HACKATHON 3
DAY 5

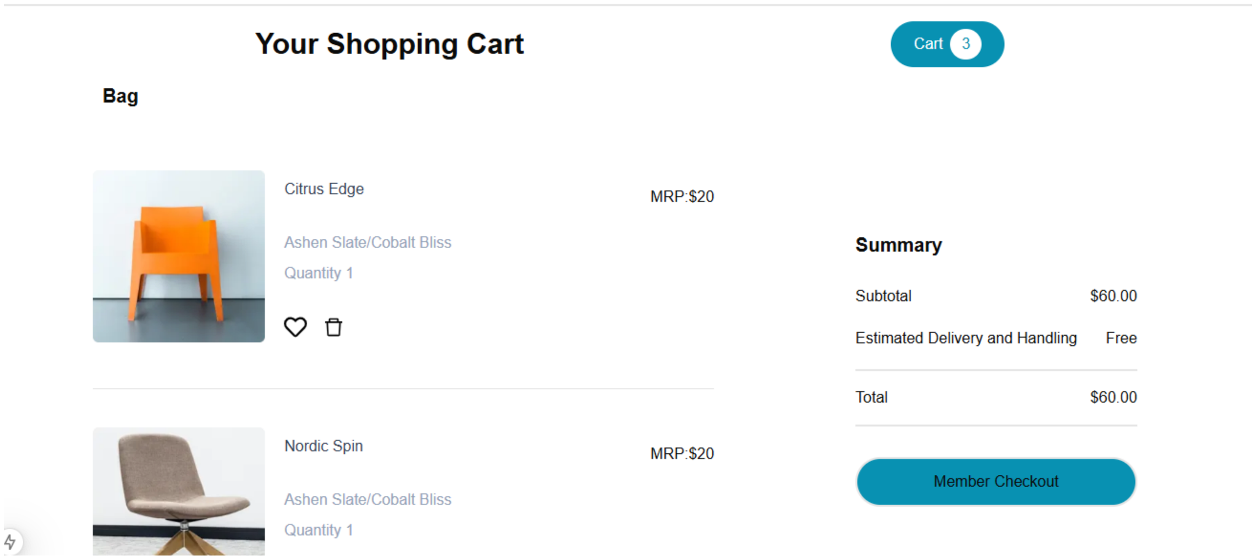
TESTING, ERROR HANDLING, AND BACKEND

Functional Testing:

- Test core functionalities like product listing, detail pages, cart operations, and user profile management.

Cart Operation:

- Item added successfully! Proceed to checkout when you're ready



Your Shopping Cart

Cart 3

Bag

Citrus Edge
MRP:$20
Ashen Slate/Cobalt Bliss
Quantity 1

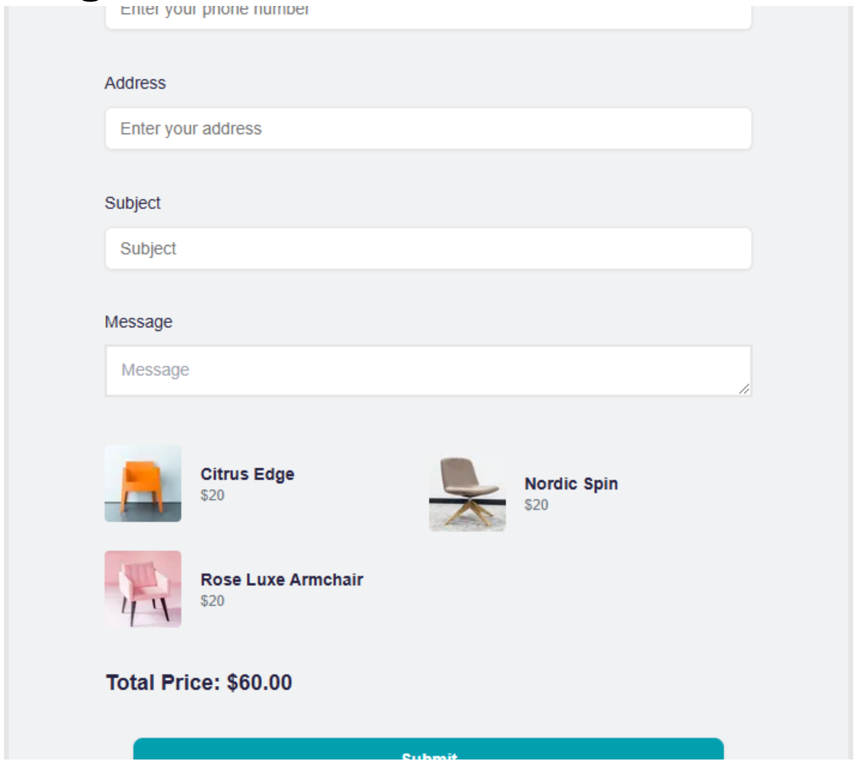
Nordic Spin
MRP:$20
Ashen Slate/Cobalt Bliss
Quantity 1

Summary

Subtotal	$60.00
Estimated Delivery and Handling	Free
Total	$60.00

Member Checkout

Checkout Page:



Enter your phone number

Address
Enter your address

Subject
Subject

Message
Message

Citrus Edge
$20

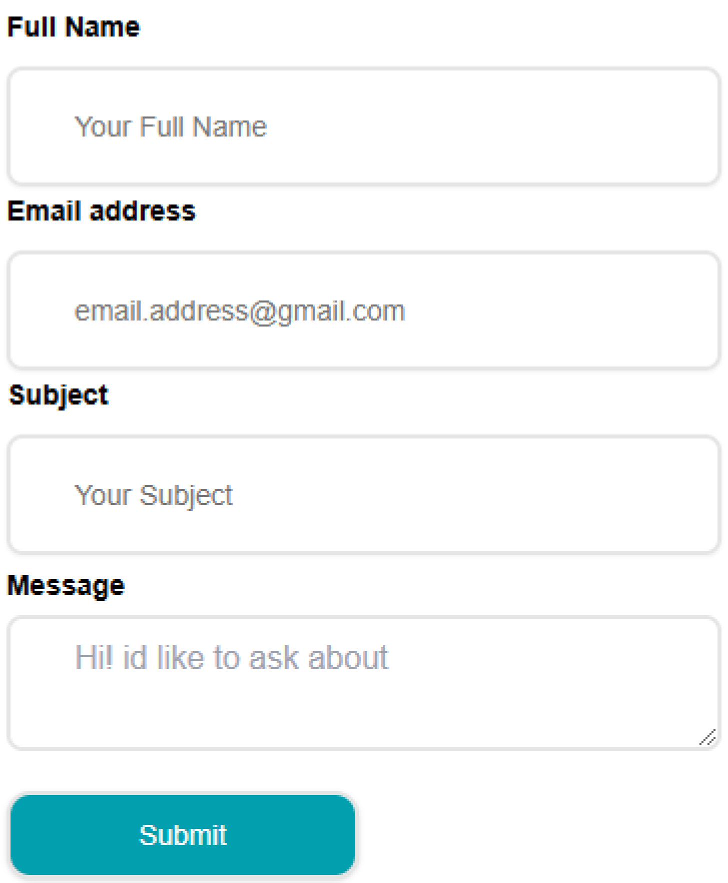
Nordic Spin
$20

Rose Luxe Armchair
$20

Total Price: $60.00

Submit

Work Contact Form:



Full Name

Your Full Name

Email address

email.address@gmail.com

Subject

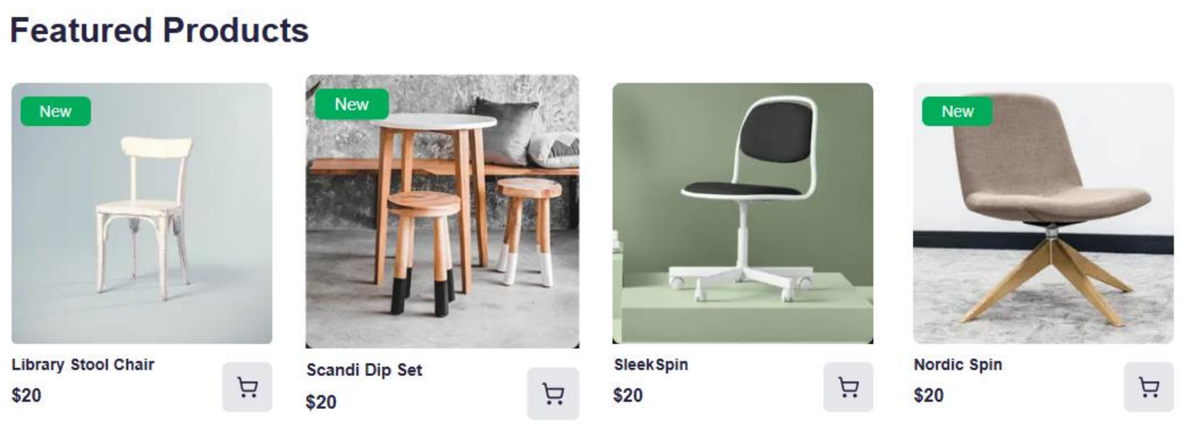
Your Subject

Message

Hi! id like to ask about

Submit

Product Listing:



Featured Products

New

Library Stool Chair

$20

New

Scandi Dip Set

$20

SleekSpin

$20

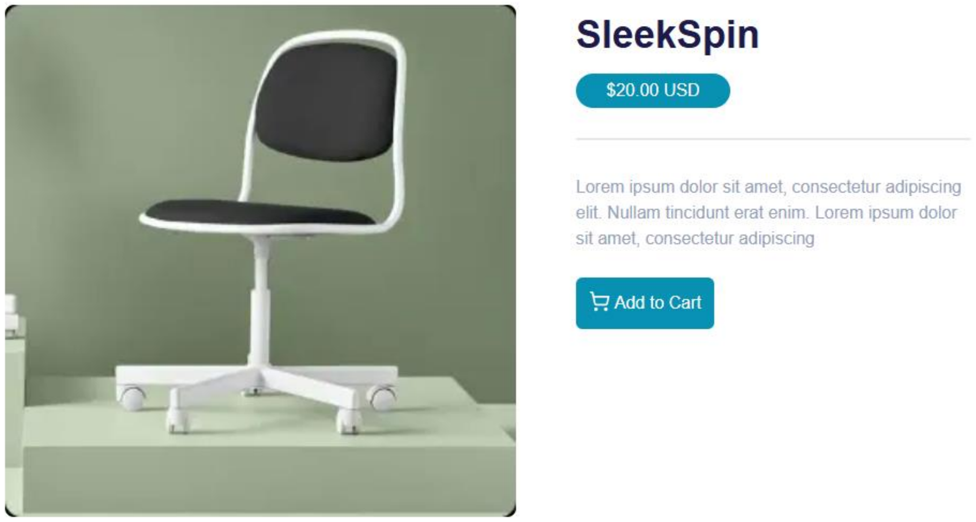
New

Nordic Spin

$20

Detail Pages:

- Detail Pages with dynamic Routing and add to card functionality.



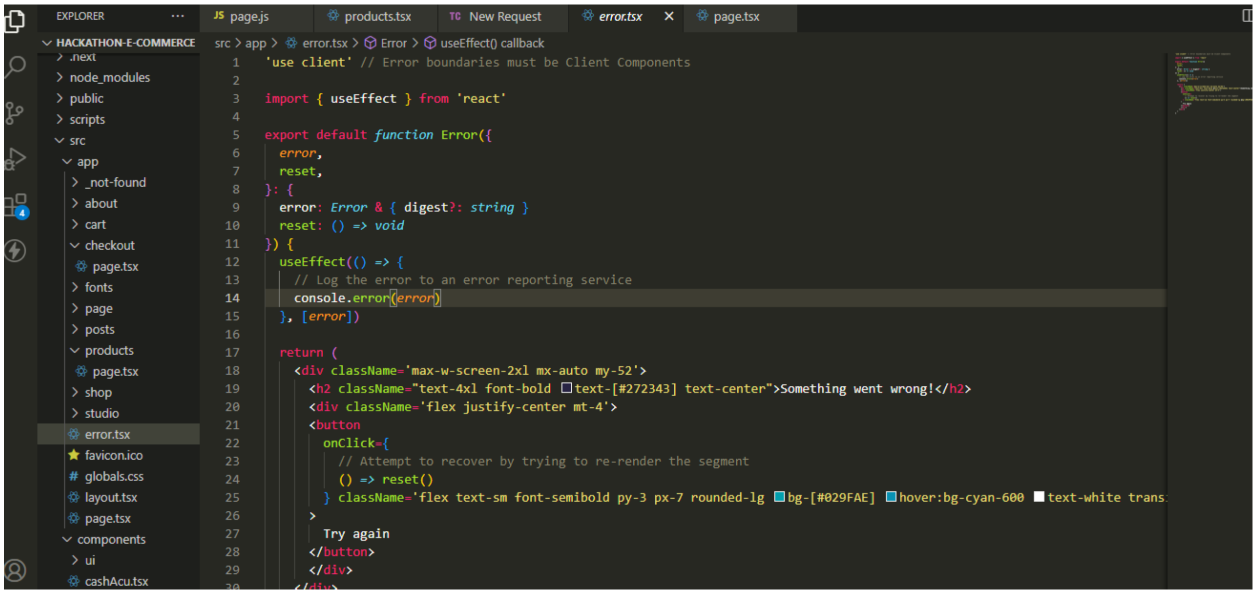
SleekSpin

$20.00 USD

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nullam tincidunt erat enim. Lorem ipsum dolor sit amet, consectetur adipiscing

Error Handling:

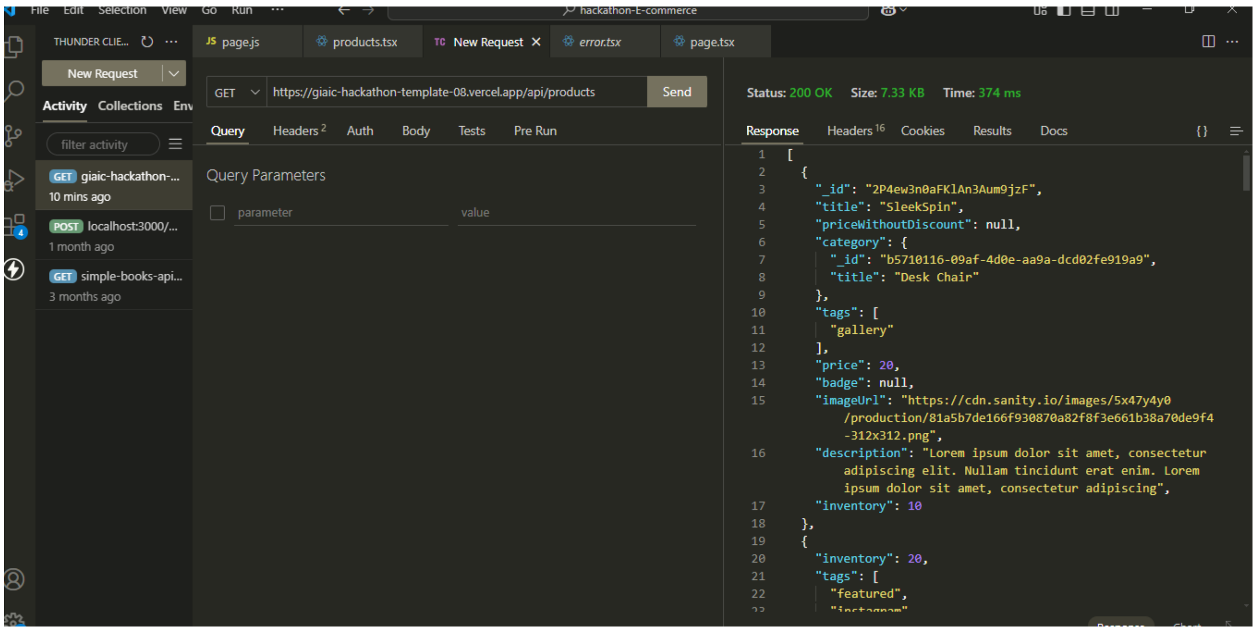
- Implement proper error messages for:
- Display fallback UI elements (e.g., "`Something went wrong!`" when the API returns no data).



```tsx
'use client' // Error boundaries must be Client Components

import { useEffect } from 'react'

export default function Error({
  error,
  reset,
}: {
  error: Error & { digest?: string }
  reset: () => void
}) {
  useEffect(() => {
    // Log the error to an error reporting service
    console.error(error)
  }, [error])

  return (
    <div className='max-w-screen-2xl mx-auto my-52'>
      <h2 className="text-4xl font-bold text-[#272343] text-center">Something went wrong!</h2>
      <div className='flex justify-center mt-4'>
      <button
        onClick={
          // Attempt to recover by trying to re-render the segment
          () => reset()
        } className='flex text-sm font-semibold py-3 px-7 rounded-lg bg-[#029FAE] hover:bg-cyan-600 text-white trans
      >
        Try again
      </button>
      </div>
```

Performance Testing:

- **APIs Get Successfully working**



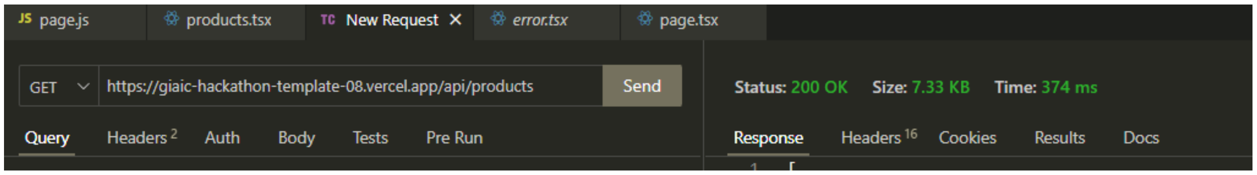
GET giaic-hackathon-... 10 mins ago
POST localhost:3000/... 1 month ago
GET simple-books-api... 3 months ago

GET https://giaic-hackathon-template-08.vercel.app/api/products Send

Status: 200 OK Size: 7.33 KB Time: 374 ms

```
[
  {
    "_id": "2P4ew3n0aFKlAn3Aum9jzF",
    "title": "SleekSpin",
    "priceWithoutDiscount": null,
    "category": {
      "_id": "b5710116-09af-4d0e-aa9a-dcd02fe919a9",
      "title": "Desk Chair"
    },
    "tags": [
      "gallery"
    ],
    "price": 20,
    "badge": null,
    "imageUrl": "https://cdn.sanity.io/images/5x47y4y0
        /production/81a5b7de166f930870a82f8f3e661b38a70de9f4
        -312x312.png",
    "description": "Lorem ipsum dolor sit amet, consectetur
        adipiscing elit. Nullam tincidunt erat enim. Lorem
        ipsum dolor sit amet, consectetur adipiscing",
    "inventory": 10
  },
  {
    "inventory": 20,
    "tags": [
      "featured",
```

200 Ok


page.js
products.tsx
New Request
error.tsx
page.tsx
Query Headers 2 Auth Body Tests Pre Run
Response Headers 16 Cookies Results Docs

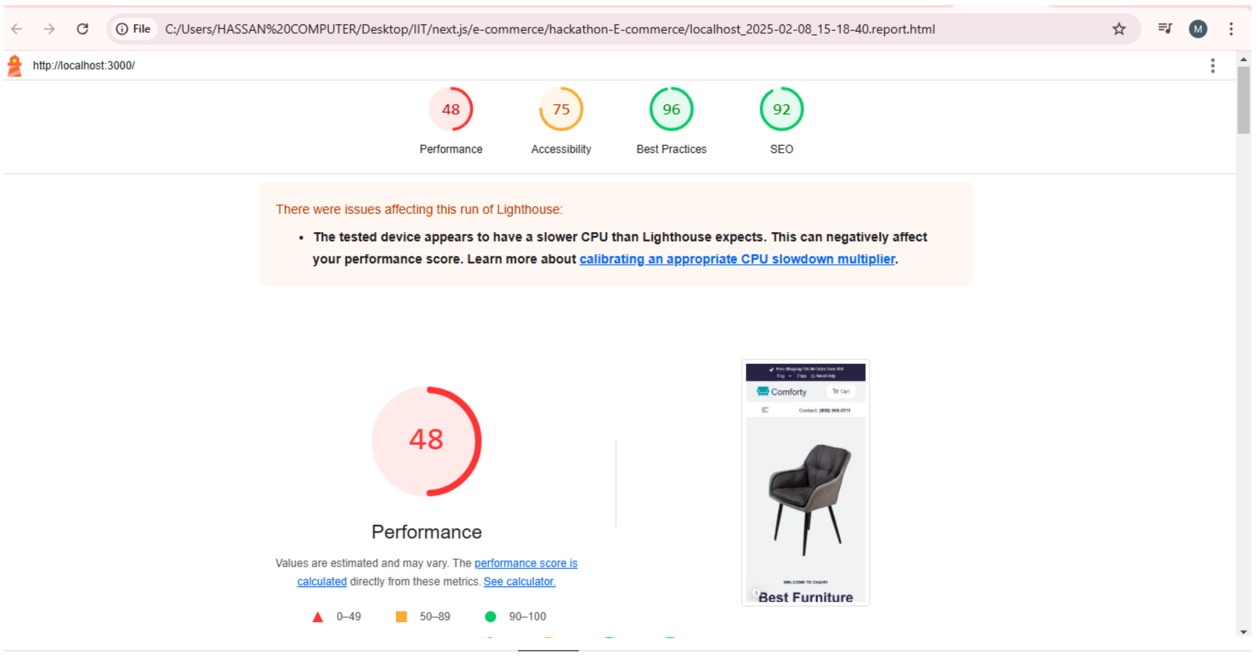
GET https://giaic-hackathon-template-08.vercel.app/api/products Send

Status: 200 OK Size: 7.33 KB Time: 374 ms

Test Case ID	**Test Case Description**	**Test Steps**	**Expected Result**	**Actual Result**	**Status**	**Severity Level**	**Assigned To**	**Remarks**	
2	TC001	Validate product listing page	Open product page > Verify products	Products displayed correctly	Products displayed correctly	Passed	Low	-	No issues found
3	TC002	Test API error handling	Disconnect API > Refresh page	Show fallback UI with error message	Error message shown	Passed	Medium	-	Handled gracefully
4	TC003	Check cart functionality	Add product to cart > Verify cart contents	Cart updates with added product	Cart updates as expected	Passed	High	-	Works as expected
5	TC004	Ensure responsiveness on mobile	Resize browser window > Check layout	Layout adjusts properly to screen size	Responsive layout working as intended	Passed	Medium	-	Test successful

Performance Optimization:

```
npm install –g lighthouse
lighthouse http://localhost:3000 –view
```


C:/Users/HASSAN%20COMPUTER/Desktop/IIT/next.js/e-commerce/hackathon-E-commerce/localhost_2025-02-08_15-18-40.report.html
http://localhost:3000/
48
Performance
75
Accessibility
96
Best Practices
92
SEO

There were issues affecting this run of Lighthouse:

- The tested device appears to have a slower CPU than Lighthouse expects. This can negatively affect your performance score. Learn more about calibrating an appropriate CPU slowdown multiplier.

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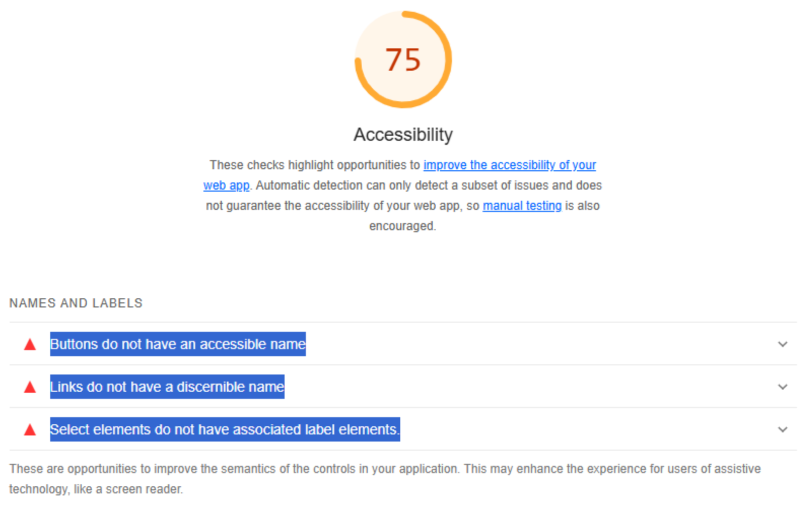
Performance

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

▲ 0–49 ■ 50–89 ● 90–100



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Accessibility

These checks highlight opportunities to improve the accessibility of your web app. Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so manual testing is also encouraged.

NAMES AND LABELS

- ▲ Buttons do not have an accessible name
- ▲ Links do not have a discernible name
- ▲ Select elements do not have associated label elements.

These are opportunities to improve the semantics of the controls in your application. This may enhance the experience for users of assistive technology, like a screen reader.

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Best Practices

USER EXPERIENCE

▲ Displays images with incorrect aspect ratio

TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks

○ Use a strong HSTS policy

○ Ensure proper origin isolation with COOP

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SEO

These checks ensure that your page is following basic search engine optimization advice. There are many additional factors Lighthouse does not score here that may affect your search ranking, including performance on Core Web Vitals. Learn more about Google Search Essentials.

CRAWLING AND INDEXING

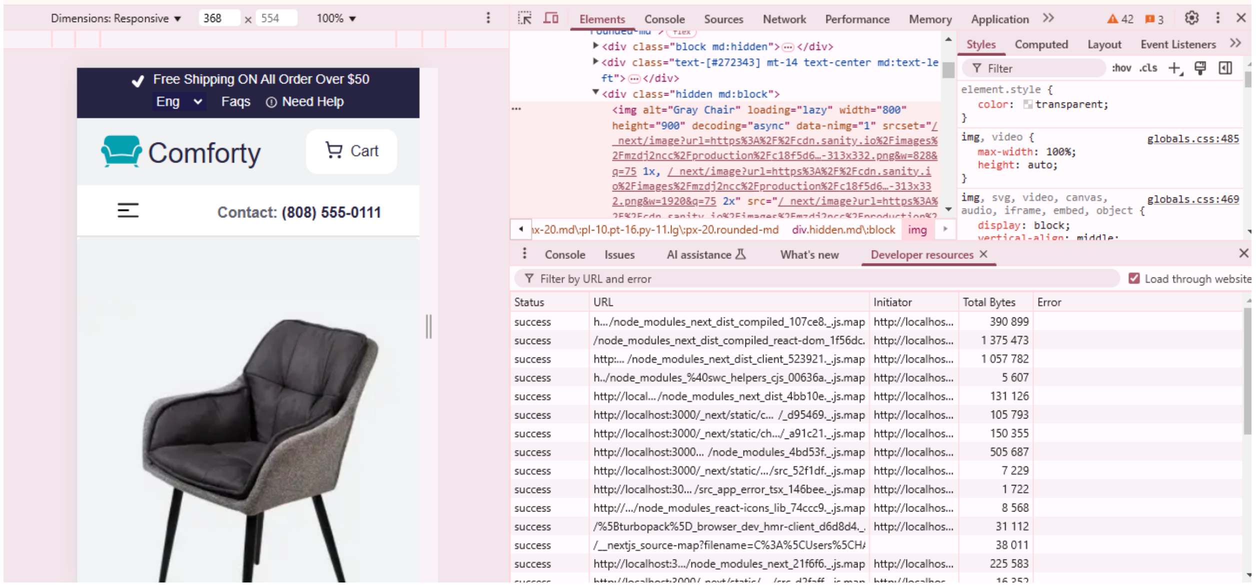
▲ robots.txt is not valid Lighthouse was unable to download a robots.txt file

To appear in search results, crawlers need access to your app.

ADDITIONAL ITEMS TO MANUALLY CHECK (1) Show

Run these additional validators on your site to check additional SEO best practices.

Developer Resources:



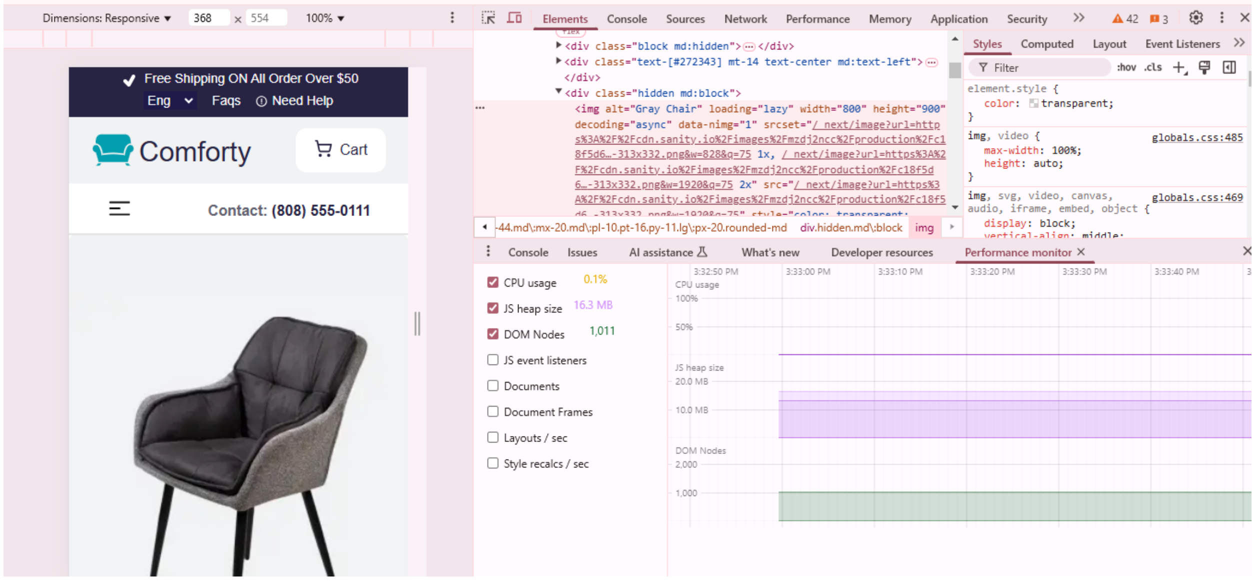
```
<div class="block md:hidden">⋯</div>
<div class="text-[#272343] mt-14 text-center md:text-left">⋯</div>
<div class="hidden md:block">
  <img alt="Gray Chair" loading="lazy" width="800"
  height="900" decoding="async" data-nimg="1" srcset="/_next/image?url=https%3A%2F%2Fcdn.sanity.io%2Fimages%2Fmzdj2ncc%2Fproduction%2Fc18f5d6…-313x332.png&w=828&q=75 1x, /_next/image?url=https%3A%2F%2Fcdn.sanity.io%2Fimages%2Fmzdj2ncc%2Fproduction%2Fc18f5d6…-313x332.png&w=1920&q=75 2x" src="/_next/image?url=https%3A%
```

```
element.style {
  color: transparent;
}
img, video {                              globals.css:485
  max-width: 100%;
  height: auto;
}
img, svg, video, canvas,                  globals.css:469
audio, iframe, embed, object {
  display: block;
  vertical-align: middle;
```

x-20.md\:pl-10.pt-16.py-11.lg\:px-20.rounded-md   div.hidden.md\:block   img

Status	URL	Initiator	Total Bytes	Error
success	h.../node_modules_next_dist_compiled_107ce8._.js.map	http://localhos...	390 899	
success	/node_modules_next_dist_compiled_react-dom_1f56dc.	http://localhos...	1 375 473	
success	http:... /node_modules_next_dist_client_523921._.js.map	http://localhos...	1 057 782	
success	h../node_modules_%40swc_helpers_cjs_00636a._.js.map	http://localhos...	5 607	
success	http://local.../node_modules_next_dist_4bb10e._.js.map	http://localhos...	131 126	
success	http://localhost:3000/_next/static/c... /_d95469._.js.map	http://localhos...	105 793	
success	http://localhost:3000/_next/static/ch.../_a91c21._.js.map	http://localhos...	150 355	
success	http://localhost:3000... /node_modules_4bd53f._.js.map	http://localhos...	505 687	
success	http://localhost:3000/_next/static/.../src_52f1df._.js.map	http://localhos...	7 229	
success	http://localhost:30... /src_app_error_tsx_146bee._.js.map	http://localhos...	1 722	
success	http://.../node_modules_react-icons_lib_74ccc9._.js.map	http://localhos...	8 568	
success	/%5Bturbopack%5D_browser_dev_hmr-client_d6d8d4._	http://localhos...	31 112	
success	/__nextjs_source-map?filename=C%3A%5CUsers%5CH/		38 011	
success	http://localhost:3.../node_modules_next_21f6f6._.js.map	http://localhos...	225 583	
success	http://localhost:3000/_next/static/.../src_d2faff._.js.map	http://localhos...	16 352	

Performance monitor:


Dimensions: Responsive ▾ 368 × 554 100% ▾
Elements Console Sources Network Performance Memory Application Security ≫ 42 3
Free Shipping ON All Order Over $50
Eng Faqs Need Help
Comforty
Cart
Contact: (808) 555-0111
Styles Computed Layout Event Listeners ≫
Filter :hov .cls
Console Issues AI assistance What's new Developer resources Performance monitor

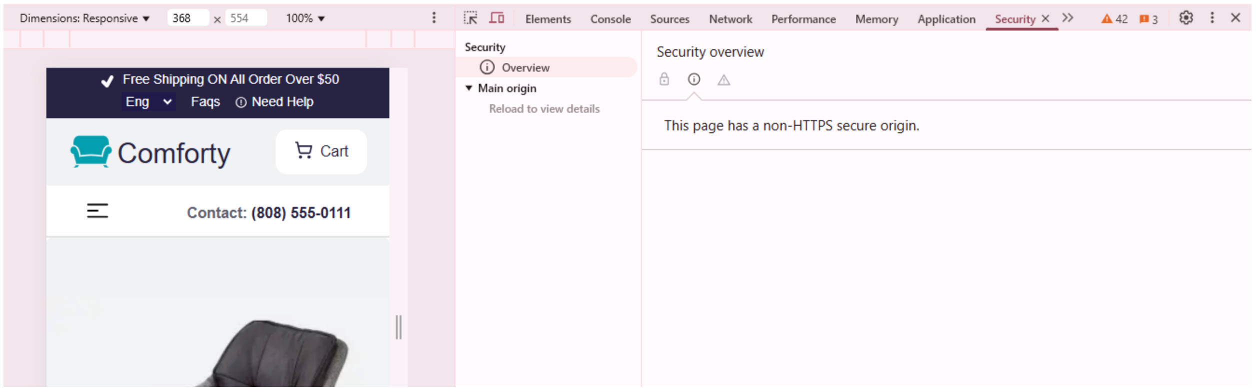
```
▶<div class="block md:hidden">⋯</div>
▶<div class="text-[#272343] mt-14 text-center md:text-left">⋯
</div>
▼<div class="hidden md:block">
  <img alt="Gray Chair" loading="lazy" width="800" height="900"
  decoding="async" data-nimg="1" srcset="/_next/image?url=http
  s%3A%2F%2Fcdn.sanity.io%2Fimages%2Fmzdj2ncc%2Fproduction%2Fc1
  8f5d6…-313x332.png&w=828&q=75 1x, /_next/image?url=https%3A%2
  F%2Fcdn.sanity.io%2Fimages%2Fmzdj2ncc%2Fproduction%2Fc18f5d
  6…-313x332.png&w=1920&q=75 2x" src="/_next/image?url=https%3
  A%2F%2Fcdn.sanity.io%2Fimages%2Fmzdj2ncc%2Fproduction%2Fc18f5
```

```
-44.md\:mx-20.md\:pl-10.pt-16.py-11.lg\:px-20.rounded-md   div.hidden.md\:block   img
```

```
element.style {
  color: transparent;
}
img, video {                                   globals.css:485
  max-width: 100%;
  height: auto;
}
img, svg, video, canvas,                       globals.css:469
audio, iframe, embed, object {
  display: block;
```

✓ CPU usage	0.1%
✓ JS heap size	16.3 MB
✓ DOM Nodes	1,011
☐ JS event listeners	
☐ Documents	
☐ Document Frames	
☐ Layouts / sec	
☐ Style recalcs / sec	

Security Overview:


Dimensions: Responsive ▾ 368 × 554 100% ▾
Elements Console Sources Network Performance Memory Application Security ≫ 42 3
Free Shipping ON All Order Over $50
Eng Faqs Need Help
Comforty
Cart
Contact: (808) 555-0111
Security
Overview
Main origin
Reload to view details
Security overview

This page has a non-HTTPS secure origin.