

Hackathon Day-5

Bandage Marketplace Template

Testing, Error Handling, and Backend Integration Refinement

Objective:

Prepare "My Marketplace Bandage" for real world deployment by thoroughly testing optimizing performance ,and refining backend integrations.Ensure readiness to handle customer-facing traffic while delivering a seamless and error-free user experience.

Key Learning Outcomes:

Comprehensive Testing :

- 1-validate all features and backend integrations.
- 2-Ensure functional, non-functional and user acceptance testing is complete.

Error Handling:

- 1-Implement user-friendly error messages and fallback mechanisms.
- 2-Gracefully handle API errors with fallback UI elements.

Performance Optimization:

- 1-Enhance speed ,responsiveness, and reliability.
- 2-Conduct performance testing to identify and fix bottlenecks.

Cross Browser and Device Compatibility:

1-Test for seamless functionality across multiple browsers and devices.security testing.

2-Identify vulnerabilities and secure sensitive data.

Documentation:

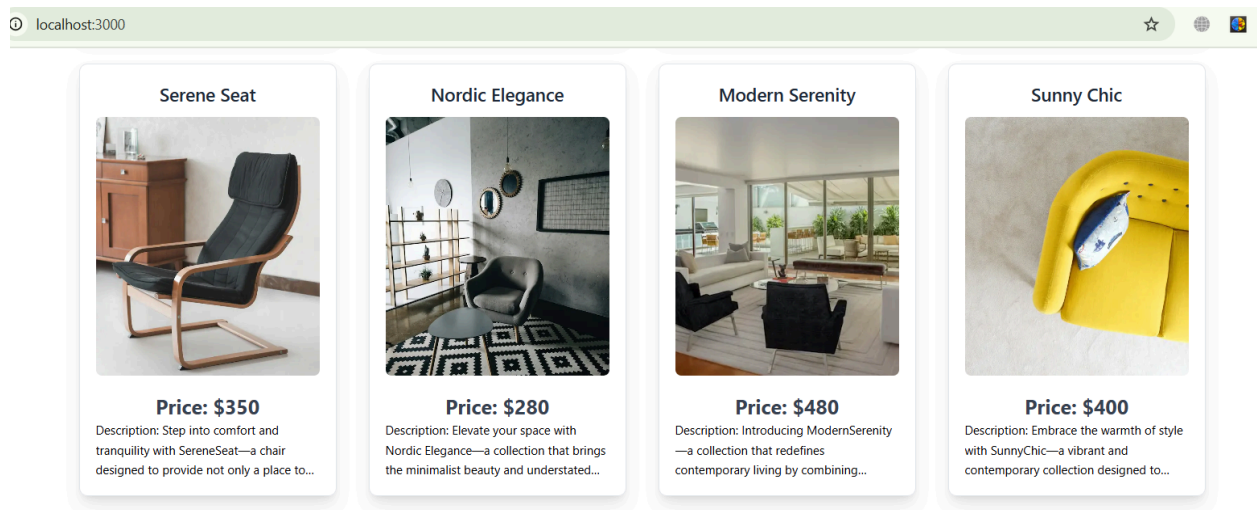
1-Create professional testing reports(CSV-based)summarizing results and resolution.

2- Prepare deployment ready documentation with best practices.

Functional Testing:

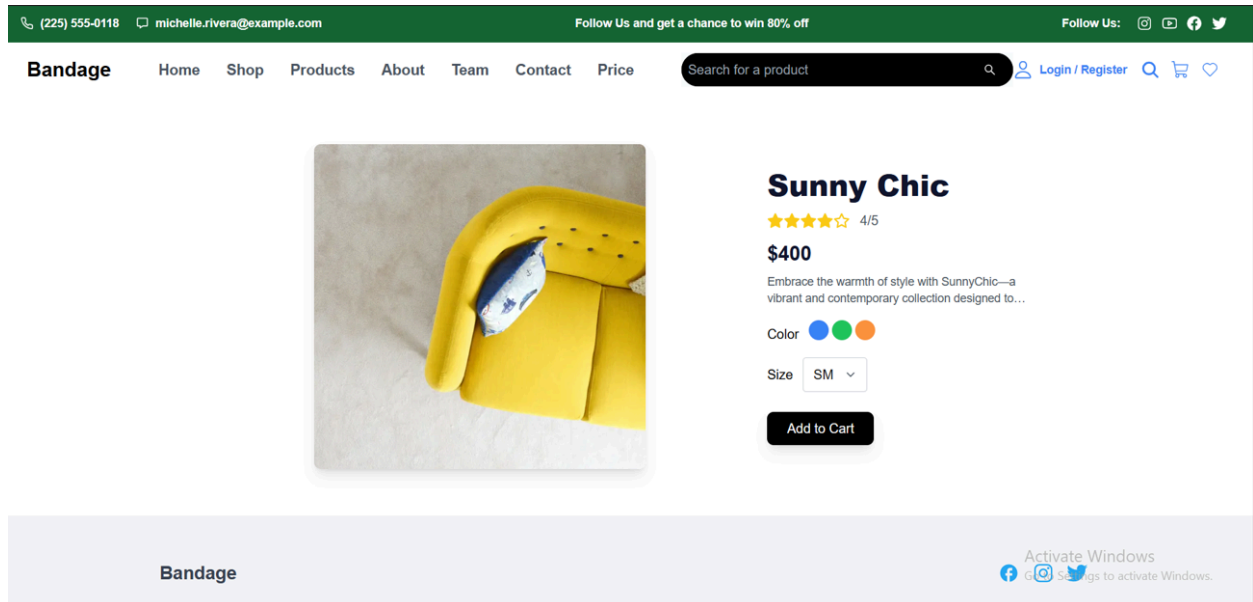
Product Listing:

Successfully showing all the products fetching from sanity CMS.



Product Details:

Each product shows on a dynamic detail page.



Cart Operation:

Successfully showing products added to cart.

Checkout Flow:

Products from the cart successfully come to check out.

API Responsive Validation:

API response testing done by using thunder client shows data of products including all the details.

Responsive status : 200 OK.

All the fields were fetched successfully with correct data structure.

The screenshot displays a REST client interface with the following details:

- Dataset:** production
- API Version:** Other
- Custom API Version:** v2025-01-18
- Perspective:** raw
- Query URL:** https://cbmeyer51api.sanity.io/v2025-01-18/data/query/productio

QUERY:

```
1 *[_type == "product"] {
2   _id,
3   title,
4   slug,
5   productImage,
6   price,
7   description,
8   tags,
9   discountPercentage,
10  isNew
11 }
```

PARAMS:

```
1 {
2
3 }
```

RESULT:

```
[...] 82 items
  0: {...} 9 properties
    slug: null
    productImage: {...} 2 properties
      _type: image
      asset: {...} 1 property
        _ref: image-35a8072e40a8b80142ff8e96e0f3af21811f5b9f-3264x4928-jpg
    isNew: false
    _id: VTjpX7gIRs7VphrWQPse9x
    title: Timber Craft
    price: 320
    description: Introducing TimberCraft—a collection that celebrates the timeless beauty of wood craftsmanship and the art of nature’s finest materials. Inspired by the rustic charm and durability of natural wood, TimberCraft brings warmth, character, and a touch of handcrafted elegance to any space. Perfect for those who value authenticity and sustainability, this collection combines the strength of timber with refined design, making it the ideal choice for modern and traditional homes alike. Each piece in the TimberCraft collection is meticulously crafted to highlight the unique grains and textures of the wood, bringing an organic, earthy feel to your space. Whether you’re looking for furniture, decor, or accents, TimberCraft offers a variety of beautifully designed pieces that blend rustic appeal with contemporary sophistication. The collection is designed to stand the test of time, with materials chosen for their durability and lasting beauty. TimberCraft is perfect for those who appreciate quality, craftsmanship, and the enduring
```

Execution: 33ms End-to-end: 1139ms

Save result as: JSON CSV

Testing Report(CSV Format):

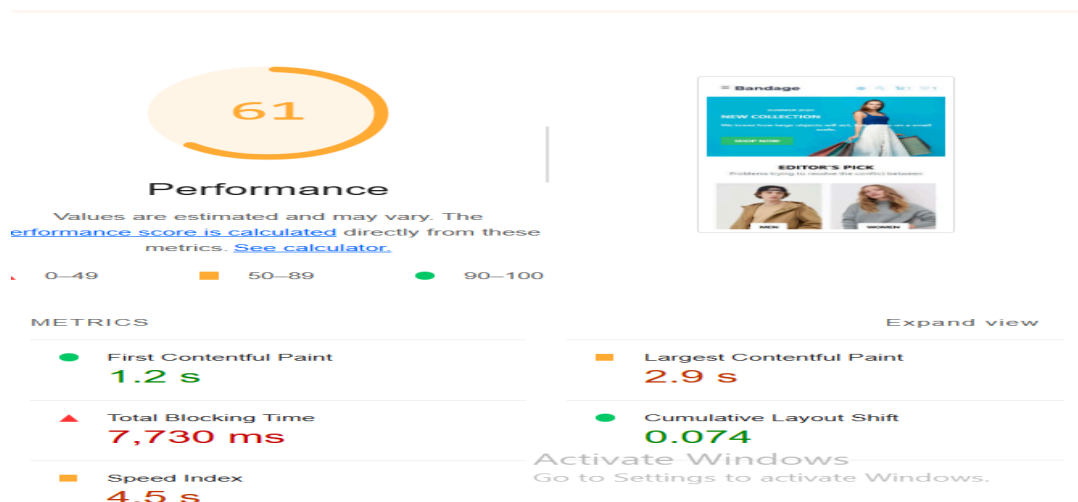
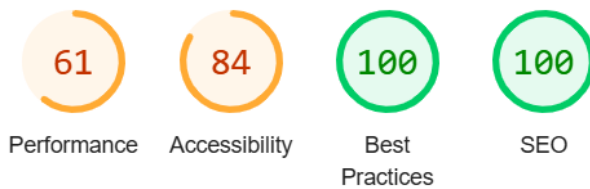
For functionality test, testing library of react use and all test cases successfully passed.

	Test Case Id	Test Case Description	Test Steps	Expected Result	Actual result	Status	Severity Level	Assigned To	Remarks
1	TC001	Check product listing	Open product page > Verify products	Products displayed correctly	Products displayed correctly	Passed	High	-	No issues found
2	TC002	Check product detail	Open product detail page > Verify details	Products detail Displayed correctly	Products detail Displayed correctly	Passed	High	-	No issues found
3	TC003	Test API error handling	Disconnect API > Refresh page	Show fallback UI with error message	Error message shown	Passed	High	-	Handled gracefully
4	TC004	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	TC005	Ensure responsiveness on mobile	Resize browser window > Check layout	Layout adjusts properly to screen size	Responsive layout working as intended	Passed	Medium	-	Works as expected

Performance Insights:



http://localhost:3000/



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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

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.

CONTRAST

▲ Background and foreground colors do not have a sufficient contrast ratio.

These are opportunities to improve the legibility of your content.

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84

100

100

100

Best Practices

TRUST AND SAFETY

○ Ensure CSP is effective against XSS attacks

○ Use a strong HSTS policy

○ Ensure proper origin isolation with COOP

GENERAL

▲ Missing source maps for large first-party JavaScript

PASSED AUDITS (14)

Show

NOT APPLICABLE (2)

Show

100

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](#).

ADDITIONAL ITEMS TO MANUALLY CHECK (1)

Hide

○ Structured data is valid

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

PASSED AUDITS (8)

Show

NOT APPLICABLE (2)

Show

Captured at Feb 8, 2025, 6:08 PM GMT+5

Emulated Moto G Power with Lighthouse.12.3.0

Single page session

Checklist for Day-5:

Functional Testing

Error Handling

Performance Optimization

Cross Browser and Device Testing

Security testing

Documentation

Final Review