

## Day 4 - Dynamic Frontend Components

### Media Mart Functional Deliverables

#### 1. Product Listing Page with Dynamic Data

- **Description:** The product listing page dynamically displays products using a manually exported JSON dataset. Each product includes its image, name, price, and a brief description, presented in a clean and visually appealing layout to enhance user experience.

#### 2. Individual Product Detail Pages with Accurate Routing and Data Rendering

- **Description:** Each product detail page dynamically renders detailed information for the selected product, including the title, full description, price, and related images. Leveraging accurate dynamic routing ensures users are directed seamlessly to the correct product page based on their selection.

#### 3. Working Category Filters, and Search Bar

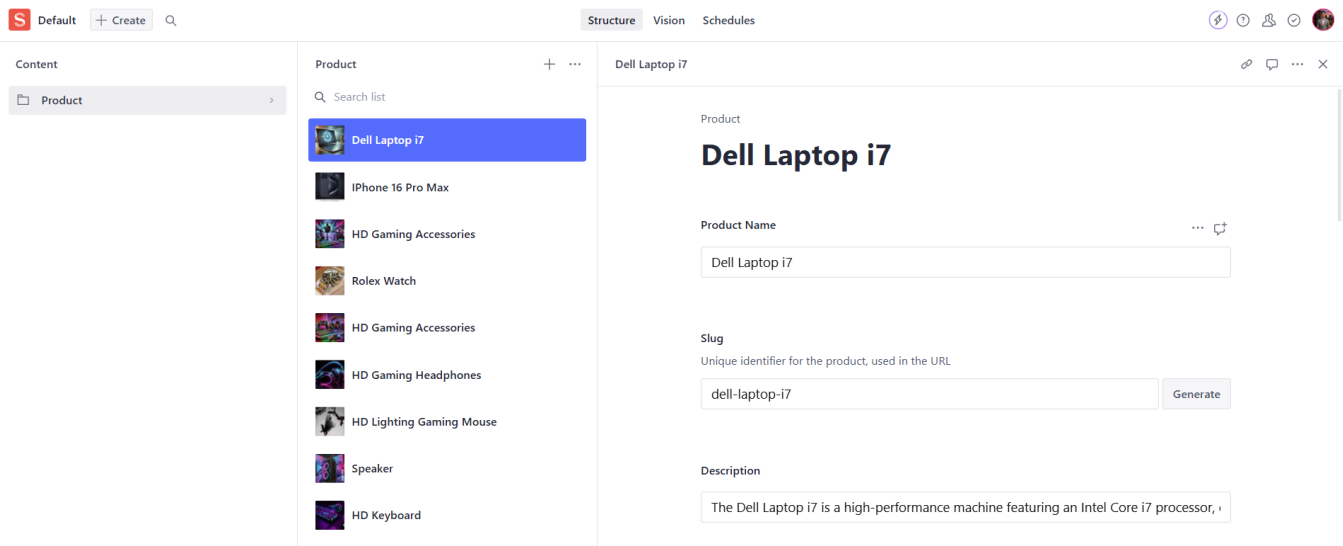
##### ➤ *Screenshots/Recordings:*

- Demonstration of category filters.
- Search bar in action.

- **Description:**

- Category Filters: Enables filtering of products based on categories like
- "Electronics," "Home Appliances," etc., allowing users to narrow down their preferences.
- Search Bar: Offers real-time search functionality, dynamically
- filtering products as users type keywords.

## 1. Product Listing Page with Dynamic Data



- **Description:** The product listing page dynamically displays products using a manually exported JSON dataset. Each product includes its image, name, price, and a brief description, presented in an aesthetically pleasing format.



## 2. Individual Product Detail Pages with Accurate Routing and Data Rendering

Get special price up to 50% off our products

English USD

Media Mart

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### HD Gaming Accessories

**\$300.00** ~~\$390.00~~

★★★★★ (0 reviews)

Upgrade your gaming experience with HD Gaming Accessories, designed for performance, precision, and comfort. Whether you're a casual gamer or a professional, these accessories provide the perfect balance of style and functionality. Featuring advanced technology, RGB lighting, and ergonomic designs, these accessories will take your gameplay to the next level. Key Features:

- 🎮 RGB Mechanical Keyboard – Customizable lighting with tactile and responsive keys for fast and accurate typing.
- 🖱️ High-Performance Gaming Mouse – Adjustable DPI, ergonomic grip, and LED effects for precise control.
- 🎧 Premium Gaming Headset – Surround sound, noise-canceling microphone, and soft ear cushions for immersive gameplay.
- 🎮 Pro Gaming Controller – High-speed response triggers, customizable buttons, and a comfortable grip.
- ⚡ Ultra-Low Latency & Fast Response – Ensures smooth gameplay with instant reactions.
- 💡 Futuristic Design – Neon-lit aesthetics for an ultimate gaming atmosphere. Perfect For: Esports professionals, streamers, and casual gamers who want top-tier accessories for an immersive and competitive gaming setup.


 Add to Cart

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English USD

Media Mart

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25% OFF

### HD Keyboard

\$39.00 ~~\$40.75~~

★★★★★ (0 reviews)

About this item **Ergonomic Design:** This ergonomic keyboard features a wave-shaped key layout that aligns with your hands' natural position, reducing strain and improving typing comfort. The UV-coated keycaps enhance the durability of this backlit keyboard for long-lasting use. **Soft Wrist Rest:** The ergonomic keyboard includes a leather wrist rest that provides extra support, reducing wrist fatigue during extended typing sessions. **Great for work and gaming,** it promotes a more comfortable typing experience. **7-Color RGB Backlighting:** The light-up keyboard offers 7 customizable colors and 4 brightness levels. Easily switch between lighting modes using FN + M1/M2/M3 to suit your environment or mood, enhancing both the functionality and aesthetic of your wired keyboard. **Convenient Device Stand:** The computer keyboard features a built-in groove to hold your phone, tablet, or other devices. This practical stand helps you stay organized and multitask efficiently while using your USB keyboard for both work and entertainment.

**Key Features:**

- 13th generation lighting keyboard


Add to Cart

Get special price up to 50% off our products

English USD

Media Mart

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20% OFF

### Dell Laptop i7

\$999.00 ~~\$1199.00~~

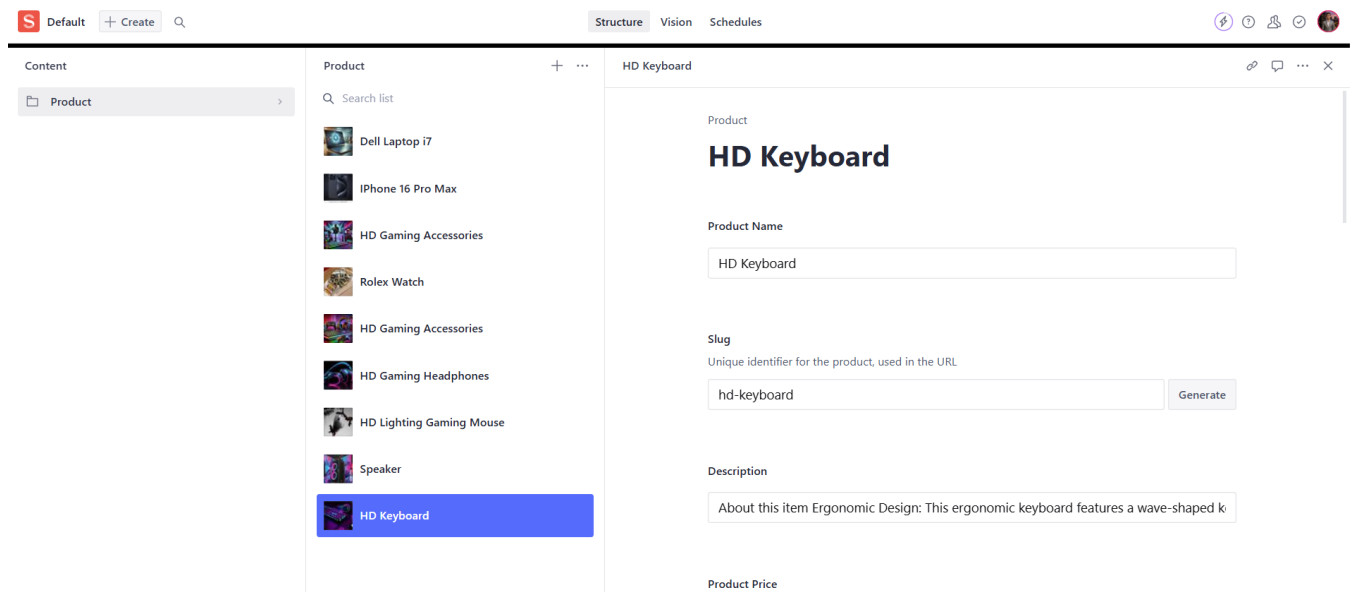
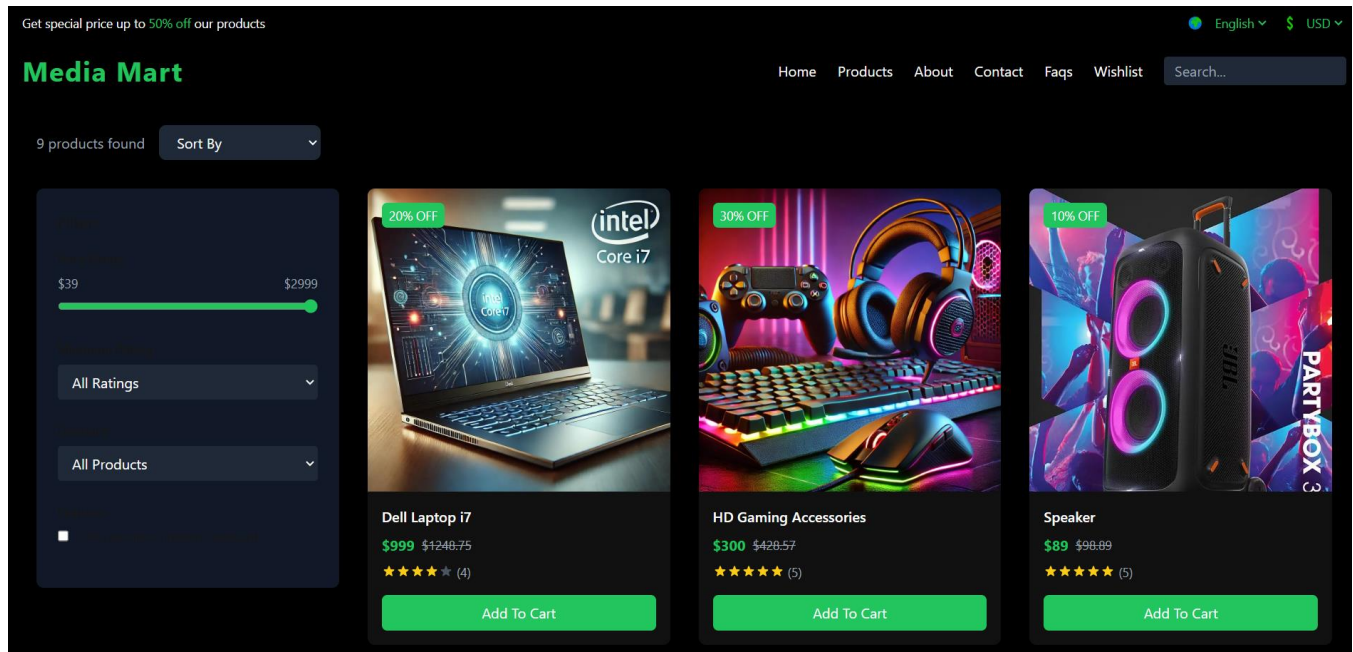
★★★★★ (0 reviews)

The Dell Laptop i7 is a high-performance machine featuring an Intel Core i7 processor, delivering exceptional speed and multitasking capabilities. Perfect for professionals and gamers alike, it combines sleek design with powerful hardware for productivity and entertainment.

Add to Cart

- **Description:** Each product detail page dynamically renders data for the selected product, including the title, full description, price, and related images. Accurate dynamic routing ensures users are directed to the correct product page based on their selection.

### 3. Working Category Filters, Search Bar, and Pagination



## Contact Us

### Let's Connect

First name

Email

Phone number

Description

This site is protected by reCAPTCHA and the Google Privacy Policy and Terms of Service apply.

Send Message



- **Screenshots/Recordings:**

- Demonstration of category filters.
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- **Description:**

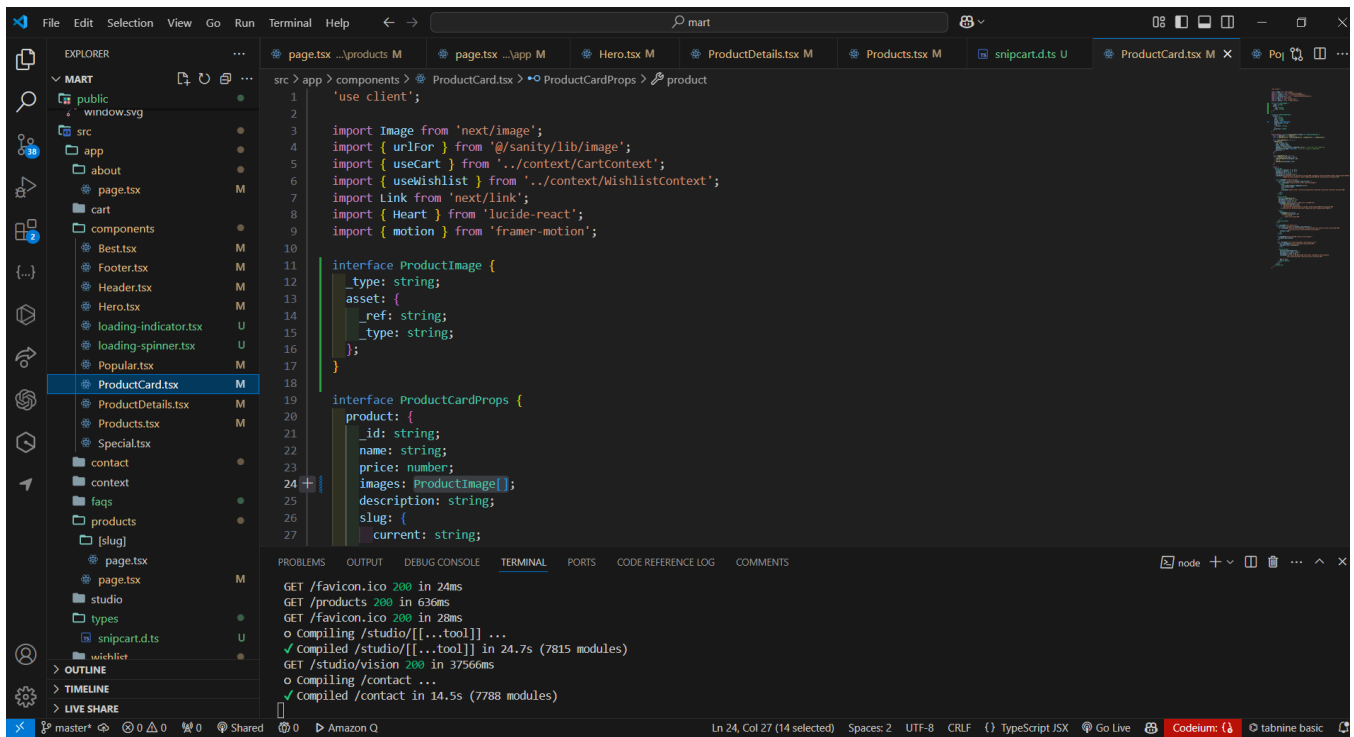
- **Category Filters:** Filters products based on categories like "Electronics," "Home Appliances," etc.
- **Search Bar:** Provides real-time search functionality, filtering products dynamically as users type.



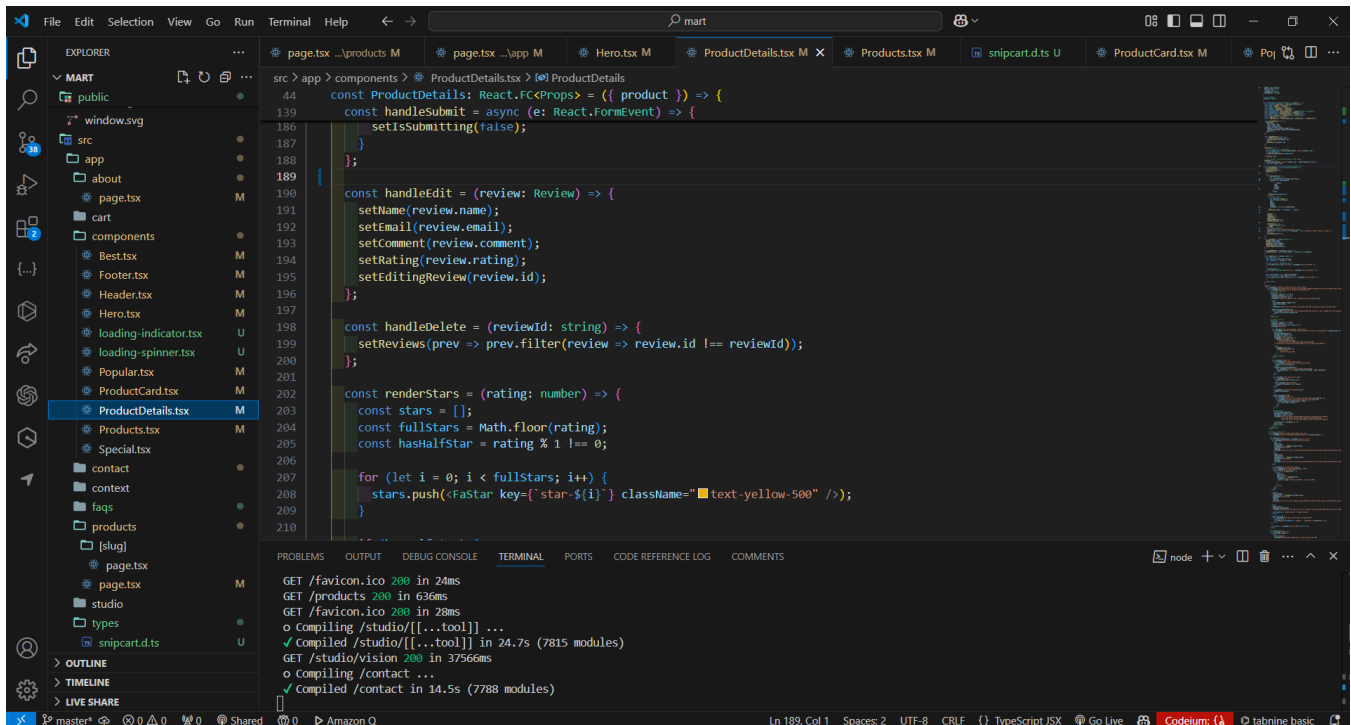
## Code Deliverables

## Key Components

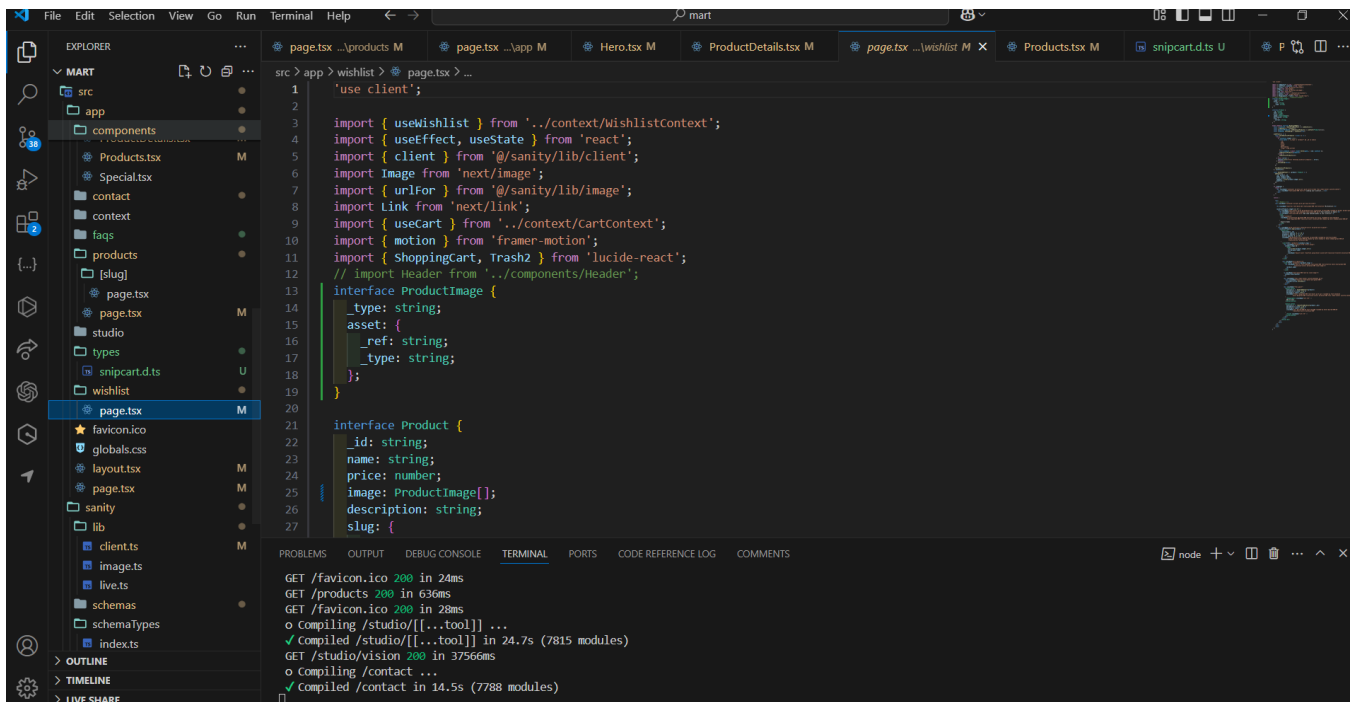
## Product Card Component



## Review Component

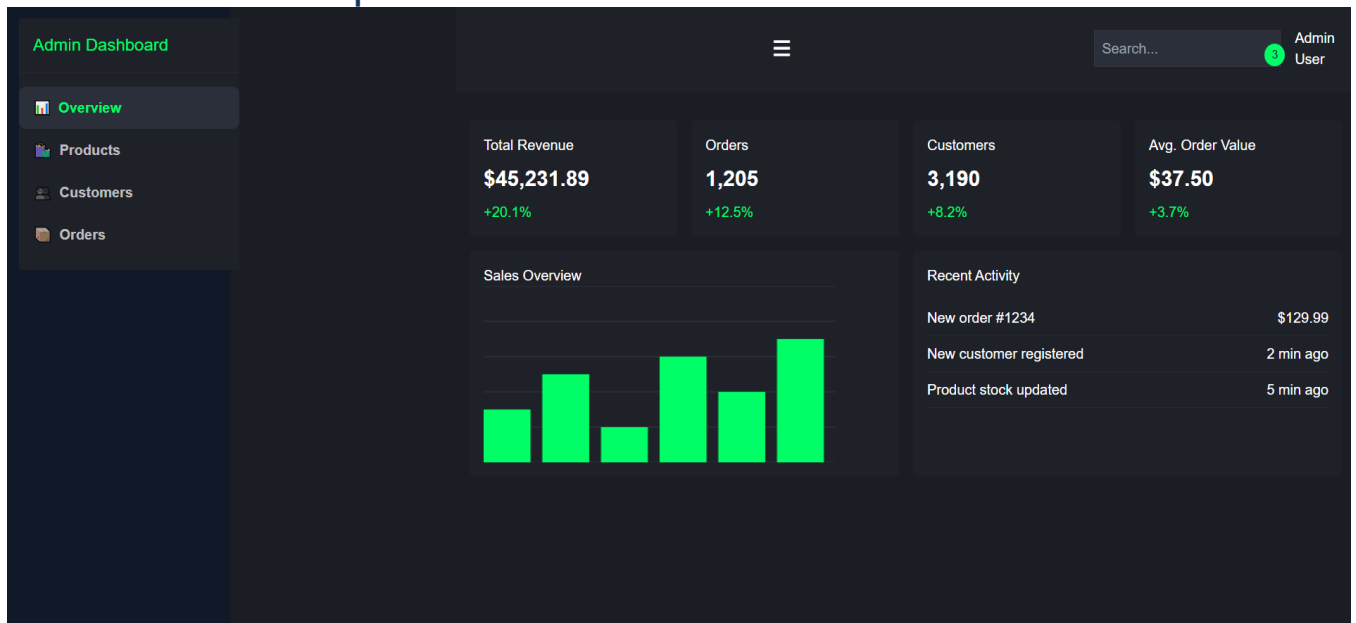


## Whish List Component





## Admin Dashboard Component



## Login Page

The Login Page is a dark-themed interface with a central shield icon and the text 'SECURE ACCESS TERMINAL'. It features two input fields: the first contains the email 'saadmohsin123@gmail.com' and the second is masked with dots. Below the fields is a green button labeled 'INITIATE LOGIN SEQUENCE'.

saadmohsin123@gmail.com

\*\*\*\*\*

INITIATE LOGIN SEQUENCE

## Documentation:

### Steps Taken to Build and Integrate Components

#### 1. Data Preparation:

- Created a JSON dataset with fields such as id, name, price, image, and category.

## 2. **Component Development:**

- Built reusable components, including Product Card, Product List, and Search Bar.
- Developed additional components like cart, add-to-cart, and user profile sections.

## 3. **Dynamic Routing:**

- Implemented Next.js dynamic routing for product detail pages.

## 4. **UI/UX Enhancements:**

- Added category filters, search functionality, and pagination.
- Styled components using Tailwind CSS for responsiveness and consistency.

## **Challenges Faced and Solutions Implemented**

### 1. **Efficiently Rendering Large Datasets:**

- **Solution:** Implemented pagination to improve performance and load times.

### 2. **Maintaining Consistent Routing and Data Handling:**

- **Solution:** Utilized Next.js dynamic routing and centralized data in a JSON file.

### 3. **Creating Responsive and User-Friendly Components:**

- **Solution:** Applied Tailwind CSS for styling and ensured a responsive design for various devices.

## Best Practices Followed

- Adopted a modular component structure for code reusability.
- Used TypeScript for enhanced type safety and error prevention.
- Ensured responsive designs for optimal user experience on both mobile and desktop.

## Components Developed for “Media Mart”

- Accordion
- Product Card
- Product List
- Search Bar
- Image Gallery
- Add-to-Cart
- Wish List
- Pagination
- Header
- Footer
- Admin Dashboard
- Login
- Payment Method(Snip Cart)

## Conclusion

The **Media Mart** e-commerce platform demonstrates the power of dynamic frontend components in creating an engaging and functional user experience. By utilizing reusable components, efficient data handling, and responsive design principles, the platform successfully combines usability and performance. Key features such as dynamic routing, category filters, search functionality, and pagination ensure smooth navigation and interaction for users. The challenges encountered during development were effectively addressed through best practices, making the platform robust and scalable. **Media Mart** is a testament to the effectiveness of modern front-end technologies and thoughtful design in crafting user-centric digital solutions.

Best Regards

**Web G Media Agency teams**