

HACKATHON - Day 05

Goal:

The goal of Day 05 is to set up our marketplace through:

- Testing components
- Handling errors
- Checking performance for optimization
- Preparing for real-time traffic environments
- Delivering the best user experience

Key Sections to Point Out

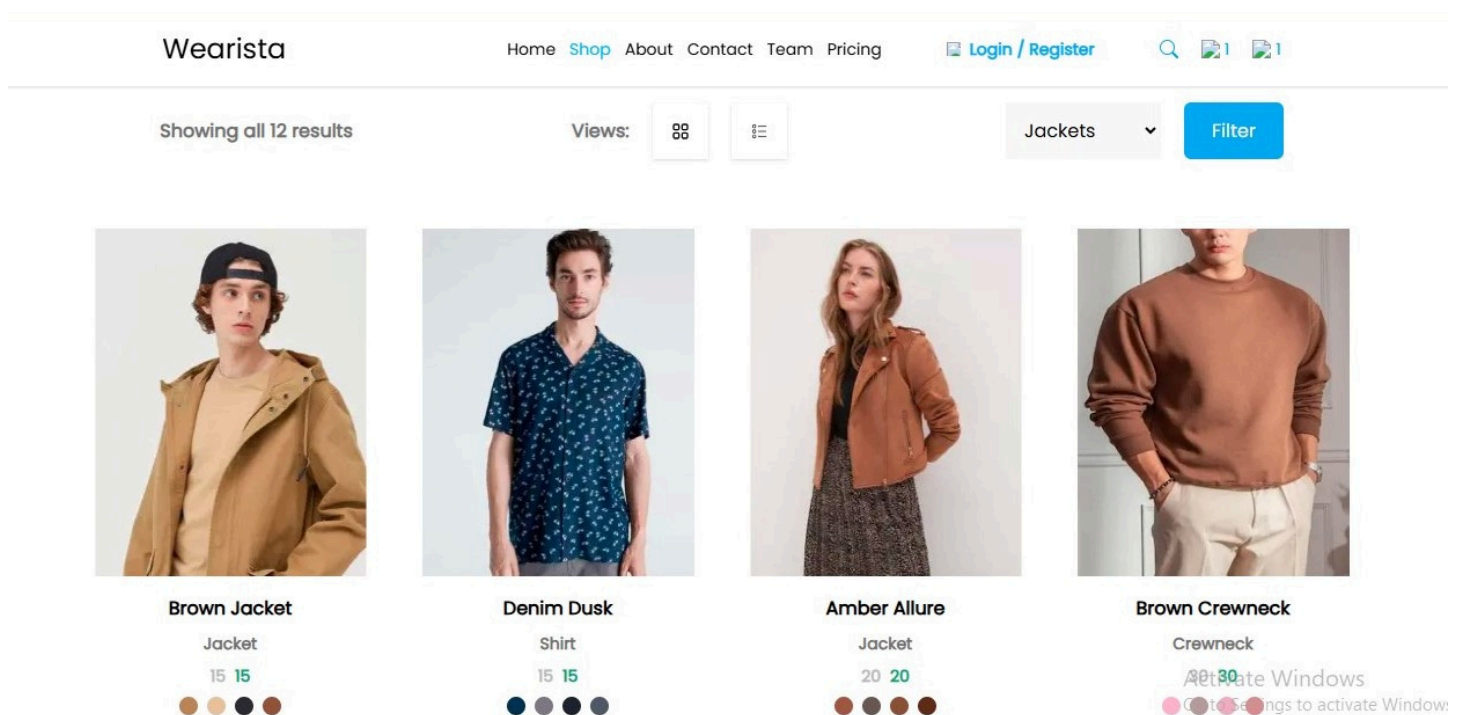
1. Functional Testing

The first task in e-commerce is to set up the Product Page as it is the backbone of every e-commerce web application. The product details must be displayed perfectly.

Key features implemented:

- Search Bar: Allows users to search for products easily.
- Filter Box: Helps filter products by category.
- Cart Operations: Includes adding/removing products, updating quantities, and viewing the cart.
- Product Detail Page: Displays comprehensive details of each product.

(Screenshot of implemented features will be included below.)



API Testing

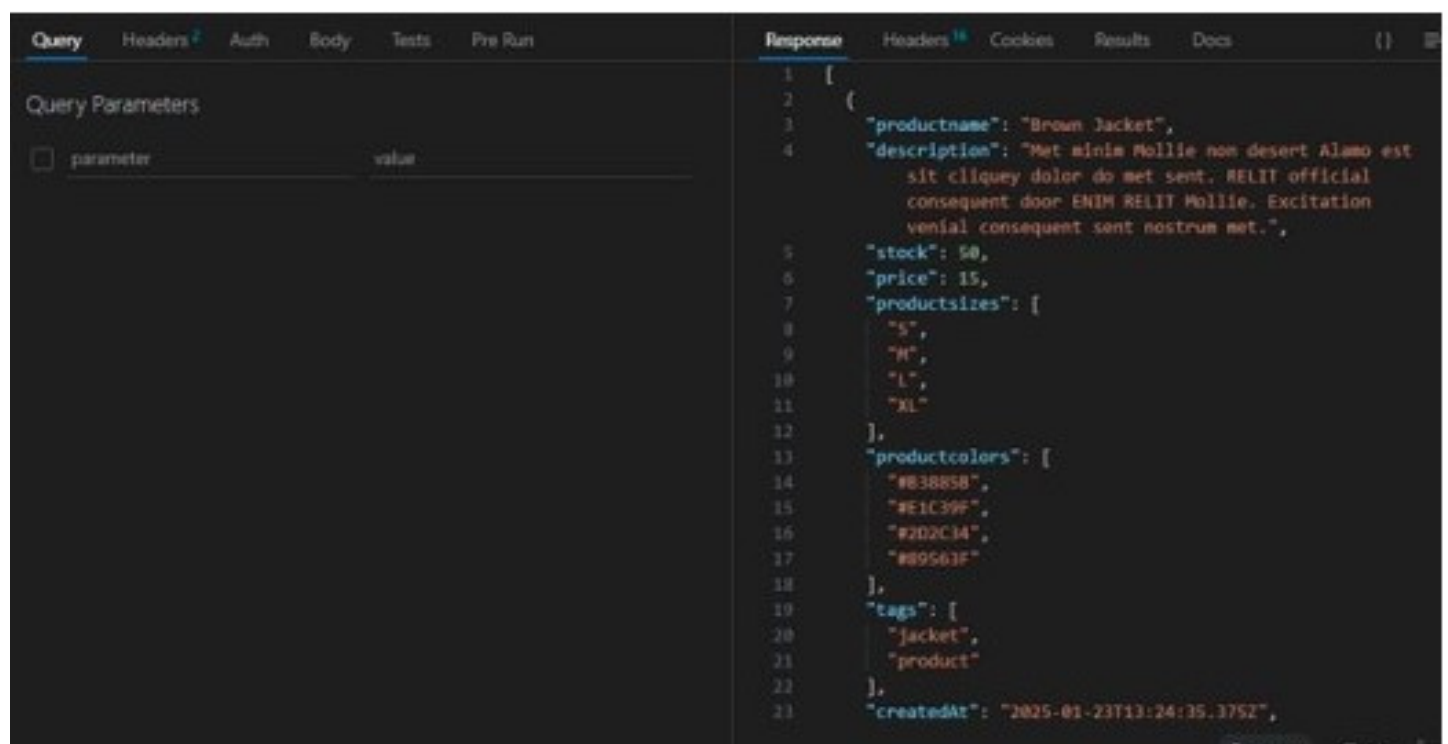
The next important task was testing our API since all product data comes from the API (Application Programming Interface).

Tools Used:

- Thunder Client (for quick API tests)
- Other testing platforms for comprehensive checks

Key tasks:

- Tested API endpoints for data consistency
- Verified error handling for failed requests
- Ensured correct data response formats



Error Handling

When we develop something, errors are inevitable, and our task is to handle them effectively. It's not just about solving errors in the code; it's about ensuring that any API request failures or unexpected issues are communicated clearly to the user.

In Next.js, we have various methods to handle errors. One key feature is the error.tsx file, which displays a user-friendly error page when an error occurs. This helps users understand

the issue without facing a blank screen or confusing messages. Clear fallback messages and proper error boundaries enhance the user experience and make the application robust.

```
'use client'
import ErrorPage from "@components/ErrorPage/ErrorPage"

function Error({
  error,
  reset,
}: {
  error: Error & { digest?: string }
  reset: () => void
}) {
  return (
    <ErrorPage error={error} reset={reset}/>
  )
}

export default Error
```

Performance Optimization

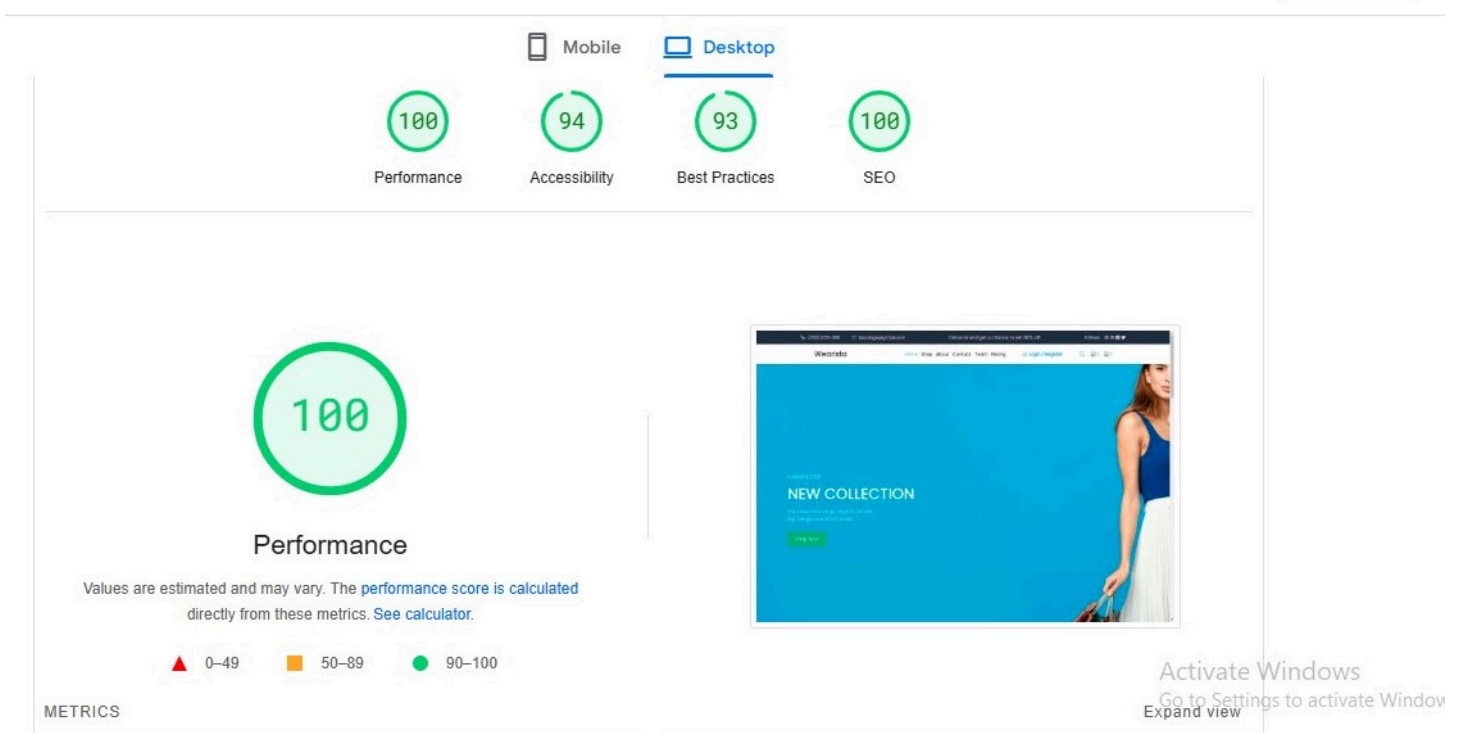
Think like a CEO monitoring employee performance—website performance matters just as much. We focused on:

- **Optimizing Load Times:** Ensuring quick load speeds on both desktop and mobile.
- **Reducing API Latency:** Streamlining API calls for faster responses.
- **Image Optimization:** Compressing images without losing quality.

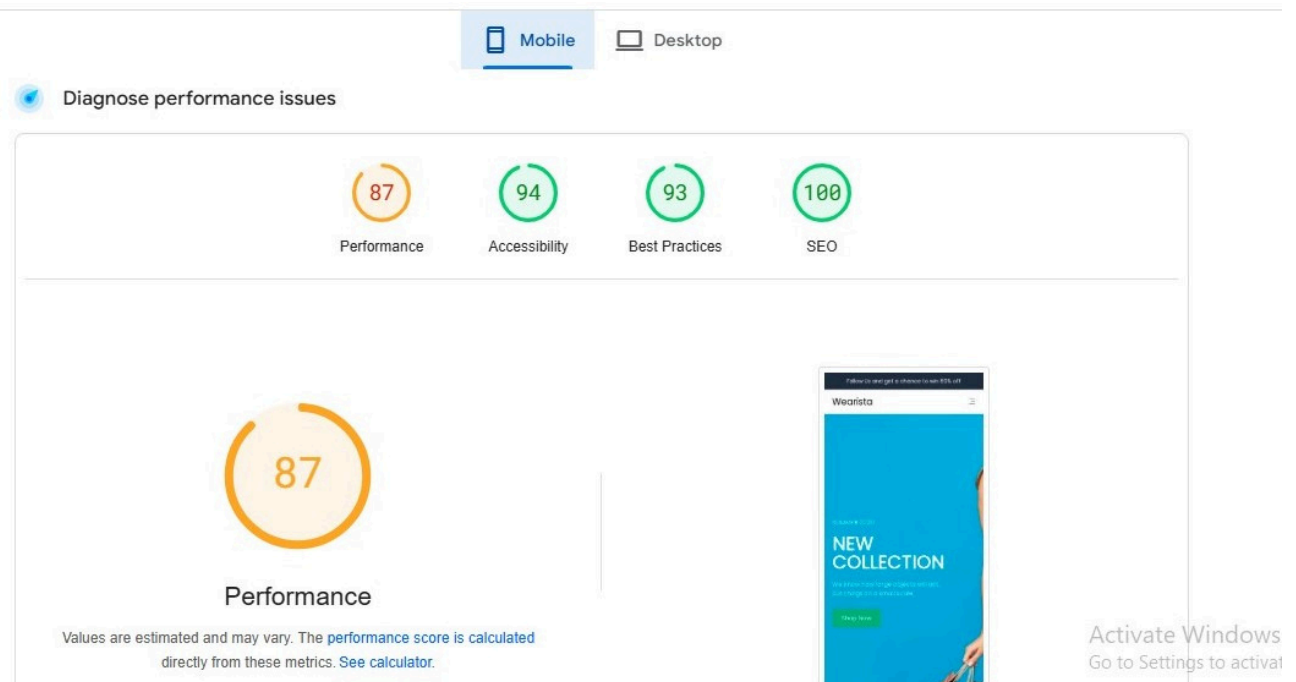
Performance Metrics:

- **Desktop Performance:** Optimized for speed and smooth navigation.
- **Mobile Performance:** Ensured responsiveness and quick interactions on mobile devices.

Desktop



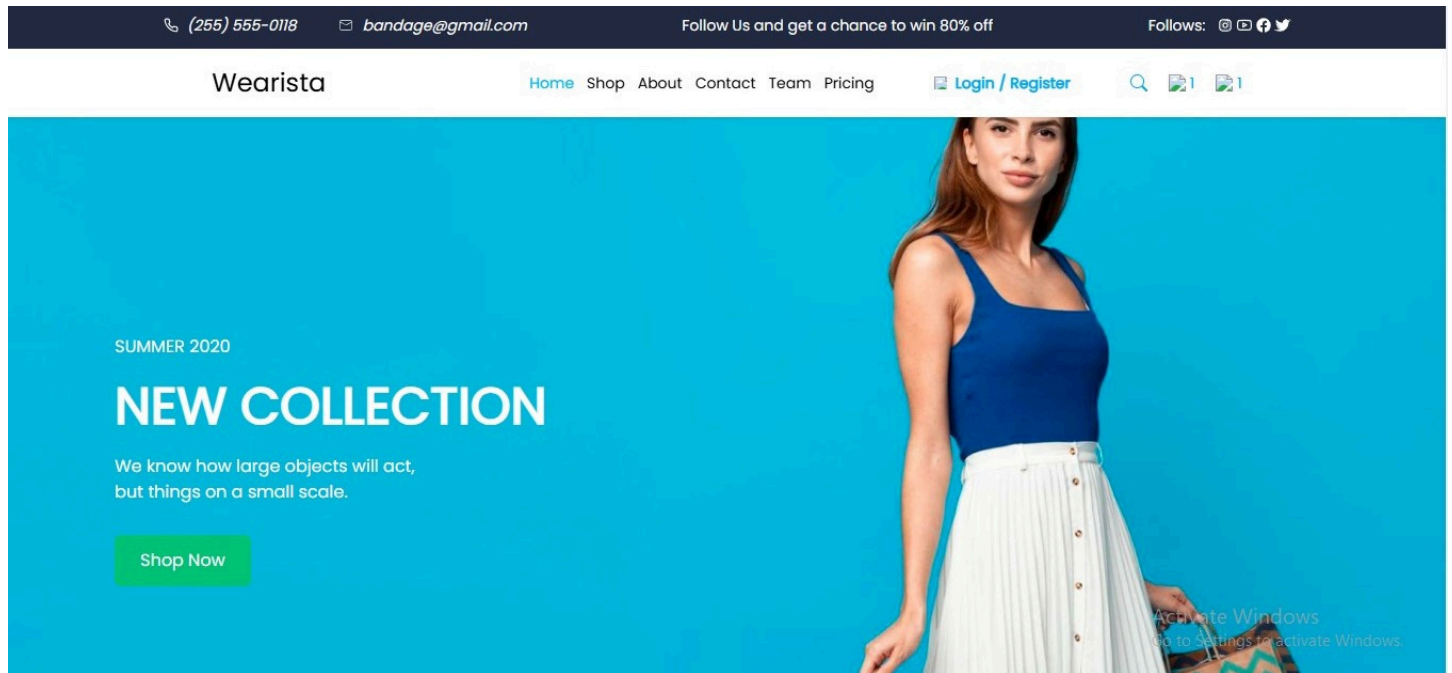
Mobile



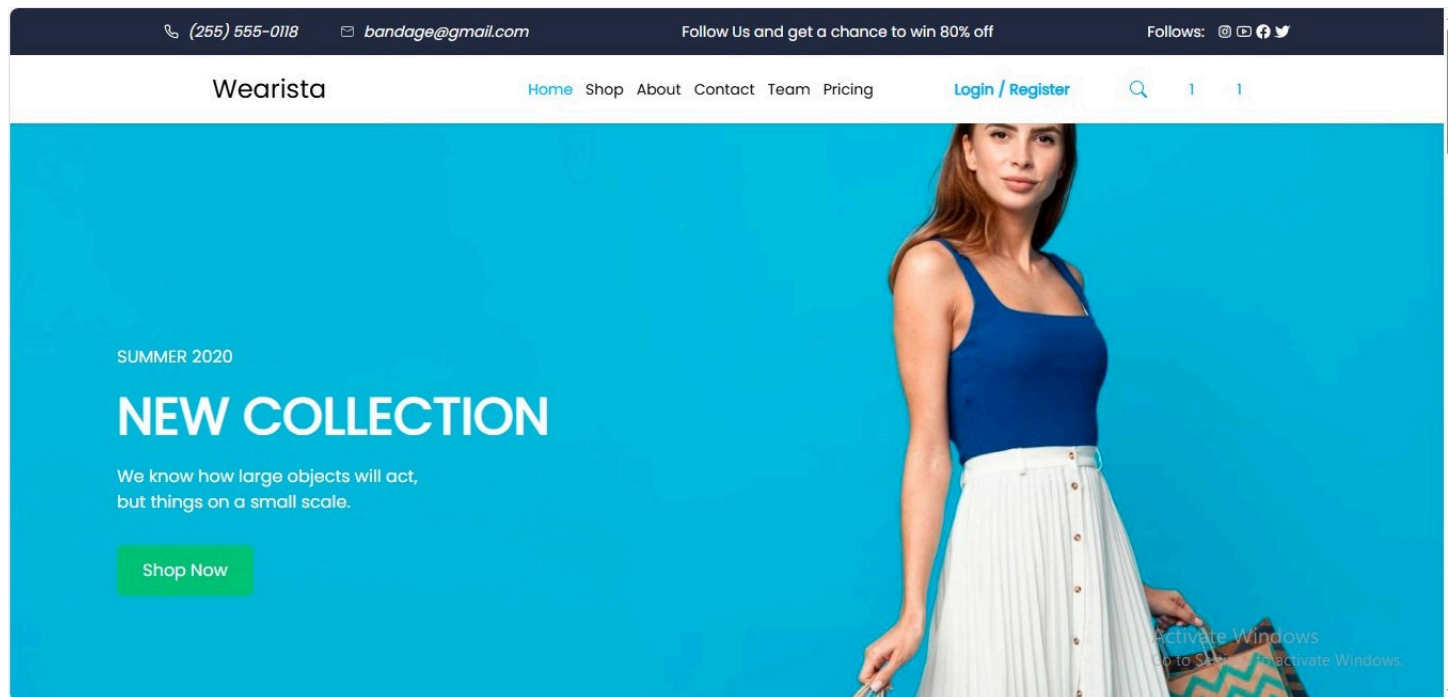
Cross-Browser and Device Testing:

To ensure broad compatibility, the web application must work seamlessly across different browsers like Chrome, Firefox, Safari, and Edge. It's essential to test the marketplace on various browsers and devices to confirm consistent perform

Microsoft Edge



Google Chrome



User Acceptance Testing (UAT):

Before launching, it's important to conduct thorough testing to verify that the web application works as intended. Testing the product multiple times helps identify potential issues, ensuring a smooth user experience.



Brown Jacket

★★★★☆ 10 Reviews

15

Availability: **InStock**

Met minim Mollie non desert Alamo est sit cliquey dolor do met sent. RELIT official consequent door ENIM RELIT Mollie. Excitation venial consequent sent nostrum met.



Select Options



Activate Window
Go to Settings to activate

Testing Report (CSV):

After completing testing, a professional documentation report should be created. This report includes detailed information about the web application's performance, functionality, and test results.

Challenges Faced:

Challenges are part of a developer's daily routine. Some of the key challenges faced during development included:

- Implementing search functionality
- Handling API integrations
- Optimizing pagination
- Managing error handling and responsiveness
- Key management and data migration

Future Enhancements:

The marketplace can evolve with additional features such as:

- Database connectivity
- Multi-language support
- Advanced user analytics

Showing all 12 results

Views:



Jackets



Filter



Brown Jacket

Jacket

15 15



Denim Dusk

Shirt

15 15



Amber Allure

Jacket

20 20



Brown Crewneck

Crewneck

30 30

