Day 5 Testing and Backend Refinements – Nike Shoes

Overview:

- **Functional Testing:** functional performance, security and user acceptance testing.
- **Error Handling:** Implementing clear error message and fallbacks mechanism,
- **Backend integration Refinements:** Ensuring Seamless Api communication and data flow
- **Performance Optimization:** Enhancing page speed and responsiveness.

1. Functional Testing:

Testing was conducted on the following components.

✅ Product Listening

✅ Header Footer

✅ Help Page

✅ About Page

✅ Dynamic Product Pages (slug-based routing)

✅ Wishlist

✅ Add to Cart

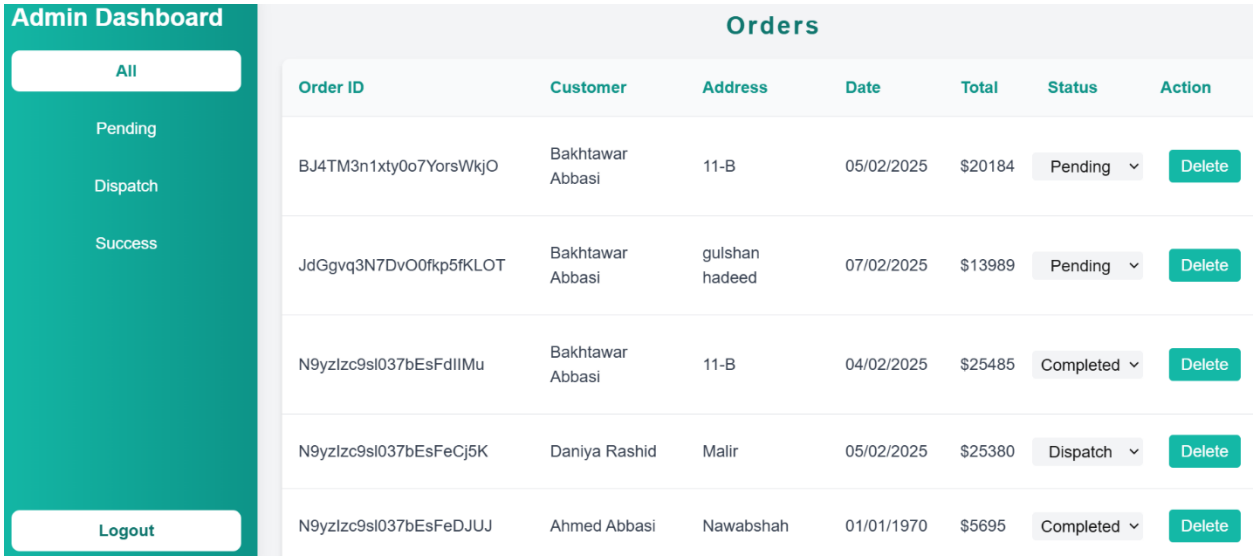
✅ Checkout & order submission

✅ Order Data store in sanity

✅ Admin Dashboard (Restricted Access)

✅ Customer data storage in sanity CMS.

✅ Product management in admin panel


Admin Dashboard
All
Pending
Dispatch
Success
Logout
Orders
Order ID
Customer
Address
Date
Total
Status
Action
BJ4TM3n1xty0o7YorsWkjO
Bakhtawar Abbasi
11-B
05/02/2025
$20184
Pending
Delete
JdGgvq3N7DvO0fkp5fKLOT
Bakhtawar Abbasi
gulshan hadeed
07/02/2025
$13989
Pending
Delete
N9yzIzc9sl037bEsFdIIMu
Bakhtawar Abbasi
11-B
04/02/2025
$25485
Completed
Delete
N9yzIzc9sl037bEsFeCj5K
Daniya Rashid
Malir
05/02/2025
$25380
Dispatch
Delete
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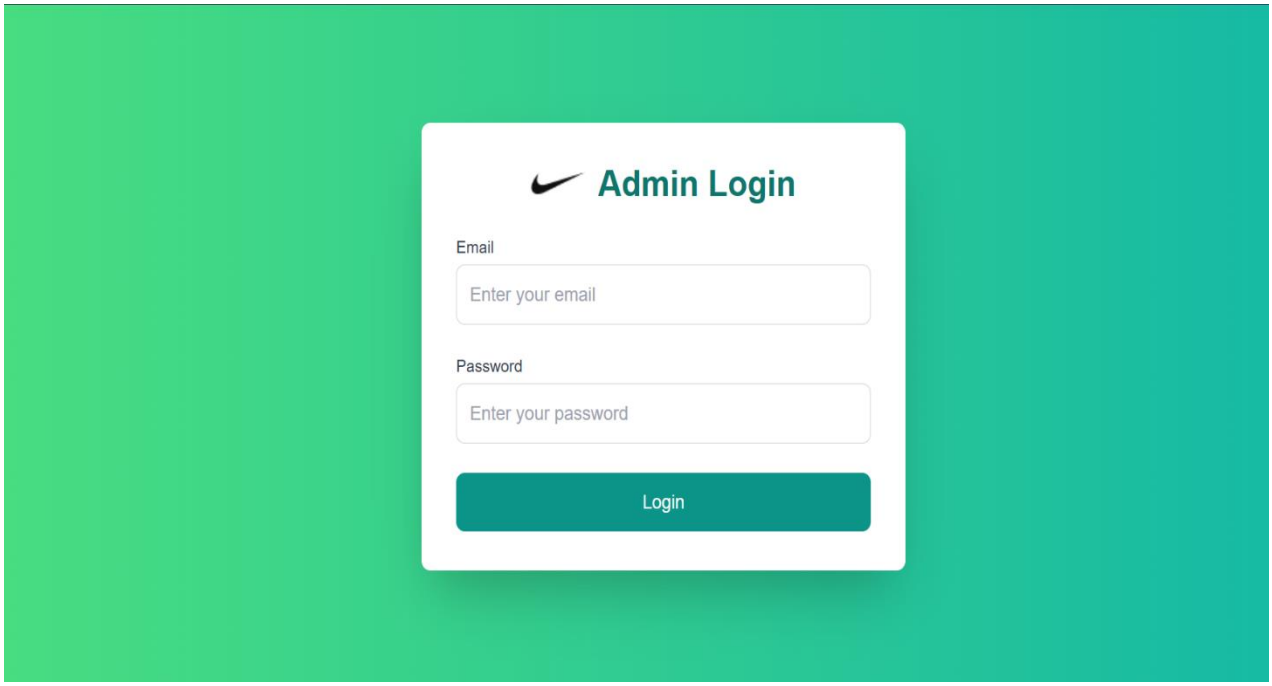
Ahmed Abbasi
Nawabshah
01/01/1970
$5695
Completed
Delete


Admin Login
Email
Enter your email
Password
Enter your password
Login

2. Error Handling:

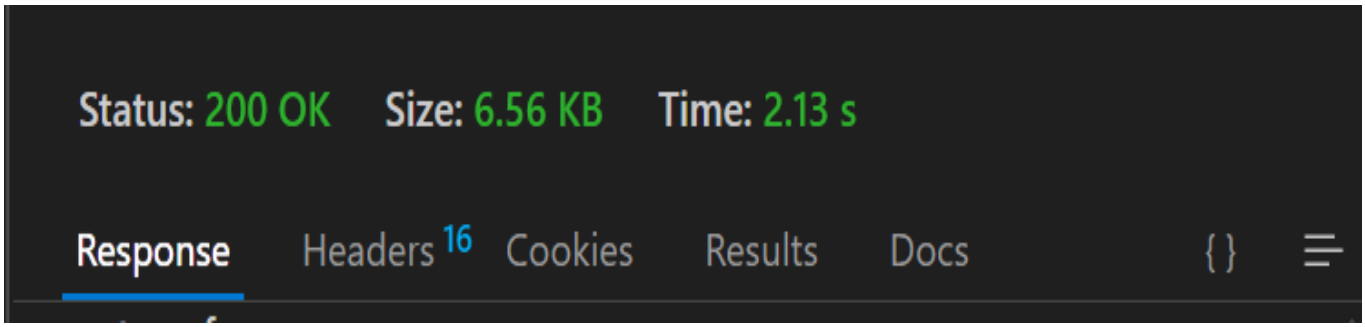
- To enhance the user, experience error handling was in corporate using try-catch block
- Errors handling with proper fallback Ui
- Try catch blocks prevents app crashes during Api request.

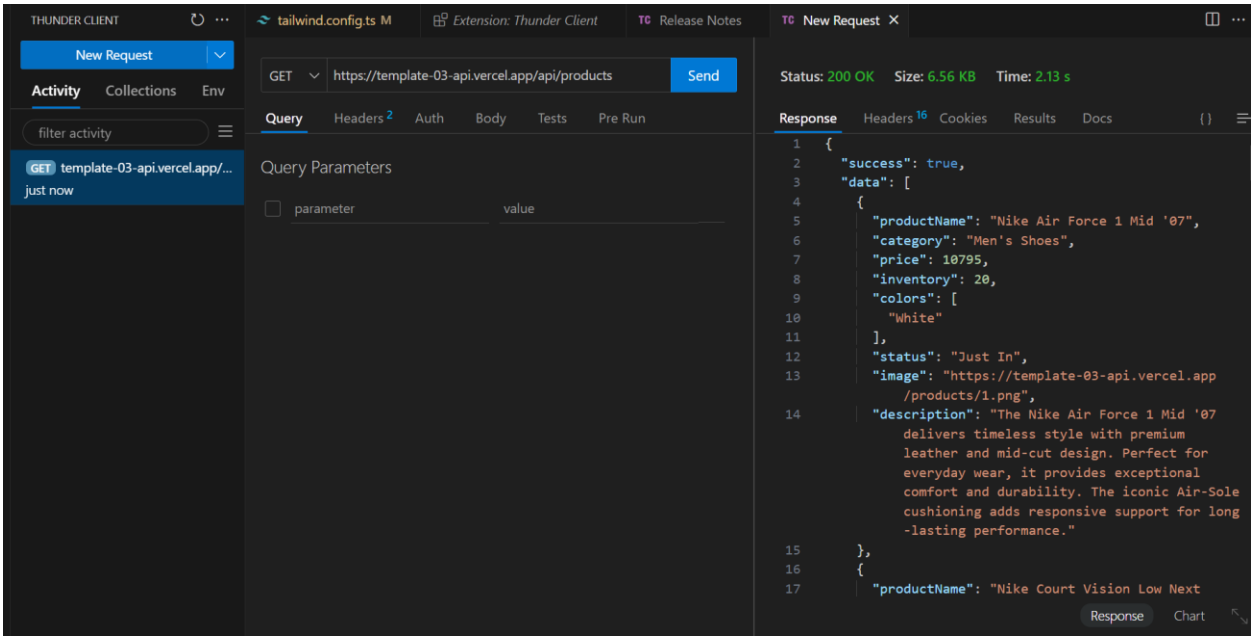
```
const Allproductpage = () => {
  const [products, setProducts] = useState<ProductType[]>([]);
  const [currentPage, setCurrentPage] = useState(1); // Track the current page
  const [productsPerPage] = useState(12); // Number of products per page

  useEffect(() => {
    async function fetchProducts() {
      try {
        const fetchedProduct: ProductType[] = await client.fetch(allproducts);
        setProducts(fetchedProduct);
        // console.log(fetchedProduct)
      } catch (error) {
        console.error("Error fetching products:", error);
      }
    }
    fetchProducts();
  }, []);
```

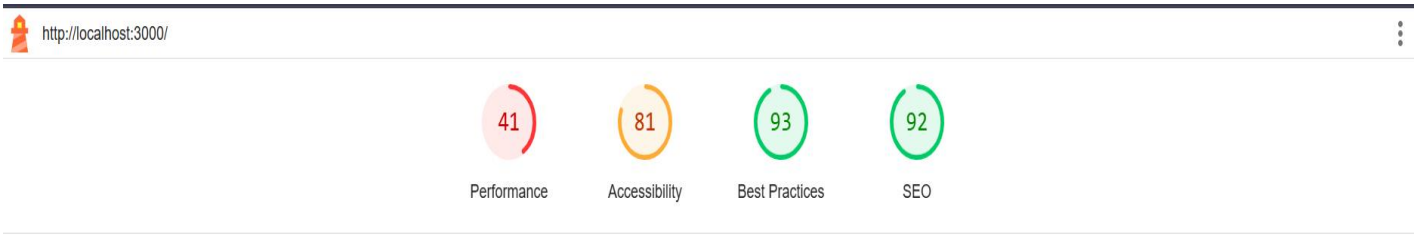
3. Performance Optimization

To enhance optimization

- **Lazy Loading:** Implemented for images and assets.
- **Image Compression**: Used Tiny PNG for optimization
- **Performance Analysis:** Evaluated using Google Lighthouse.



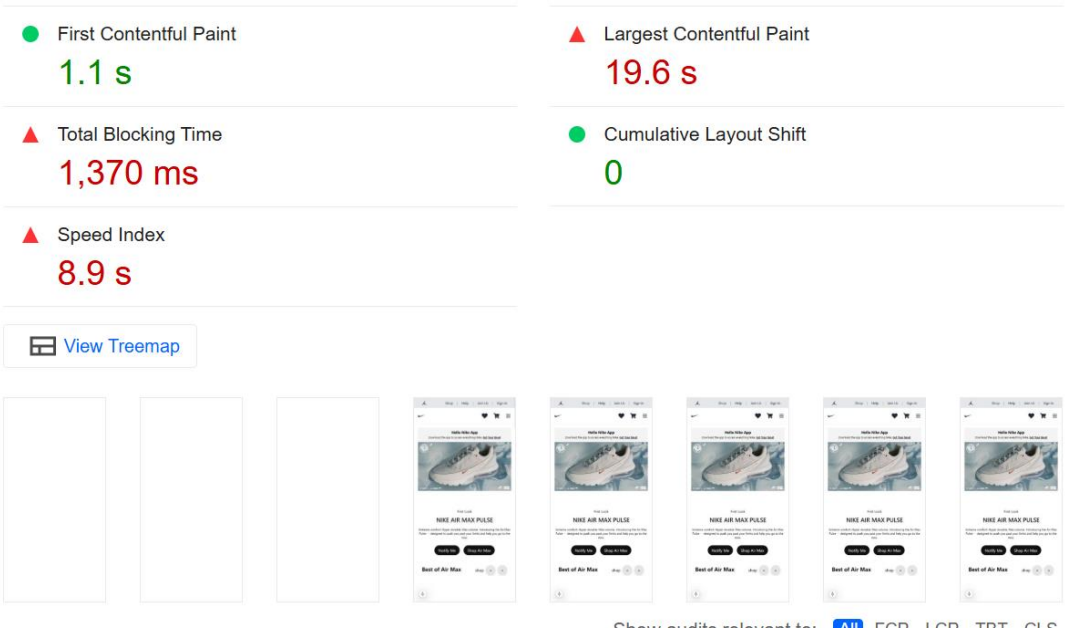




Performance

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

0–49 50–89 90–100



- **Accessibility:** The accessibility score is good, but slight improvements in color contrast and adding alt text to images can make it more user-friendly.

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.

- **Best Practices:** The score is decent, though updating outdated libraries and ensuring secure coding practices will improve it.

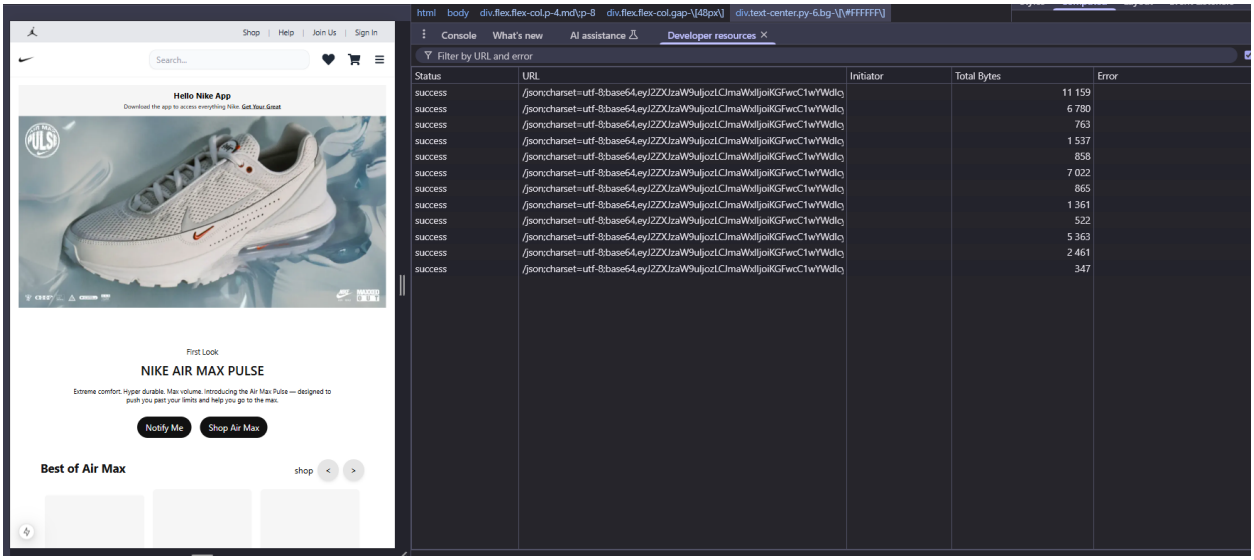
Best Practices

- **SEO:** The SEO score is strong, but adding meta descriptions and improving heading structures can boost search engine visibility.

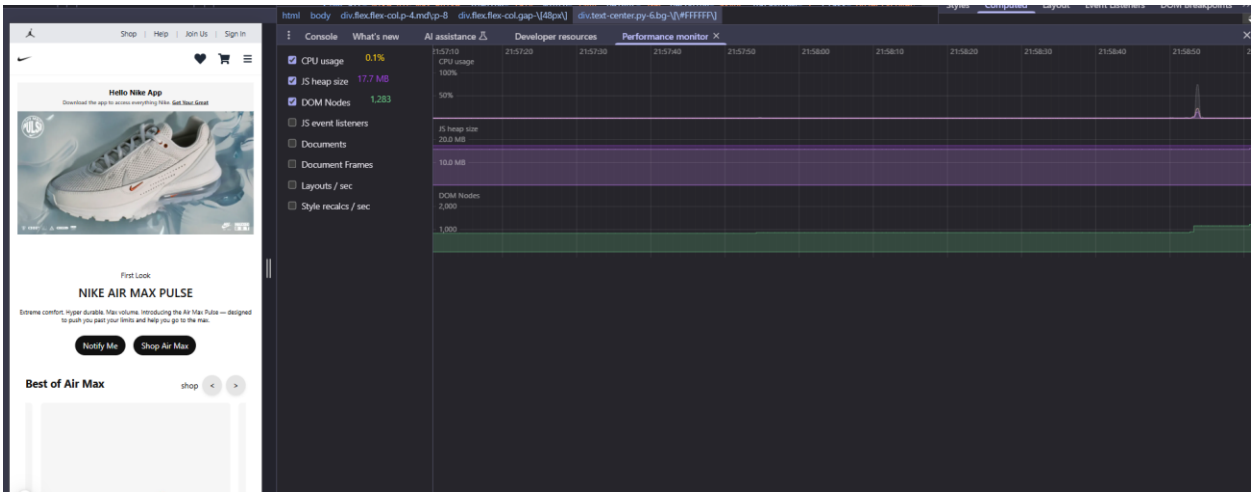
SEO

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.

- **Developers Resources**



- **Performance monitor**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Hello Nike App
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First Look
NIKE AIR MAX PULSE
Extreme comfort. Hyper durable. Max volume. Introducing the Air Max Pulse — designed to push you past your limits and help you go to the max.
Notify Me
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shop
html body div.flex.flex-col.p-4.md\:p-8 div.flex.flex-col.gap-\[48px\] div.text-center.py-6.bg-\[\#FFFFFF\]
Console What's new AI assistance Developer resources Performance monitor
CPU usage 0.1%
JS heap size 17.7 MB
DOM Nodes 1,283
JS event listeners
Documents
Document Frames
Layouts / sec
Style recalcs / sec
21:57:10
21:57:20
21:57:30
21:57:40
21:57:50
21:58:00
21:58:10
21:58:20
21:58:30
21:58:40
21:58:50
CPU usage
100%
50%
JS heap size
20.0 MB
10.0 MB
DOM Nodes
2,000
1,000