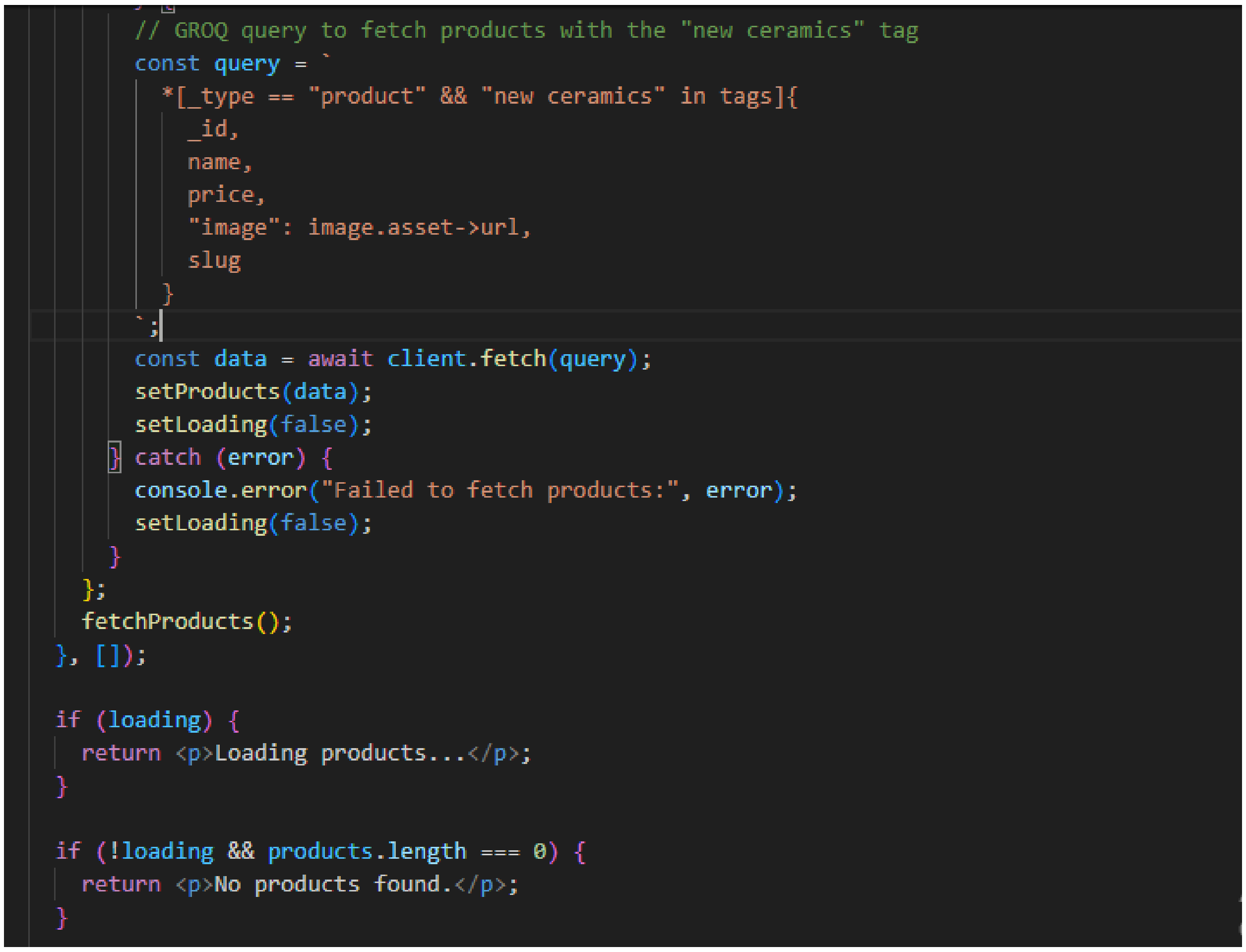
DAY_5: TESTING, ERROR HANDLING & BACKEND INTEGRATION REFINEMENT

1. Functional Testing

- All the features like product listing, detailed page of a product and shopping-cart are working as expected. Already shown the screenshots in Day_4 repo.

2. Error handling

- Gracefully handled error and add fallback that if API is not fetching the data so displayed "No products found" on UI.



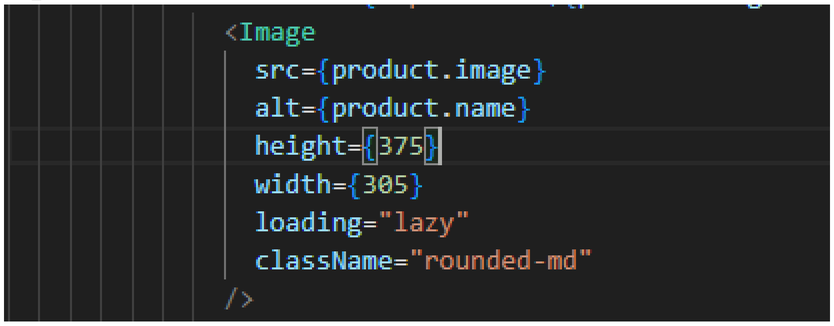
```
        // GROQ query to fetch products with the "new ceramics" tag
        const query = `
          *[_type == "product" && "new ceramics" in tags]{
            _id,
            name,
            price,
            "image": image.asset->url,
            slug
          }
        `;
        const data = await client.fetch(query);
        setProducts(data);
        setLoading(false);
      } catch (error) {
        console.error("Failed to fetch products:", error);
        setLoading(false);
      }
    };
    fetchProducts();
  }, []);

  if (loading) {
    return <p>Loading products...</p>;
  }

  if (!loading && products.length === 0) {
    return <p>No products found.</p>;
  }
```

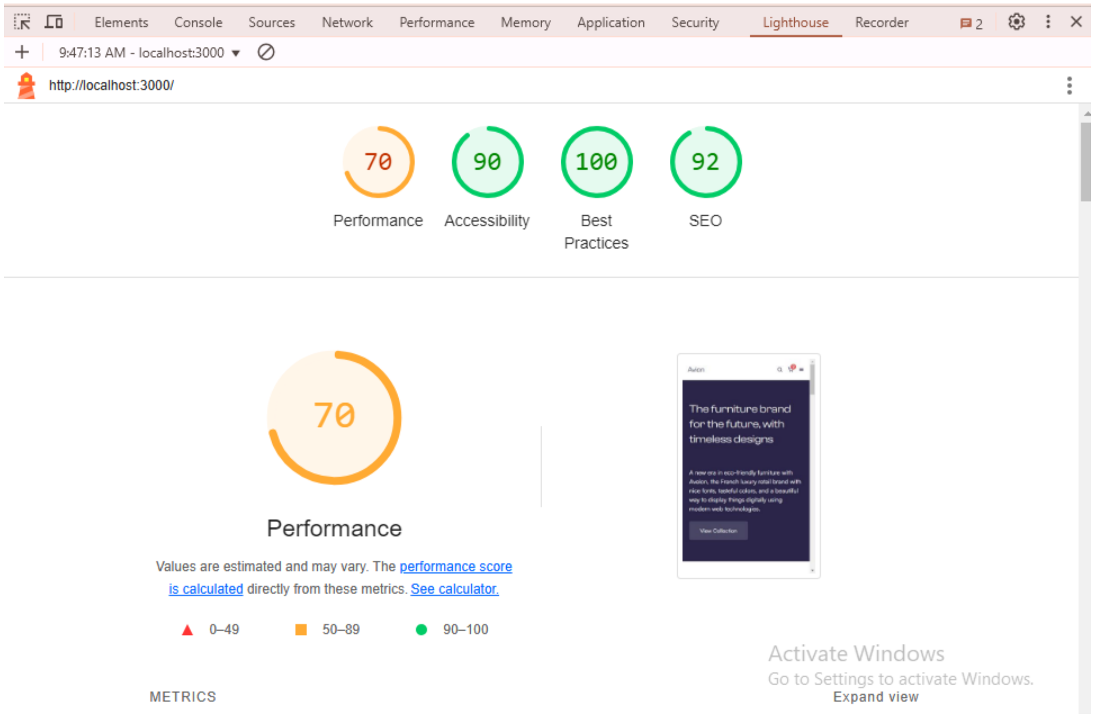
3. Performance Optimization

1. Optimized Assets



```
<Image
  src={product.image}
  alt={product.name}
  height={375}
  width={305}
  loading="lazy"
  className="rounded-md"
/>
```

2. Analyze Performance



70	90	100	92
Performance	Accessibility	Best Practices	SEO

70

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

The furniture brand for the future, with timeless designs
Activate Windows
Go to Settings to activate Windows.
Expand view

4 main causes which are effecting performance and have to be considered:

i. JavaScript execution time
ii. Eliminate render blocking resources
iii. Reduce initial server response time
iv. Page prevented back/forward cache restoration

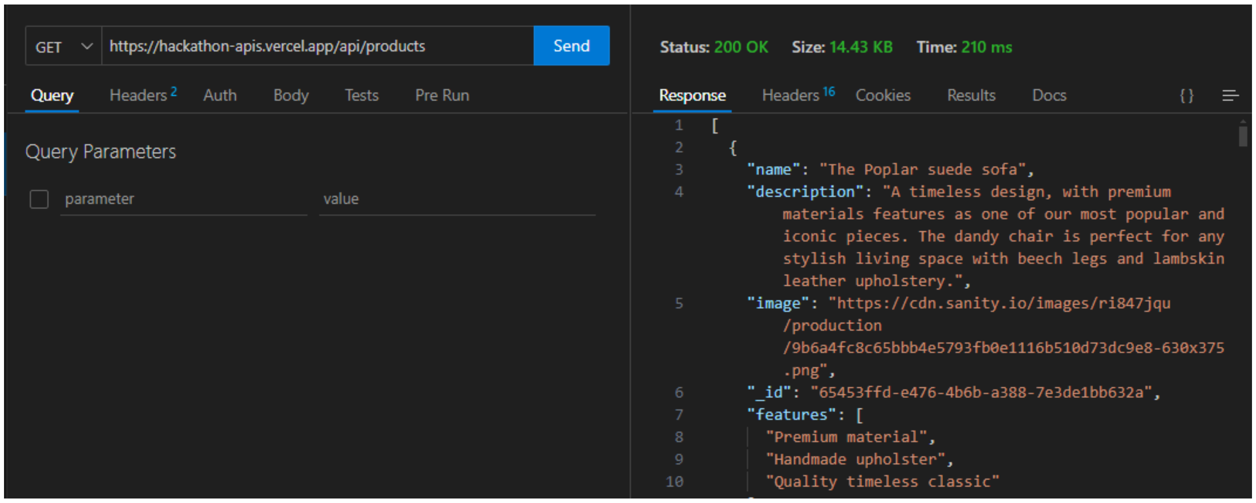
3. **Test Load Time**

Step_4: Testing across multiple devices

➢ Successfully tested the components and responsiveness of website on different devices.

Step_5: Security Testing

Secure API Communication:



https://hackathon-apis.vercel.app/api/products

Status: 200 OK Size: 14.43 KB Time: 210 ms

```
[
  {
    "name": "The Poplar suede sofa",
    "description": "A timeless design, with premium
        materials features as one of our most popular and
        iconic pieces. The dandy chair is perfect for any
        stylish living space with beech legs and lambskin
        leather upholstery.",
    "image": "https://cdn.sanity.io/images/ri847jqu
        /production
        /9b6a4fc8c65bbb4e5793fb0e1116b510d73dc9e8-630x375
        .png",
    "_id": "65453ffd-e476-4b6b-a388-7e3de1bb632a",
    "features": [
      "Premium material",
      "Handmade upholster",
      "Quality timeless classic"
```