appears in the cart	Product appears in the cart	Passed	Low	N/A	Works as expected.
TC004	Test checkout flow	1. Add product to cart 2. Proceed to checkout 3. Enter payment details	Order placed successfully	Order placed successfully	Passed	Low	Jane Smith	Work as expected

Checklist for Day 6:

Deployment Preparation: ✓

Staging Environment Testing: ✓

Documentation: ✓

Form Submission: ✓

Final Review: ✓