Day-5

TESTING, ERROR HANDLING, AND BACKEND INTEGRATION REFINEMENT

STEP 1: FUNCTIONAL TESTING
STEP 2: ERROR HANDLING
STEP 3: POSTMAN API

https://template6.six .vercel.api/products

	Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status	Severity Level	Assigned To	Remarks
1	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
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Test Case ID	Description	Expected Result	Actual Result	Status	Severity	Remarks
TC001	Test navigation links	All links navigate correctly	All links function as intended	Pass	Low	None
TC002	Verify product listing display	Products display correctly	Products display correctly	Pass	Medium	None
TC003	Test shopping cart functionality	Items add/remove/update correctly	Cart functions as expected	Pass	High	None
TC004	Check blog post accessibility	Blog posts are accessible	Blog posts accessible	Pass	Low	None
TC005	Test contact form submission	Form submits successfully	Form submits successfully	Pass	Medium	None
TC006	Analyze performance metrics	Performance score ≥ 90	Score: 83	Fail	High	Optimization needed
TC007	Check accessibility features	Accessibility score ≥ 90	Score: 100	Pass	Medium	Ensure ongoing compliance
TC008	Evaluate SEO metrics	SEO score ≥ 90	Score: 79	Fail	Medium	Implement recommended SEO practices

API TESTING:


```
GET    https://template6-six.vercel.app/api/products    Send

Query   Headers 2   Auth   Body   Tests   Pre Run

Query Parameters

   parameter                    value
```

```
Status: 200 OK    Size: 45.98 KB    Time: 1.04 s

Response   Headers 16   Cookies   Results   Docs    {}

1   [
2       {
3           "imageUrl": "https://cdn.sanity.io/images
                /7xt4qcah/production
                /2219cafc285ec13a2ed3f88aa36cbea852a11735
                -305x375.png",
4           "price": 210,
5           "tags": [
6               "rustic ",
7               "vase ",
8               "home decor",
9               "vintage ",
10              "interior design"
11          ],
12          "dicountPercentage": 10,
13          "description": "Bring the charm of nature into
```

PERFORMMANCE:

http://localhost:3000/

33 Performance   94 Accessibility   100 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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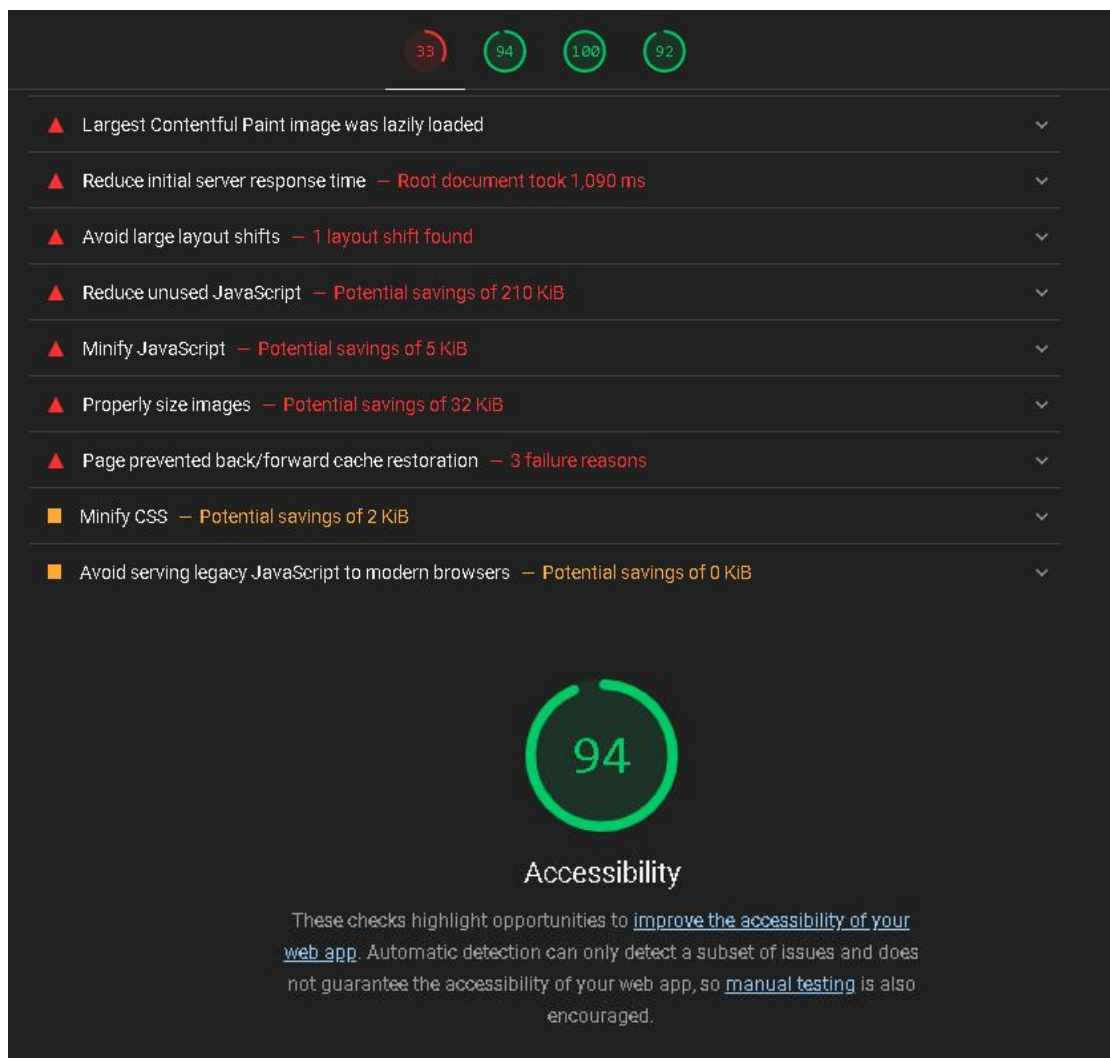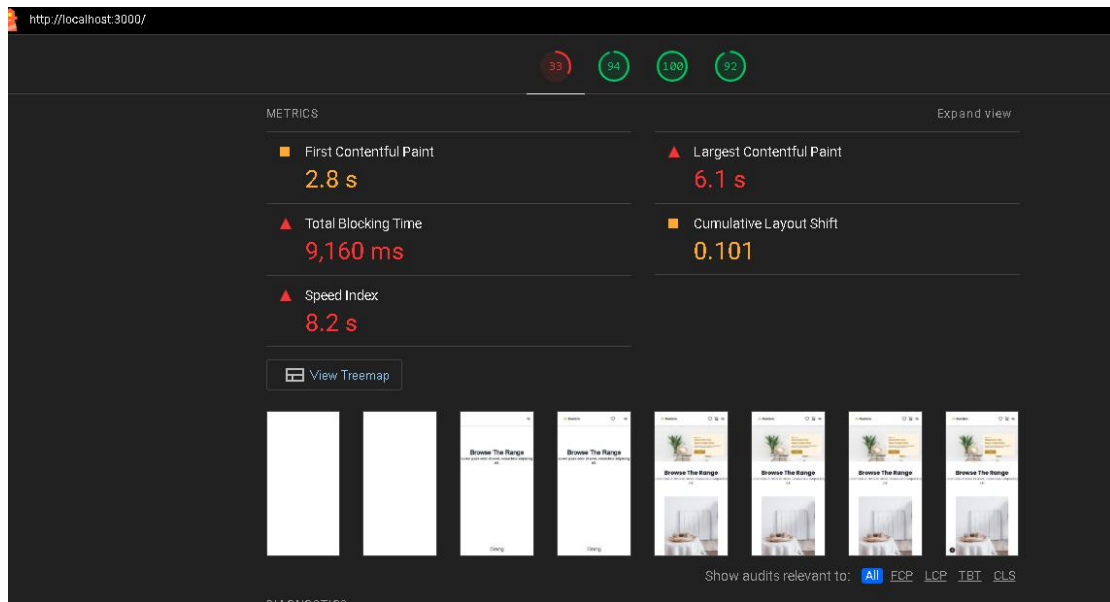Performance

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

▲ 0–49   ■ 50–89   ● 90–100

33 94 100 92

METRICS   Expand view

■ First Contentful Paint   ▲ Largest Contentful Paint
  2.8 s   6.1 s

▲ Total Blocking Time   ■ Cumulative Layout Shift
  9,160 ms   0.101

▲ Speed Index
  8.2 s

⊞ View Treemap

Show audits relevant to: All FCP LCP TBT CLS

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33 94 100 92

▲ Largest Contentful Paint image was lazily loaded   ⌄

▲ Reduce initial server response time — Root document took 1,090 ms   ⌄

▲ Avoid large layout shifts — 1 layout shift found   ⌄

▲ Reduce unused JavaScript — Potential savings of 210 KiB   ⌄

▲ Minify JavaScript — Potential savings of 5 KiB   ⌄

▲ Properly size images — Potential savings of 32 KiB   ⌄

▲ Page prevented back/forward cache restoration — 3 failure reasons   ⌄

■ Minify CSS — Potential savings of 2 KiB   ⌄

■ Avoid serving legacy JavaScript to modern browsers — Potential savings of 0 KiB   ⌄

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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.

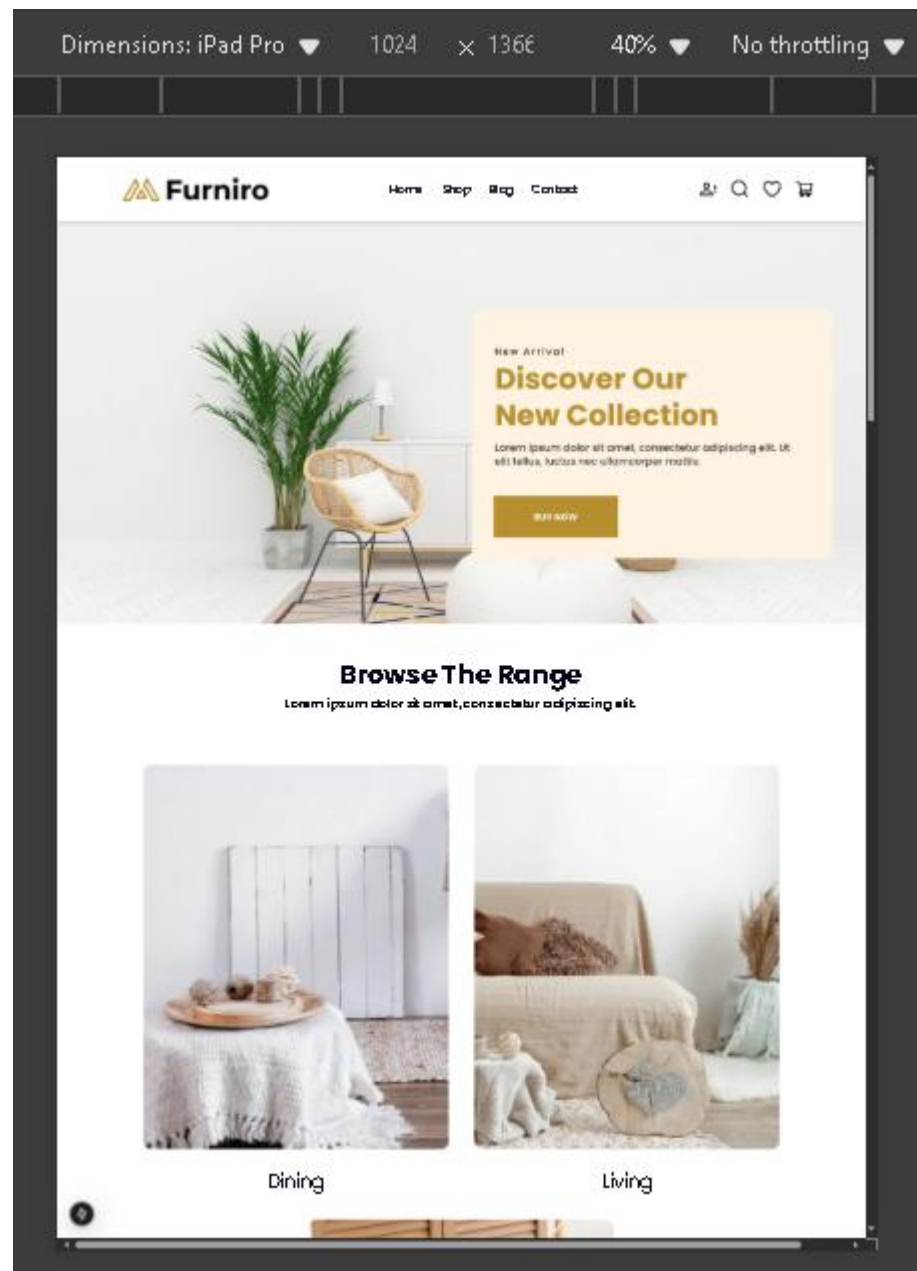**100**

Best Practices

TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks ⌄

○ Use a strong HSTS policy ⌄
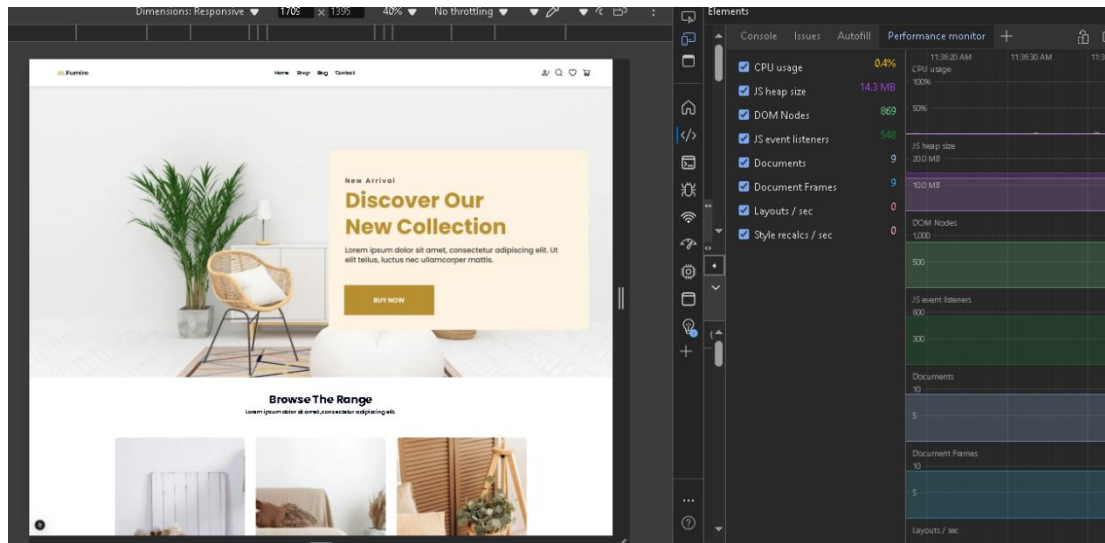
○ Ensure proper origin isolation with COOP ⌄

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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.

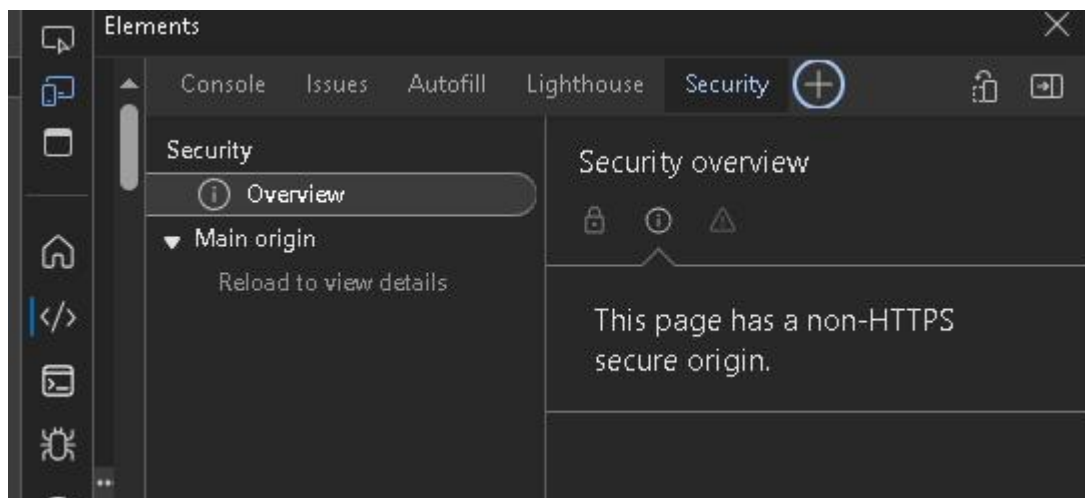**RESPONSIVENESS:**

PerfomanceMonitor:

Security:

CONCLUTION:

This testing and refinement process significantly improved the user experience, performance,and security of the application. All key features are seamlessly, ensuring a high-quality product ready for deployment.