

CHRONO-E-COMMERCE DOCUMENTATION

Project Name: Chrono-E-Commerce.

Type: E-Commerce.

Created by: Arsalaan Sairab

Tech: React-ESlint.

Paid/Free: Free.

Description:

The Chrono-E-Commerce is a web-application created by using technologies like React and ESLint. The webapp has a good UI with good accessibility and easy interface. The app is available in two themes white and dark, users can switch according to their wish. Users can browse products can also add them to cart and finally place their order.

The app usually helps different types of people to showcase their products and advertise them across the internet without paying anything. Just add the products and send the link to the people who wants to check your products and that's it. Users can also make it their shop website as it sells their products and advertise them.

There are different types of pages which serves different products like electronics, grocery and clothes etc. The users can add their products accordingly and can also remove the page which doesn't match their product.

The webapp contains the following pages:

- | | | |
|--------------------------------|----------------------------|---------------------|
| 1) Home page (landing page). | 2) smart watches/ mobiles. | 3) Grocery. |
| 4) About page. | 5) Cart page. | 6) Admin dashboard. |

We will see what each page does, serve and what it's functionality.

1) Home Page:

What it Does:

The Home page is the landing and main entry point to the e-commerce application. It displays featured products, highlights key product categories through banner sections, and calls users to browse different product categories. It's designed in a way to give users an idea about the webapp.

Key Features:

A. Hero Section

A promoted banner on top with striking imagery, along with call-to-action buttons

Built using the Hero component from src/components/Hero.js

Grabs the immediate user attention on landing onto the site.

B. Section of Features Products

Product listing- displays 6 handpicked products from the entire product catalog (first 6 items)

Uses the ProductList component to render product cards in a grid layout

Includes a "View All Products" button that routes to /products

Each product card depicts the following: an image, the name of an item, price in INR ₹, rating using stars, a quick description, and an "Add to Cart" button.

C. Category Banner Sections:

Smart Watches & Wearables - Covers activity trackers, smartbands, and smartwatches.

Image: Professional photo of smartwatches

Description: "Come and explore our unique collection of smartwatches and fitness trackers.

From classy smartwatches to pro fitness trackers, choose the perfect wearable to best suit your lifestyle.

Button: "Explore smart-watches" → links to /category/smart-watches

Latest Smartphones - Features premium and budget smartphones.

Image: A collection of modern smartphones

Description: Inscribed with state-of-the-art displays, powerful processors, and cameras that boast of updated capabilities.

Button: "Explore smart-mobiles" → /category/smart-mobiles

Premium Laptops & Computing - Features high-performance laptops.

Image: Professional laptops in action

Description: Discover a range of power-packed laptops and computing devices that cater to all needs.

Fresh Grocery & Essentials: Comprises of daily needs.

Image: Fruits and other groceries

Description: "Shop fresh groceries and everyday essentials delivered right to your door."

Each banner uses alternating layouts - for visual variety (reverse=true/false).

D. Section for Testimonials/Reviews.

Displays customer ratings and reviews

It is building trust through social proof.

E. Newsletter Subscription Section.

Email input field for newsletter signup

"Subscribe Now" button to capture information about the user.

Encourages users to stay up-to-date with offers and announcements.

How It's Made:

Technology Stack:

- Built with React using functional components and hooks
- Material-UI for UI components (Container, Box, Grid, Typography, Button)
- Framer Motion for smooth animations
- React Router for links to navigate
- styled-components for custom styling
- Key Code Structure:

Details of animation:

- Uses motion.div components with initial/animate/whileInView attributes
- Fade-in animations on scroll using whileInView
- Products animate with opacity and y-position changes
- The text elements are staggered with delays for an elegant effect.
- Scale animations on category banners

CHRONO E-COMMERCE

- [Home](#)
- [Watches](#)
- [Mobiles](#)
- [Laptops](#)
- [Grocery](#)
- [About](#)
- [Cart](#)

PREMIUM SELECTION

Your One-Stop E-Commerce Destination

Discover a wide range of products from smart watches and mobiles to laptops and groceries. Shop with confidence at CHRONO E-COMMERCE.

[Shop Now](#) [Browse Categories](#)

500+ Products **10k+** Happy Customers **4.9** Star Rating

SMART-WATCHES

Smart Watches & Wearables

Discover our exclusive collection of smart watches and fitness trackers. From elegant smartwatches to advanced fitness trackers, find the perfect wearable to match your lifestyle. Each device is designed with cutting-edge technology and premium quality.

[Explore smart-watches](#)

Our Products

Explore our collection of premium products.

Sort By: **Featured**

Showing 6 products

<p>Smart-watches ★★★★★ Apple Watch Series 9 Advanced smartwatch with health monitoring, GPS, and cellular connectivity.</p> <p>₹35999.10 Add to Cart</p>	<p>Smart-watches ★★★★★ Samsung Galaxy Watch 6 Premium smartwatch with fitness tracking and sleep monitoring capabilities.</p> <p>₹31499.10 Add to Cart</p>	<p>Smart-watches ★★★★★ Fitbit Versa 4 Fitness-focused smartwatch with comprehensive health metrics and workout modes.</p> <p>₹17999.10 Add to Cart</p>
<p>Smartphones ★★★★★ iPhone 14 Pro The latest iPhone model with a triple-camera system and improved battery life.</p> <p>₹12999.10 Add to Cart</p>	<p>Smartphones ★★★★★ Google Pixel 7 Pro A high-end smartphone with a 6.7-inch OLED display and a 50MP camera.</p> <p>₹11999.10 Add to Cart</p>	<p>Tablets ★★★★★ Huawei MatePad Pro 11 A sleek tablet with a 12.6-inch screen and a long battery life.</p> <p>₹10999.10 Add to Cart</p>

2. DIFFERENT PRODUCT CATEGORY PAGES

What it does:

Category pages help users find products easily by showing items grouped under a specific category.

Each category has its own page with related products only.

These pages help users quickly reach the products they want without searching the full store.

Product List Section

- Shows all products of the selected category
- Products are fetched using
`getProductsByCategory(category)`
- Products are shown in a grid card layout
- Each product card shows:
 - Product image
 - Name
 - Price
 - Rating
 - Short description
 - **Add to Cart** button

Product Filtering Process (Important)

1. The user selects a category (for example: Electronics).
2. This function first collects all products that belong to the selected category.
3. After category filtering, the user can apply **sorting options**:
 - Price: Low to High
 - Price: High to Low
 - Highest Rated Products
 - Product Name (A to Z)
4. The selected sorting option rearranges the already filtered product list.
5. The updated and sorted products are returned to the page.
6. The page displays products based on the selected category and sorting option.

This process ensures fast loading, accurate results, and a better shopping experience.

How Each Filter Works.

❖ Price: Low to High

Products are arranged from cheapest to most expensive, helping users find budget-friendly items first.

❖ Price: High to Low

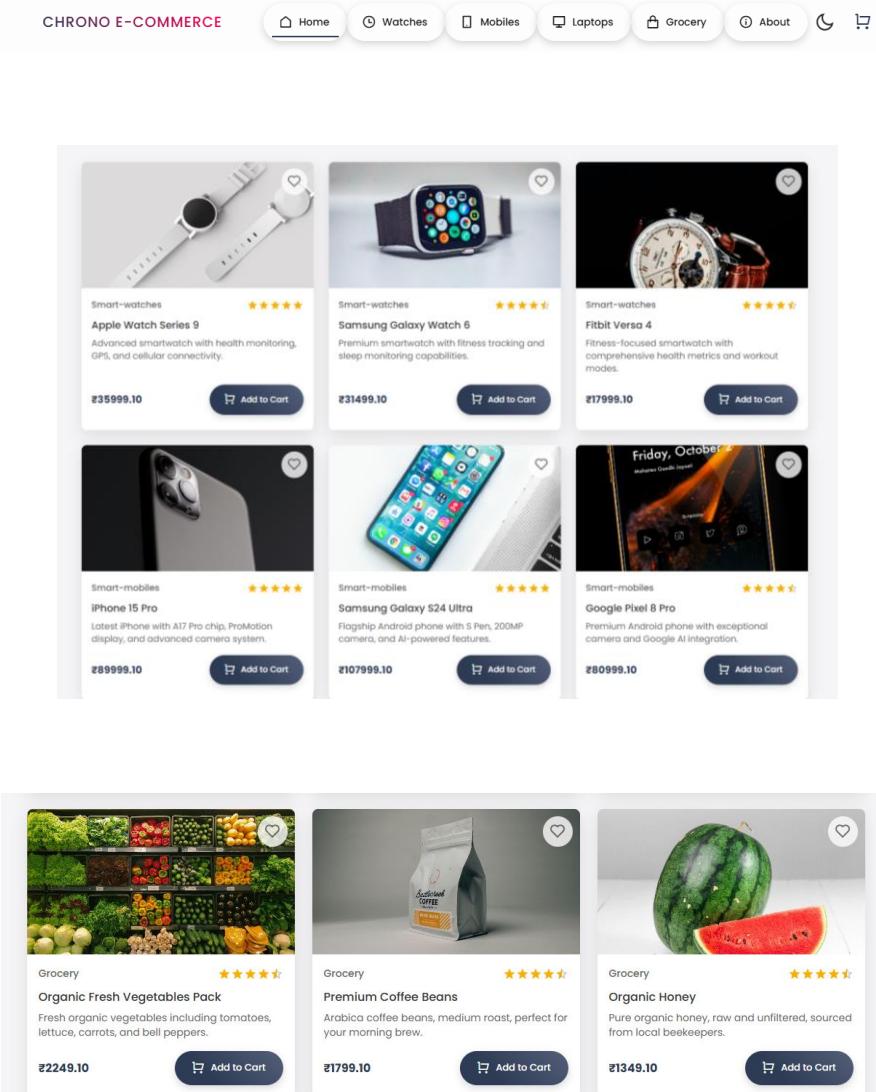
Products are arranged from most expensive to cheapest, useful for users looking for premium items.

❖ Highest Rated

Products are sorted based on customer ratings, showing the best-reviewed products at the top.

❖ Name (A to Z)

Products are sorted alphabetically by name, making it easy to find items quickly.



3. ADMIN LOGIN PAGE (/admin/login)

What it Does:

The AdminLogin page is an authentication gateway that securely authenticates administrators to an admin panel where they can add, edit, and delete products. It follows the structure of a professional login interface, like credentials verification, which has to be filled out by a user; session control is performed based on that.

Authentication:

- Only verified users can login to it.
- Any other user not listed in the app will see an error message that indicates the credentials are invalid.

Authentication Logic:

Security Implementation:

- Credentials stored in component state (simplified way for demo)
- Persists authentication session by using localStorage.
- Admin Dashboard checks adminAuthenticated flag on mount
- If not authenticated, redirects back to the login page.

The screenshot shows the Chrono E-commerce Admin Login page. At the top is a logo icon consisting of a white shopping cart inside a red rounded square. Below it, the text "CHRONO E-COMMERCE" and "Admin Login" are displayed. A sub-instruction "Enter your credentials to access the admin dashboard" is present. There are two input fields: "Username *" with placeholder "User" and "Password *" with placeholder "*****". Both fields have small icons for user and lock. Below the inputs is a large blue "Login" button. At the bottom left is a "Back to Store" link.

The screenshot shows the same Admin Login page as above, but with an error message. Above the input fields, the text "Enter your credentials to access the admin dashboard" is followed by a red error box containing the message "Invalid username or password". The "Username" field now contains "User" and the "Password" field contains "*****". The "Login" button is still present at the bottom.

4. ADMIN DASHBOARD PAGE (/admin/dashboard)

What it Does:

The AdminDashboard is where control is effected by an administrator. It provides a full interface for managing the inventory of products, thus allowing admins to add new products, view all dynamically added products, delete products, and manage product features. It's a full CRUD interface built with extensive form validation and real-time feedback.

Key Features:

- Authentication Check : On mount, checks if adminAuthenticated flag exists in localStorage
 - Automatically redirects to /admin/login if not authenticated.
- Add products and delete products.
- The added product would automatically showcased in the respective category page it was added.
- Add Product Form Section With full form fields:
 - ❖ **Product Name Input:**
 - Required field
 - Validating: Should not be empty.
 - ❖ **Price Input:**
 - Decimal accepting number field
 - Required field
 - Validation: Must be a valid number > 0
 - Displays prices in INR (₹)
 - ❖ **Product Image URL:**
 - Required field
 - Validation: The URL format must be valid.
 - Preview support in the list view
 - ❖ **Product Description:**
 - Multi-line text field.
 - Required field
 - Allows for detail about product description.
 - Validating: Cannot be blank

❖ Category Dropdown:

- Select menu with pre-defined categories:
- Smart Watches
- Mobile Smart Phones
- Laptops
- Grocery
- Required field

❖ Rating Input:

- Number field with min/max validation
- Range: 0 to 5 (with decimals, such as 4.5)
- Default value: 4.0
- Validations: Must be between 0-5

❖ Features Management:

- Text input to add features individually
- "Add Feature" button that adds to features array
- Each feature is displayed as a removable Chip component.

The screenshot shows the Chrono E-commerce Admin Dashboard. The top navigation bar includes the logo, 'CHRONO E-COMMERCE Admin Dashboard', and a 'Logout' button. The main content area has two sections: 'Add New Product' on the left and 'Added Products (2)' on the right.

Add New Product Section:

- Product Name ***: An input field.
- Category ***: A dropdown menu.
- Price ***: An input field.
- Image URL ***: An input field.
- Description ***: A text area.
- Rating**: A field showing '4.0'. Below it, a note says 'Rating from 0 to 5'.
- Features**: A section with an 'Add a feature' input field and a '+' button.
- In Stock**: A toggle switch that is turned on.

Added Products (2) Section:

- Asus laptop 1**: computer
£5.99
- milk**: grocery
£999.00

Diagrammatic presentation of the proposed project

Diagrammatic presentation of the proposed project

