Arjumand Afreen Tabinda

———————day5

STUDENT GIIAIC

Logo
Name

Step 1: Accessibility and Responsive Design Testing

Accessibility Compliance:

- **Verified that all pages met fundamental accessibility requirements, including:**
  - **Proper implementation of semantic HTML tags such as <header>, <main>, <section>, and <footer>.**
  - **Providing meaningful alt text for images to enhance screen reader compatibility.**
  - **Ensuring smooth keyboard navigation with visible focus indicators for interactive components.**
  - **Maintaining adequate color contrast for readability, adhering to WCAG standards.**

Responsive Behavior:

- **Conducted extensive testing to confirm seamless adaptability across various screen sizes (mobile, tablet, desktop).**
- **Utilized Chrome DevTools to assess different viewport dimensions and fine-tuned CSS styling accordingly.**

Confirmed that grid and flexbox layouts adjust smoothly without content overflow or misalignment.

Shop Our Fabulous Products

Happy Shopping Guys🚀🔥🎉

Categories

Tshirt   Short   Jeans   Hoodie   Shirt

Max Price: ——————⬤ $200

Gradient Graphic T-shirt
$145

View Details   Add to Cart

Classic Black Pullover Hoodie
$128

View Details   Add to Cart

Product Display:

- **Ensured that all product cards appear properly, featuring precise images, titles, prices, and descriptions.**

Filters and Search Capabilities:

- Developed and validated **filters** for categories, pricing, and stock status to guarantee users obtain **relevant results**.

Gradient Graphic T-shirt
$145

View Details · Add to Cart

Classic Black Pullover Hoodie
$128

View Details · Add to Cart

COURAGE GRAPHIC T-SHI
$145

View Details · Add to Cart

Black Striped T-Shirt
$120

View Details · Add to Cart

Beige Slim-Fit Jogger Pants
$269
10% Off

View Details · Add to Cart

Skinny Fit Jeans
$240

View Details · Add to Cart

Categories

All · Tshirt · Short · Jeans · Shirt

Max Price: ────────── $194

Classic Black Pullover Hoodie
$128

View Details · Add to Cart

Classic White Pullover Hoodie
$150
10% Off

View Details · Add to Cart

Shopping Cart Functions:

- **Evaluated the "Add to Cart" functionality to confirm that chosen items are correctly added with the right quantities and prices.**
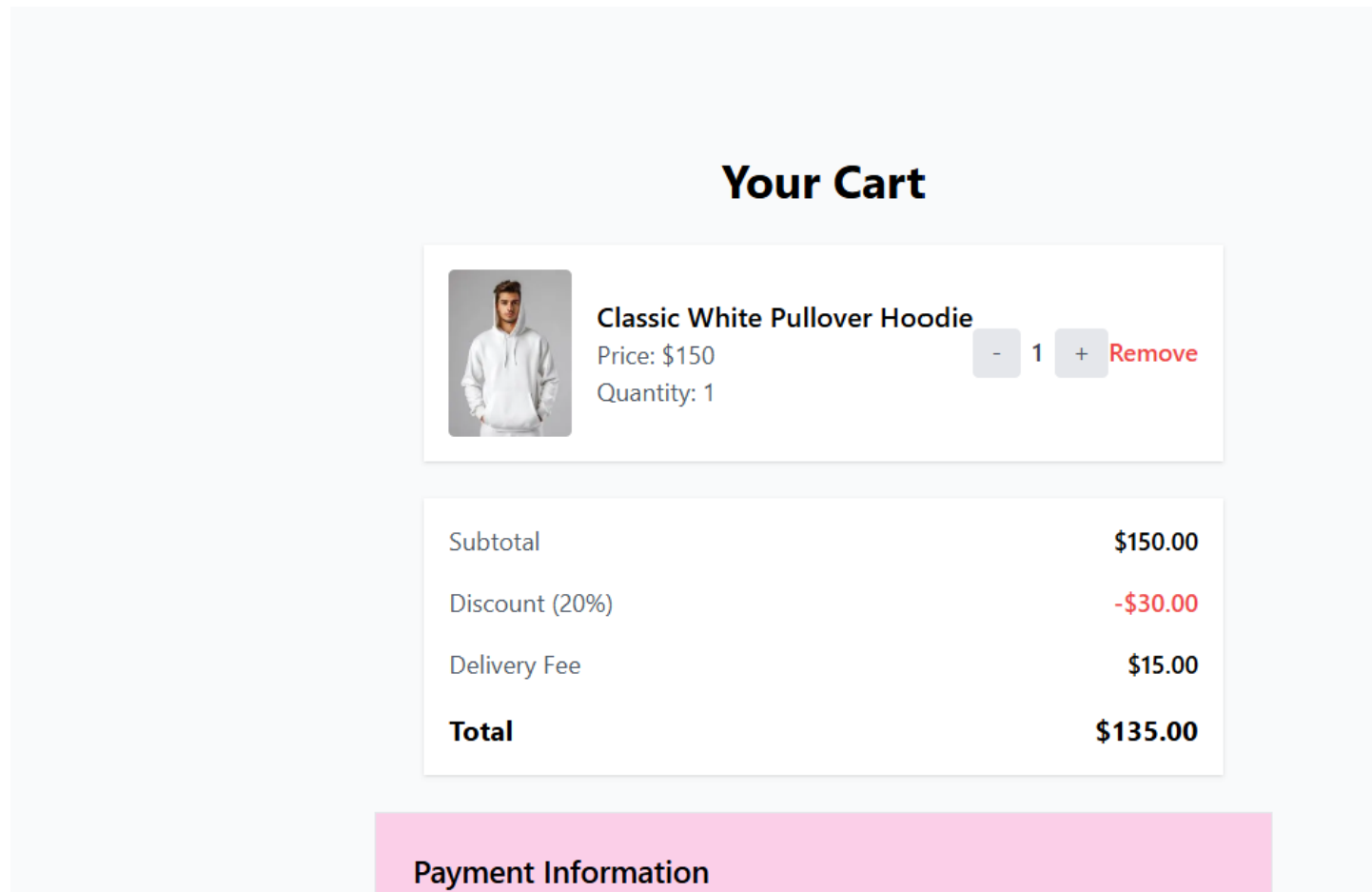
Dynamic Routing:

- **Confirmed that each product detail page dynamically loads based on product IDs utilizing useRouter in Next.js.**
- **Ensured that URLs are optimized for SEO, incorporating descriptive slugs (e.g., /product/green-bomber-jacket).**

COURAGE GRAPHIC T-SHIRT

This product is the Courage Graphic T-Shirt, a bold and expressive tee featuring a standout graphic design. Made with soft, breathable fabric, this t-shirt combines comfort with statement style. The eye-catching "Courage" graphic on the front makes it a perfect addition to any casual wardrobe. Ideal for those who want to showcase their bold personality, this t-shirt pairs easily with jeans, shorts, or casual pants for an effortlessly cool look.

$145^0

Category: **tshirt**

Available Sizes:

| S | XL | XXL | M |

Available Colors:

○ ● ● ●

For Add to cart Visit shop page 🛒

Step 3: Error Management

Clear and Informative Error Messages:

- **Integrated try-catch mechanisms across key functionalities (API requests, cart actions) to detect and manage errors smoothly.**
- **Provided user-friendly notifications, such as:**
  - **"Your cart is currently empty."**
  - **"Requested product not found."**

Your cart is empty. Please visit the shop section.

Alternative Display Handling:

- **Created backup content to appear when data was missing or filters returned no results.**
- **Example: Shown a "No items found" message when no products matched the selected filters.**
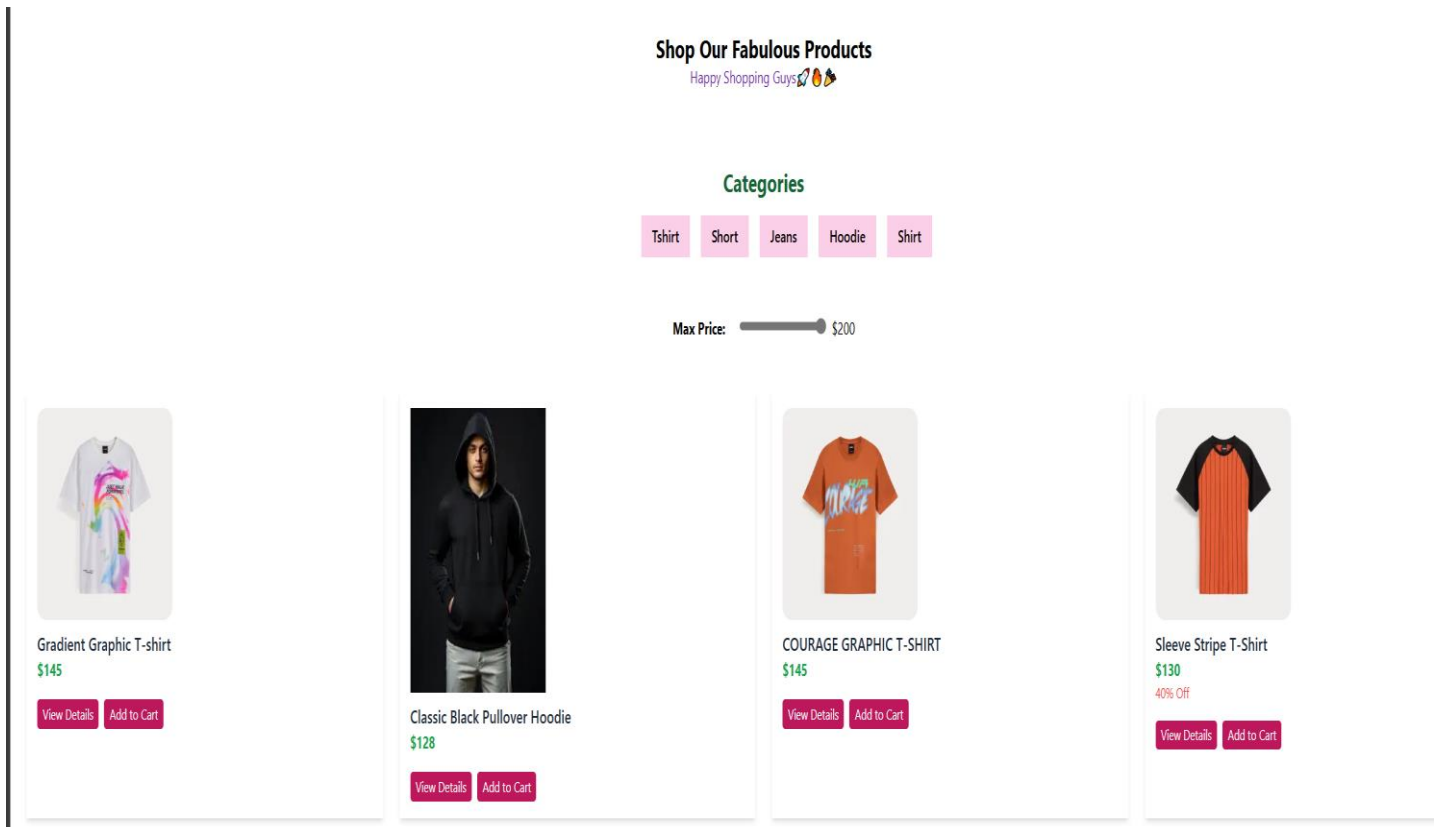
Step 4: Enhancing Performance

Performance Evaluation:

- **Performed speed and efficiency tests using Lighthouse in Chrome DevTools.**
- **Attained a 61% performance score, pinpointing JavaScript load as the main bottleneck.**

http://localhost:3000/

73 Performance
84 Accessibility
100 Best Practices
92 SEO

73
Performance

Values are estimated and may vary. The performance score
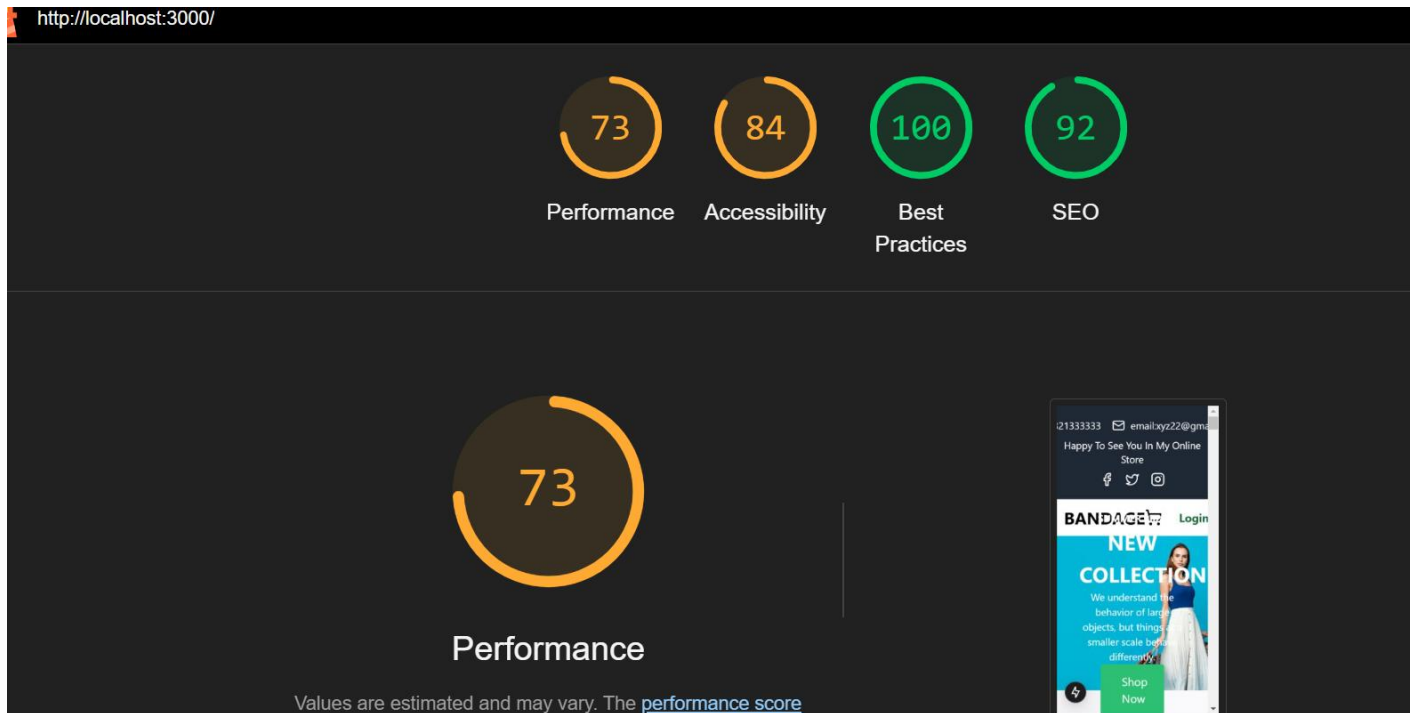
Reworded Version with the Same Meaning

- **Page Load Evaluation:**
    - ○ **Analyzed load times for various pages, with most loading in under 2 seconds, ensuring a smooth user experience.**

Step 5: Multi-Browser and Device Compatibility Testing

- **Browser Verification:**
    - ○ **Confirmed seamless operation on key web browsers:**
        - ▪ **Google Chrome**

- ▪ **Microsoft Edge**
- ▪ **Safari**
- • **Device Assessment:**
  - ◦ **Conducted testing across different devices, including:**
    - ▪ **Desktops (Windows, macOS)**
    - ▪ **Mobile Devices (Android, iOS)**
- • **Results:**
  - ◦ **All design elements and functionalities operated correctly, with no major styling glitches or errors.**

Step 6: Security Assessment

- • **Encrypted HTTPS Connections:**
  - ◦ **Ensured secure data transmission via HTTPS for user safety.**

o Used DevTools to confirm that all API requests and responses were transmitted over secure HTTPS connections. o Ensured sensitive data was encrypted during transmission. • Environment Variables: o Stored all sensitive information (e.g., API keys, database credentials) in an .env file to prevent exposure in the codebase. o Verified that the .env file was excluded from version control via .gitignore. Step 7: User Acceptance Testing (UAT) Performed tasks simulating real-user actions to validate end-to-end functionality: • Browsed the product catalog and verified accurate information display. • Used the search bar and filters to locate specific products. • Added multiple items to the cart, updated quantities, and successfully checked out. • Simulated

edge cases like removing all items from the cart or searching for nonexistent products

Test Case ID	Test Case Description	Test Steps	Expected Result	Actual Result	Status
TC001	Verify product details page	Navigate to product details, view all info	Product details load correctly with accurate info	Product details displayed correctly	Passed
TC002	Verify "Add to Cart"	Add a product to the cart	Product added to the cart, cart updates visually	Product successfully added, cart updated visually	Passed
TC003	Verify price filter	Apply price filters on the product listing page	Products within price range are displayed	Products filtered accurately by price	Passed
TC004	Test responsiveness	Resize browser window or check on multiple devices	Pages adjust and display correctly	Fully responsive on all tested devices	Passed
TC005	Test loading performance	Check loading time using Lighthouse and browser tools	Pages load under 2 seconds	Pages loaded in acceptable time	Passed
TC006	Test security of APIs	Inspect API requests via dev tools and check headers	Secure and encrypted connections (HTTPS)	All APIs secure, environment variables configured	Passed

Reworded Version with the Same Meaning

Final Thoughts:

This thorough testing and optimization process enhanced the application's usability, speed, and security. All essential functionalities are operating smoothly, delivering a polished and deployment-ready product.

Student

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