DAY 5 – Testing, Error Handling, And Backend Integration Refinement

Rahim Ali 21-Jan-2025

Focus of the Day

- This Document Clearly Outlines the objectives of Day 5 of hackathon. Emphasizing testing & performance optimization

Testing Overview

- Functional testing is addressed with specific test cases for product page, product details page, cart operations, website responsiveness on mobile and desktop screens, dynamic routing, search bar, Price Sorting & price filters like functionalities

Steps For Implementation

Functional testing: Validate core features like product page, product details page, cart operations , and dynamic routing using tools like React library testing

Performance Optimization: Optimize assets, analyze performance with lighthouse, and aim for fast load times using lazy loading and minimized CSS/Javascript

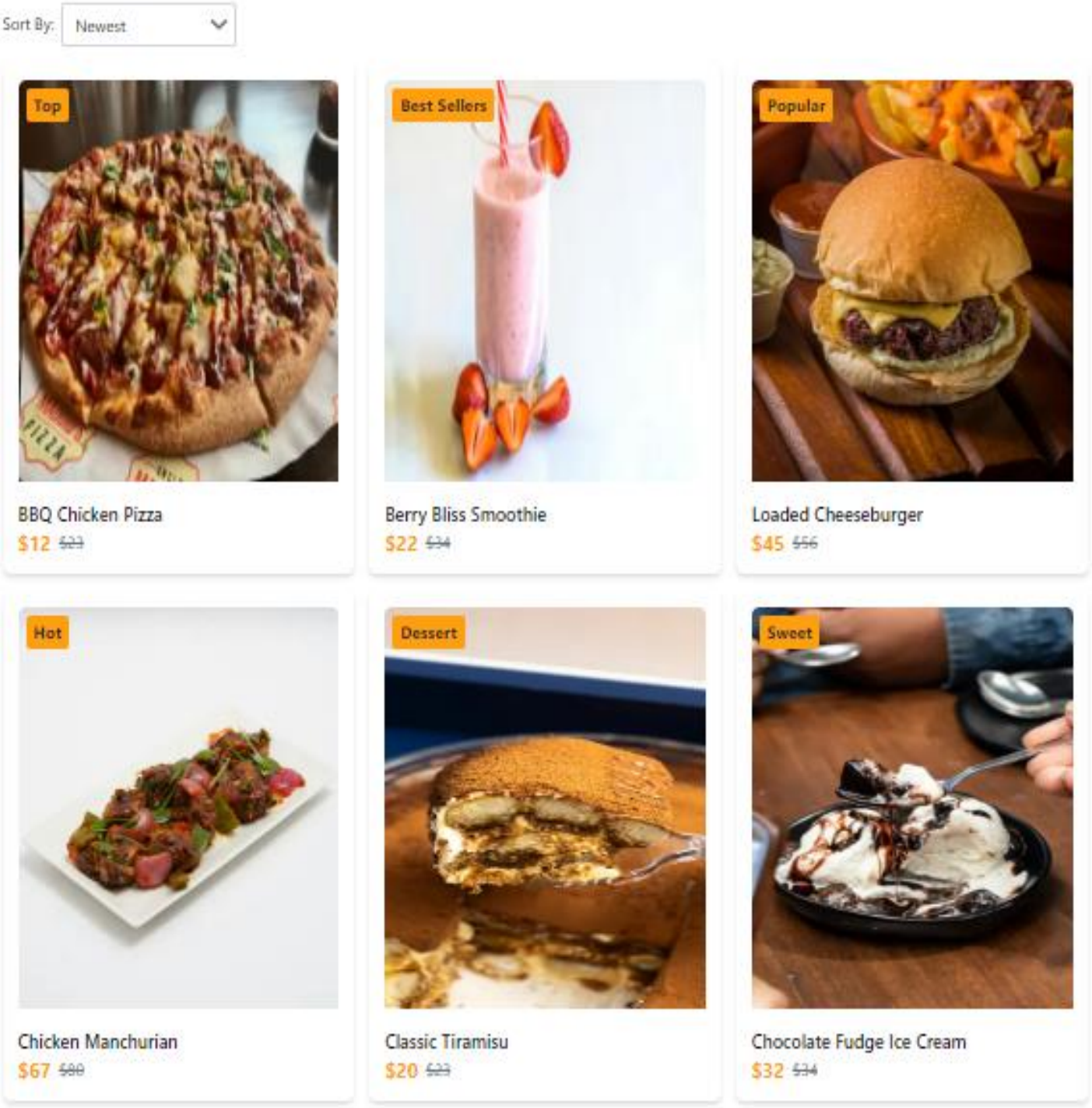
Cross-Browser Testing: Ensure consistent Functionality across all most used browsers like Chrome,Opera,Edge,Tor, & FireFox and devices like Iphone XS/11/15/16PM to make sure that pages are responsive on every medium of screens sizes which are commonly used.

User Acceptance Testing (UAT): Simulate Real-world usage scenarios, Gather Feedback, and address usability issues to enhance user experience.

1. **Product Page (TC001):**

No issues Found:

- **Product listing: All Products are displayed Correctly.**
- **Results:**



2. GRUQ Queries (TC002):

No issues Found:

- **Results:**

shop/page.tsx

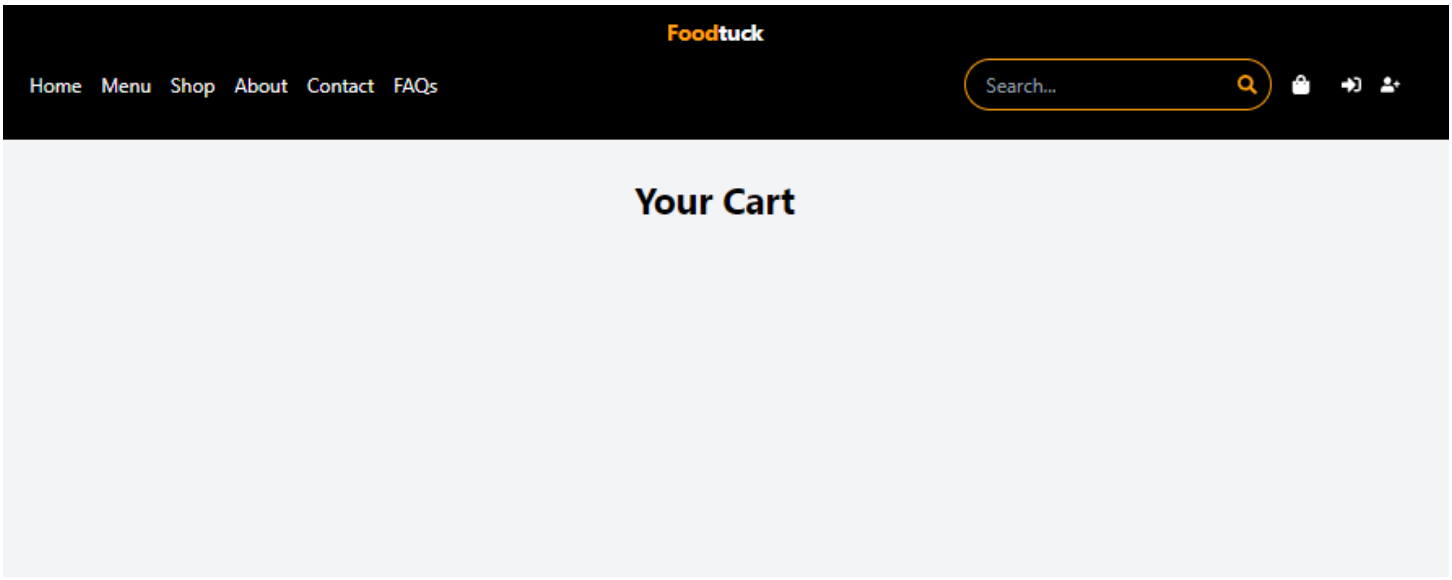
```
//GRUQ Queries to Fetch Data From Sanity

   const fetchFoodItems = () => {
   client
     .fetch(
       `*[_type == "food"]{
         _id,
         name,
         category,
         price,
         originalPrice,
         tags,
         "imageUrl": image.asset→url,
         description,
         available,
         _createdAt
       }`
     )
     .then((data) => {
       setFoodItems(data);
       const allTags: string[] = data.flatMap((item: FoodItem) => item.tags || []);
       setTags([...new Set(allTags)]); // Remove duplicates Tags
     })
     .catch(console.error);
 };
```

3. Cart Operations (TC003):

Issues Found: Cart Functionalities are not working as expected, the data is not showing up in the cart due to lack of understanding related to React-redux Toolkit, will update the cart later on.

- **Results:**



4. Device Responsiveness (TC004):

No Issues: All Components renders correctly across various devices including mobile and tablets

Devices Tested: iPhone Xs/11/15/16PM

Browser Tested: Chrome/Tor/Firefox/Edge/Opera

- **Results:**

4:42 LTE 67

Foodtuck

Product Detail

Home › Product

Out of Stock

Prev Next

Vanilla Ice Cream

A creamy and aromatic treat made with real vanilla beans for a classic dessert experience.

$20 ~~$25~~

5.0 Rating | 22 Review

Add to cart

-dynamic-frontend-components-food-tuck.vercel.app

4:42 LTE 67

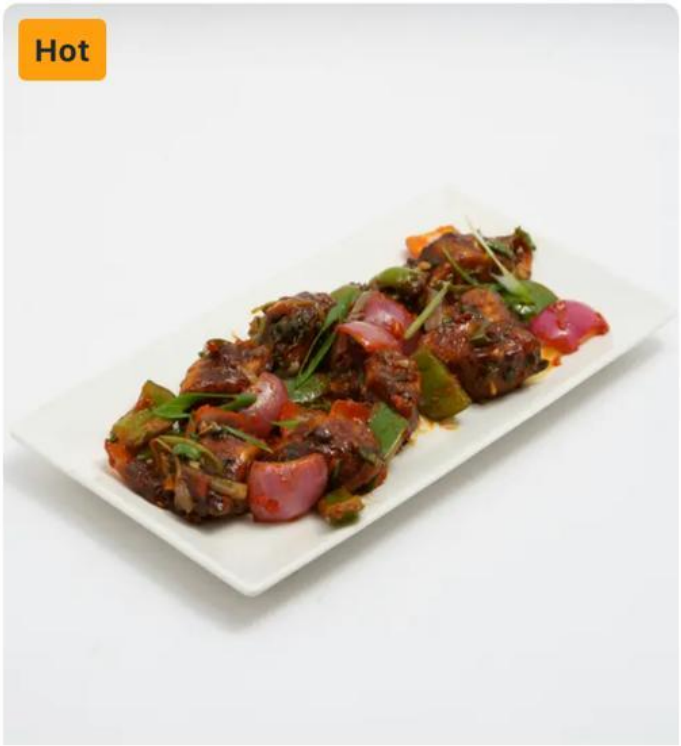
Foodtuck

Shop Page

Home › Shop

Sort By: Price: High to Low

Hot



Chicken Manchurian

$67 ~~$80~~

Best Sellers

-dynamic-frontend-components-food-tuck.vercel.app

4:42
LTE 67
Chocolate Fudge Ice Cream
$32 $34
« 1 2 »
Search Product
Filter by Price
From $0
to $100
Latest Products
BBQ Chicken Pizza
$12
Berry Bliss Smoothie
$22
Loaded Cheeseburger
$45
Chicken Manchurian
$67
Product Tags
Dessert Sweet Vegetarian Best Sellers
Top Hot Popular Healthy
-dynamic-frontend-components-food-tuck.vercel.app

4:44
LTE 67
Foodtuck
FAQ Page
Home › FAQ
Questions Look Here
Find answers to the most frequently asked questions about our services and offerings.
How do we serve food?
We serve food with the utmost care and hygiene. Our chefs use fresh ingredients to prepare meals, and our staff ensures that the food is served hot and fresh to your table.
How can we get in touch with you?
You can get in touch with us through our contact page on the website, by calling our customer service number, or by visiting us at our location. We are always here to assist you with any queries.
Do you offer vegetarian options?
Yes, we offer a variety of vegetarian options on our menu. Our chefs are skilled in preparing delicious
-dynamic-frontend-components-food-tuck.vercel.app

5. Dynamic Routing (TC005):

No Issues: Dynamic routes are loading as expected with no errors or missing parameters

- **Result:**

In Stock

Prev Next

Loaded Cheeseburger

A juicy beef patty loaded with melted cheese, fresh veggies, and tangy sauce in a soft bun.

$45 ~~$56~~

5.0 Rating | 22 Review

Add to cart

Add to Wishlist

Category: Fast Food
Tag: Popular

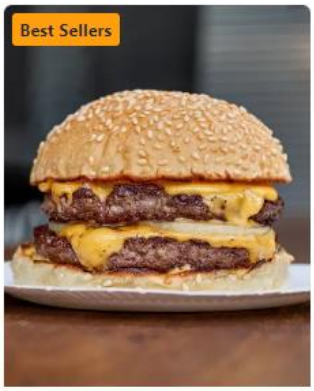
Description

Satisfy your cravings with our Loaded Cheeseburger, the ultimate fast-food favorite packed with flavor and freshness. This mouthwatering burger features a juicy, perfectly seasoned beef patty topped with melted cheddar cheese, crisp lettuce, ripe tomatoes, and tangy pickles. All of this deliciousness is nestled in a soft sesame seed bun and drizzled with a savory burger sauce. Perfect for a quick lunch, dinner, or a snack on the go, this cheeseburger is guaranteed to hit the spot every time.

Ingredients:

- Juicy beef patty
- Melted cheddar cheese
- Fresh lettuce, tomatoes, and pickles
- Soft sesame seed bun
- Drizzle of savory burger sauce

Similar Products



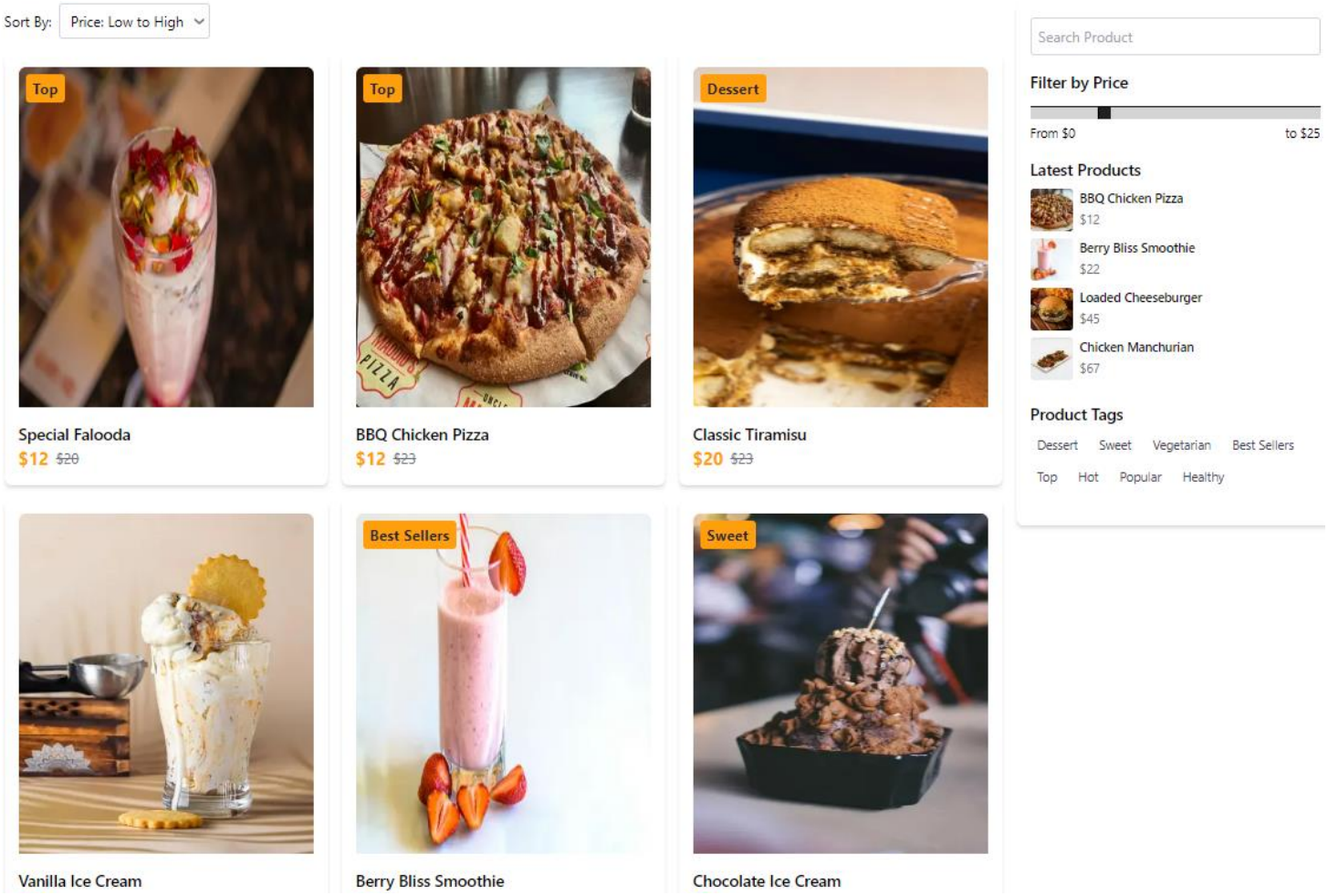
Classic Burger

$50 ~~$60~~

6 . Filter and Search (TC006):

No Issues: Filters returned correct, with expected results due to proper query handling

- **Result:**



Cross Browser Compatibility:

- **No Issues:** Consistent functionality and design across Chrome, Edge and other tested browsers.

7. Performance Highlights (Lighthouse):

Product Details Performance:

Mobile Desktop

Diagnose performance issues

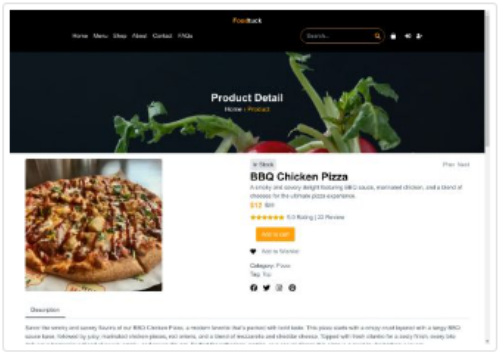
77 Performance | 88 Accessibility | 96 Best Practices | 100 SEO

77

Performance

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

▲ 0–49 ■ 50–89 ● 90–100



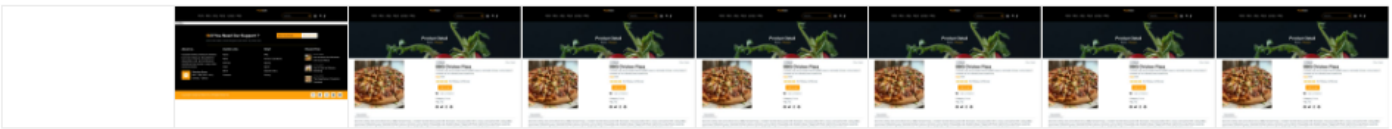
METRICS Expand view

- First Contentful Paint: 0.2 s
- Largest Contentful Paint: 0.7 s
- Total Blocking Time: 0 ms
- Cumulative Layout Shift: 0.684
- Speed Index: 0.5 s

Captured at Jan 21, 2025, 4:26 PM GMT+5 | Emulated Desktop with Lighthouse 12.2.3 | Single page session

Initial page load | Custom throttling | Using HeadlessChromium 131.0.6778.264 with lr

View Treemap



Show audits relevant to: All FCP LCP TBT CLS

DIAGNOSTICS

7. Performance Highlights (Lighthouse):

Product Page Performance:

Mobile Desktop

Diagnose performance issues

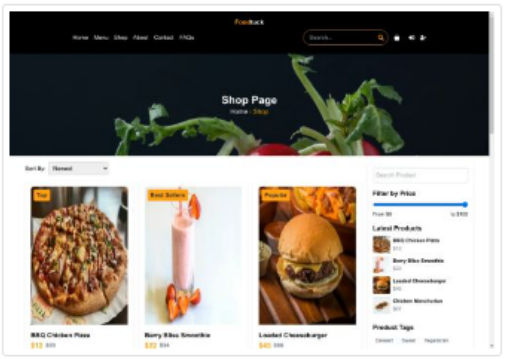
91	82	96	100
Performance	Accessibility	Best Practices	SEO

91

Performance

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

▲ 0–49 ■ 50–89 ● 90–100

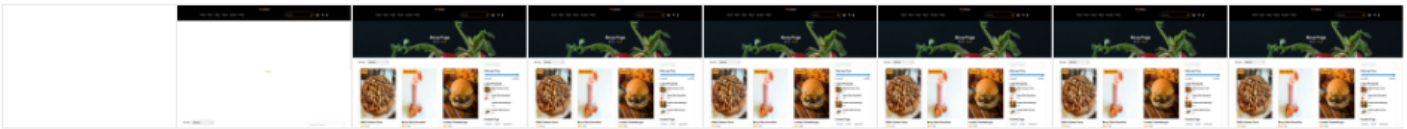


METRICS Expand view

- First Contentful Paint: 0.2 s
- Largest Contentful Paint: 0.7 s
- Total Blocking Time: 10 ms
- Cumulative Layout Shift: 0.194
- Speed Index: 0.7 s

Captured at Jan 21, 2025, 4:23 PM GMT+5
Initial page load
Emulated Desktop with Lighthouse 12.2.3
Custom throttling
Single page session
Using HeadlessChromium 131.0.6778.264 with lr

View Treemap



Show audits relevant to: All FCP LCP TBT CLS

DIAGNOSTICS

7. Performance Highlights (Lighthouse):

Home Page Performance:

Mobile Desktop

Diagnose performance issues

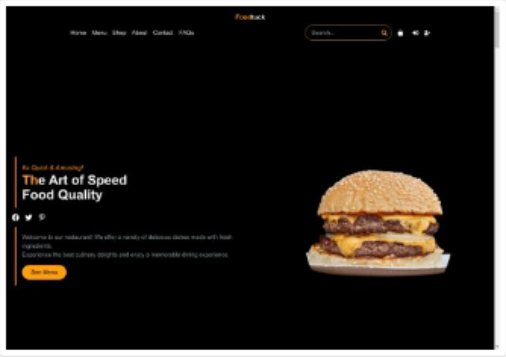
100 Performance | 90 Accessibility | 100 Best Practices | 91 SEO

100

Performance

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

0–49 50–89 90–100

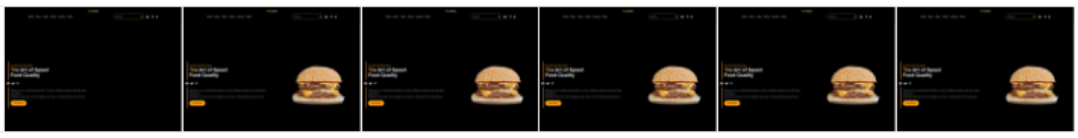


METRICS Expand view

- First Contentful Paint: 0.3 s
- Largest Contentful Paint: 0.6 s
- Total Blocking Time: 0 ms
- Cumulative Layout Shift: 0.01
- Speed Index: 0.6 s

Captured at Jan 21, 2025, 4:14 PM GMT+5
Initial page load
Emulated Desktop with Lighthouse 12.2.3
Custom throttling
Single page session
Using HeadlessChromium 131.0.6778.264 with lr

View Treemap



Show audits relevant to: All FCP LCP TBT CLS

DIAGNOSTICS

Test Case Report

TESTCASE ID	TESTCASE DESCRIPTION	TEST STEPS	EXPECTED RESULTS	ACTUAL RESULT	STATUS	SECURITY LEVEL	ASSIGNED TO	REMARKS
TC001	Validate Product Listing Page	Opens Product Page	Products displayed correctly	Products displayed correctly	**Passed**	**High**	N/A	Perfectly working
TC002	Test Queries Fetch	Data Fetching Properly	Data Fetched Correctly	Data Fetched Correctly	**Passed**	**Medium**	N/A	Fetches properly
TC003	Checking Cart Functionality	Add product to cart	Cart updates with added product	Cart doesn't show added products	**Failed**	**Low**	N/A	Not working
TC004	Ensure Responsivenes on Website	Resize browser window>Check Layout	Layout Adjust Properly with screen size	Layout Adjust Properly with screen size	**Passed**	**High**	N/A	works on all devices
TC005	Verified Dynamic Routing	Product>product detail page	Shows every product dynamic with all information	Shows every product dynamic with all information	**Passed**	**Medium**	N/A	works as expected
TC006	Verified Dynamic Routing	Apply Filters/perform search and sort query	Filter Products according to price and sorting	Filter Products according to price and sorting	**Passed**	**Medium**	N/A	work as expected