



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Mynta-Clone

The domain of the Project:
Full Stack Development

Team Mentors (and their designation):
Suhail Khan (Senior SoftWare Engineer)

Team Members:
Ms. Maneesha Katuri

Period of the project

October 2025 to December 2025



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Declaration

The detailed development project titled “Myntra Website Clone” was executed under the technical mentorship of Mr. Suhail Khan, Senior Software Engineer at ListenFirst Media, and facilitated by Sure Trust, spanning the duration from October 2025 to December 2025.

The primary motivation behind this undertaking was to rigorously simulate a corporate software development environment. The core objective was to acquire advanced proficiency in Full Stack Development by architecting a scalable, industry-standard e-commerce application, thereby significantly elevating technical acumen and career readiness.

I formally declare that this project is a strictly educational, non-commercial interface replication inspired by the Myntra E-commerce digital platform. It has been developed exclusively for academic demonstration and skill validation. This system utilizes no proprietary backend infrastructure, confidential datasets, or official APIs belonging to Myntra. All trademarks, logos, and brand assets referenced herein remain the exclusive property of their respective copyright holders.

I confirm that the architecture, code implementation, and deployment strategies presented in this project are the result of my independent work and research, reflecting a comprehensive mastery of modern software engineering principles.

Team Members:

Maneesha Katuri

Prof. Radhakumari

Executive Director & Founder

Sure Trust

Mentor's Name

Mr. Suhail Khan

Senior Software Engineer

ListenFirst Media



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Table of contents

1. Executive summary
2. Introduction
3. Project Objectives
4. Methodology & Results
5. Social / Industry relevance of the project
6. Learning & Reflection
7. Future Scope & Conclusion



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Executive Summary

This project aimed to develop a responsive frontend clone of the Myntra e-commerce website to strengthen practical skills in modern web development. The objective was to analyze the structure and design of a real-world online store, implement a modular React-based architecture, and ensure a seamless user experience across different devices.

The project was developed using React, HTML, CSS, and Redux for global state management. It includes all essential aspects of a complete React application such as reusable components, routing for smooth navigation, API integration for dynamic product data, Redux for managing global state (cart, wishlist, orders), and deployment. Modern development tools like Vite and Visual Studio Code were used during development.

The resulting application successfully replicates the core user interface and navigation patterns of the Myntra platform. This project provided a deeper understanding of scalable UI architecture, reusable component design, responsive layouts, and real-world application development. Future enhancements may include backend integration, real product data, authentication, and payment gateway features for a more comprehensive learning experience.



Introduction

With the rapid growth of online shopping platforms, providing a smooth, responsive, and visually appealing user experience has become a key requirement in modern web development. Myntra is one of India's most popular fashion e-commerce platforms, known for its clean design, intuitive navigation, and rich product presentation. This project was developed as a frontend clone of the Myntra website to understand how real-world e-commerce applications are designed and implemented using React and related technologies.

The main goal of this project is to analyze the structure and functionality of a large-scale e-commerce platform and recreate its core features in a simplified yet effective way. The project focuses on building reusable React components, implementing seamless routing between pages, integrating product data through APIs, and managing shared application state using Redux. Through this approach, the project aims to strengthen practical knowledge of frontend development and industry-level best practices.

The scope of this project is limited to frontend implementation. It includes features such as product listing pages, filters, navigation menus, wishlist, cart, and basic order flow. Backend-related functionalities like real user authentication, payment gateways, order databases, and server-side logic are not included. Mock APIs are used to simulate product data and interactions, making the project suitable for learning and demonstration purposes.

An innovative aspect of this project is the use of a complete React-based architecture that closely resembles a real e-commerce application. The project applies modular component design, Redux-based global state management, clean URL routing, and responsive layouts to simulate a production-like environment. This approach helps in understanding how scalable and maintainable frontend systems are built and provides valuable hands-on experience in developing real-world web applications.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Project Objectives

Objectives and Goals of the Project

- Develop a responsive frontend clone of the Myntra e-commerce website.
- Understand the design and workflow of a real-world fashion e-commerce platform.
- Build reusable and modular components using React.
- Implement smooth page navigation using React Router.
- Integrate product data using APIs and display it through product cards and grids.
- Apply filters such as brand, price, color, and discount similar to Myntra.
- Manage global state using Redux for cart, wishlist, and user interactions.
- Ensure the application works smoothly on all devices (desktop, tablet, mobile).
- Follow industry-level frontend development practices.



Expected Outcomes and Deliverables

- A fully functional frontend Myntra clone application.
- Well-structured and reusable React components.
- Responsive UI with consistent design across devices.
- Working product listing, filtering, wishlist, and cart features.
- API-integrated product data displayed dynamically.
- Redux-based global state management implementation.
- Deployed project accessible via a live URL.
- Clean, readable, and maintainable source code.



Methodology and Results

Methods/Technology Used:

The application is a modern Single Page Application (SPA) built using the React ecosystem.

- Frontend Framework: React (v19) with Vite as the build tool for fast development and optimized production builds.
- Language: JavaScript (ES6+).
- Styling: Tailwind CSS implementation for a highly responsive, pixel-perfect, and utility-first design system that mimics the original Myntra UI.
- State Management: Redux Toolkit is used for managing global application state, including authentication, cart, wishlist, products, and filters.
- Routing: React Router DOM (v7) handles client-side routing, enabling seamless navigation between pages without refreshing the browser.
- UI Components: Functional React components with hooks. External libraries include React Slick (for carousels), React Icons / Lucide React (for iconography).
- HTTP Client: Fetch API (native) is used to communicate with the backend services.

Tools and Software Used:

- **Core Logic:** JavaScript (ES6+), Semantic HTML5, CSS3
- **Frontend Framework:** React.js (v19)
- **Routing:** React Router DOM (v7)
- **State Management:** Redux Toolkit (Slices & Async Thunks)
- **Styling & UI:** Tailwind CSS, React Slick (Carousels), Lucide Icons
- **Build Tool:** Vite (Fast development & optimized bundling)
- **API Host:** MockAPI.io (RESTful API services)
- **Deployment & Hosting:** Netlify (Live hosting with GitHub integration)
- **IDE:** Visual Studio Code (VS Code)
- **Source Control:** Git & GitHub
- **Debugging Tools:** Chrome DevTools, Redux DevTools



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Data Collection Approach:

- The data used in this project is collected through mock REST APIs created using MockAPI.io. These APIs provide simulated product information such as product name, price, category, brand, images, and discounts. The data is fetched dynamically using the Fetch API and displayed within the application. No real user data or production databases are involved, and the data collection is strictly for educational and demonstration purposes.

Project Architecture

- The application is built using a modular and scalable frontend architecture with React and Redux Toolkit, optimized for high-performance data flow and component reusability.
- **App.jsx**

Acts as the central router and layout manager.

Handles conditional rendering of global Navbar and Footer across 20+ dynamic routes.

- **Pages/** (ListingPage, Bag, Wishlist, ProductDetails, etc.)

Contains 21 unique page components.

Each page represents a distinct view and a major segment of the Myntra user journey.

- **Components/** (Navbar, Sidebar, Banner, Cards, Carousel)

Implements a deeply nested component architecture.

UI elements are organized into sub-directories for maximum reusability and consistent styling.

Navbar/ – Manages the complex mega-menu and search interface.

Cards/ – Contains multiple card types (Category, Product, Grid) to handle different visual data patterns.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Listing/ – Handles filter sidebar logic and product grid rendering.

- **Store/** (Redux Toolkit Ecosystem)

Serves as the central control room of the application.

Consists of **six Redux slices**: *auth, cart, wishlist, products, filter, orders*.

All slices are managed through a centralized **store.js**, ensuring a Single Source of Truth.

- **API Integration (productsApi.js)**

Acts as a clean abstraction layer for all external data communication.

Responsible for fetching real-time product catalog data from cloud-based APIs.

- **Unidirectional Data Flow**

Maintains a strict one-way data flow.

User actions (e.g., add to bag) dispatch Redux actions, which update the global state and re-render UI components without page refresh.

- **Utility Layer (slugs.js, productUtils.js)**

Contains helper functions for string manipulation, URL handling, and data formatting.

Helps reduce code duplication and improves maintainability.

- **Asset Management**

Uses centralized **assets/** and **public/** directories.



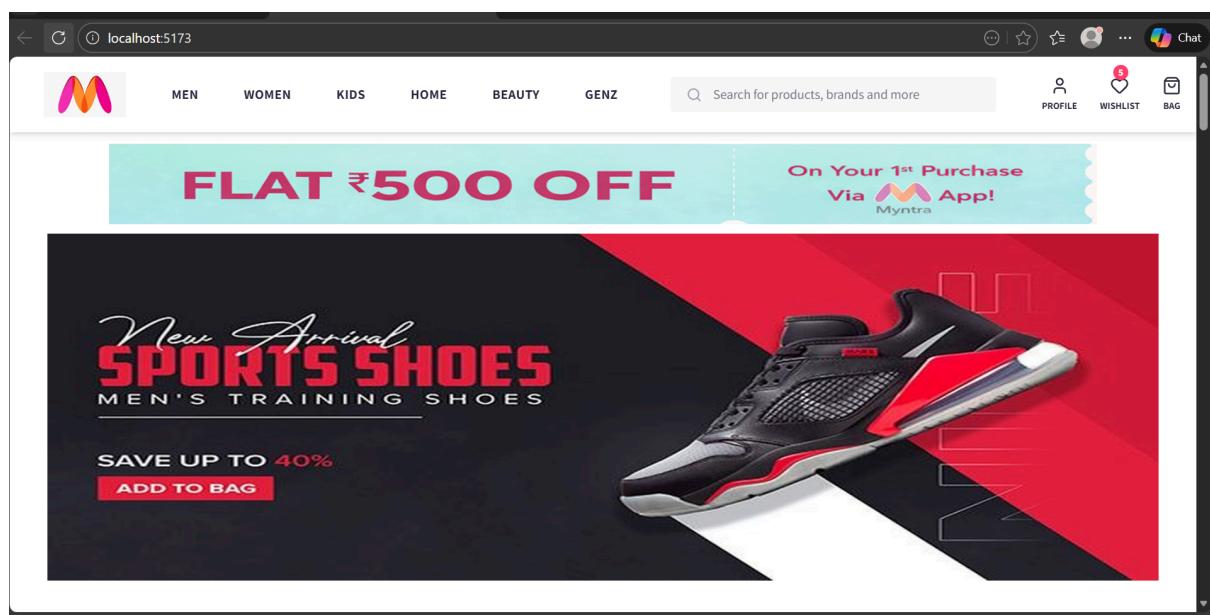
Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Manages high-quality images and static resources required for consistent visual presentation.

Footer.jsx is a global component in `src/components/` that displays common website information and secondary navigation across all pages.

Final project working screenshots along with supporting explanation

Home Page: The landing page that includes a responsive Navbar, Mega Menu, and dynamic sliding banners.



Product Grid: Displays multiple products with **Brand, Price, and Color filters** available in the sidebar.

The screenshot shows a product grid for 'Kurtas And Suits'. On the left, there is a sidebar with a 'FILTERS' section containing a 'BRAND' dropdown and a search bar. The main area displays five products: 'KUBER Jewellery' (earrings), 'GIVA Jewellery' (bracelets), 'MONTE CARLO Saree' (saree), 'MILTON Dresses' (dresses), and 'YELLOW CHIMES Heels' (high-heeled pumps). Each product card includes a small image, the brand name, category, rating, reviews, and price.

Product Details: A dedicated page displaying high-quality product images, size selection options, and an **Add to Bag** button.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

localhost:5173/women-kurtas-and-suits

The screenshot shows a website interface for women's clothing and accessories. At the top, there is a navigation bar with categories: MEN, WOMEN, KIDS, HOME, BEAUTY, GENZ, and a search bar. Below the navigation is a sidebar with filters for COLOR (Black, Blue, Green, Maroon, Multi, Navy Blue, Orange, Pink, Red, White), DISCOUNT RANGE (10% and above, 20% and above), and price ranges (Rs. 499 to Rs. 1000, Rs. 1001 to Rs. 2000, Rs. 2001 to Rs. 5000, Rs. 5001 and above). The main content area displays a grid of products from various brands: BOMBAY DYING Formal Shirts (₹999), FFI T-shirts (₹899), IKEA Night dresses (₹1999), STOR dresses (₹1499), URBAN LADDER Jackets (₹1299). Below these are smaller product cards for HOME CENTRE dresses (₹1799), AJANTA Kurta (₹899), CELLO Tops (₹299), MORPHY RICHARDS Night Wear (₹1999), and BAJAJ Watch (₹1499). Each product card includes a 'ADD TO BAG' button and a heart icon.

- **Shopping Bag:** The checkout area where users can manage selected items, view the total cost, and apply coupons before placing the order.

localhost:5173/bag

The screenshot shows the shopping bag page. At the top, there are tabs for BAG, ADDRESS, and PAYMENT, with BAG currently selected. A '100% SECURE' badge is visible. The main area is titled 'Check Details (3 Items)'. It lists two items: 'Bombay Dyeing Formal Shirts' (Qty: 1, ₹999, 60% OFF) and 'Ikea Night dresses' (Qty: 1). To the right, a 'PRICE DETAILS (3 ITEMS)' section shows:

Total MRP	₹9497
Discount on MRP	-₹5000
Coupon Discount	Apply Coupon
Platform Fee	FREE
Shipping Fee	FREE
Total Amount	₹4497

A large 'PLACE ORDER' button is at the bottom. Below it, a '100% SECURE PAYMENTS' section contains a note about terms and conditions.

Wishlist: A section where users can save their favorite styles to view or purchase later.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

localhost:5173/wishlist

The screenshot shows a user's wishlist with four items:

- Kuber** Home Essentials: ₹799 (₹1199 (75% OFF% OFF))
- Lavie** Handbag: ₹1799 (₹2599 (50% OFF% OFF))
- Puma** Casual Shoes: ₹899 (₹2799 (68% OFF% OFF))
- GIVA** Jewellery: ₹999 (₹2499 (60% OFF% OFF))

Each item has a "MOVE TO BAG" button below it.

User Profile: A dashboard where users can manage their account details, saved addresses, and view recent orders.

localhost:5173/login

The screenshot shows a login or signup page with the following elements:

- A large input field for a phone number, currently showing "+91 9786543245".
- A note below the input field: "By continuing, I agree to the [Terms of Use](#) & [Privacy Policy](#)".
- A large red "CONTINUE" button.
- A link at the bottom: "Have trouble logging in? [Get help](#)".



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

localhost:5173/orders

MEN WOMEN KIDS HOME BEAUTY GENZ

Search for products, brands and more

PROFILE WISHLIST BAG

ALL ORDERS

Placed
Arriving by 4 Jan
Morphy Richards
Toaster
Size: M Qty: 1
₹1999

Placed
Arriving by 4 Jan
HRX
Flip Flops
Size: M Qty: 1
₹499

localhost:5173/addresses

100% SECURE

Select Delivery Address

DEFAULT ADDRESS

John Doe HOME
123, 4th Main, HSR Layout, Sector 100
HSR Layout, Bengaluru - 560001
Karnataka
Mobile: 9876543210

REMOVE EDIT

Work Office WORK
Tech Park, Outer Ring Road
Bellandur, Bengaluru - 560102
Karnataka

ADD NEW ADDRESS

Name*

Mobile No*

Pin Code* State*

Address (House No, Building, Street)*

Locality/Town* City/District*

TYPE OF ADDRESS

Home Work

CONTINUE

₹4497

SAVE ADDRESS



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

BAG ADDRESS PAYMENT 100% SECURE

Select Delivery Address

DEFAULT ADDRESS

John Doe HOME
123, 4th Main, HSR Layout, Sector 2
HSR Layout, Bengaluru - 560001
Karnataka
Mobile: 9876543210

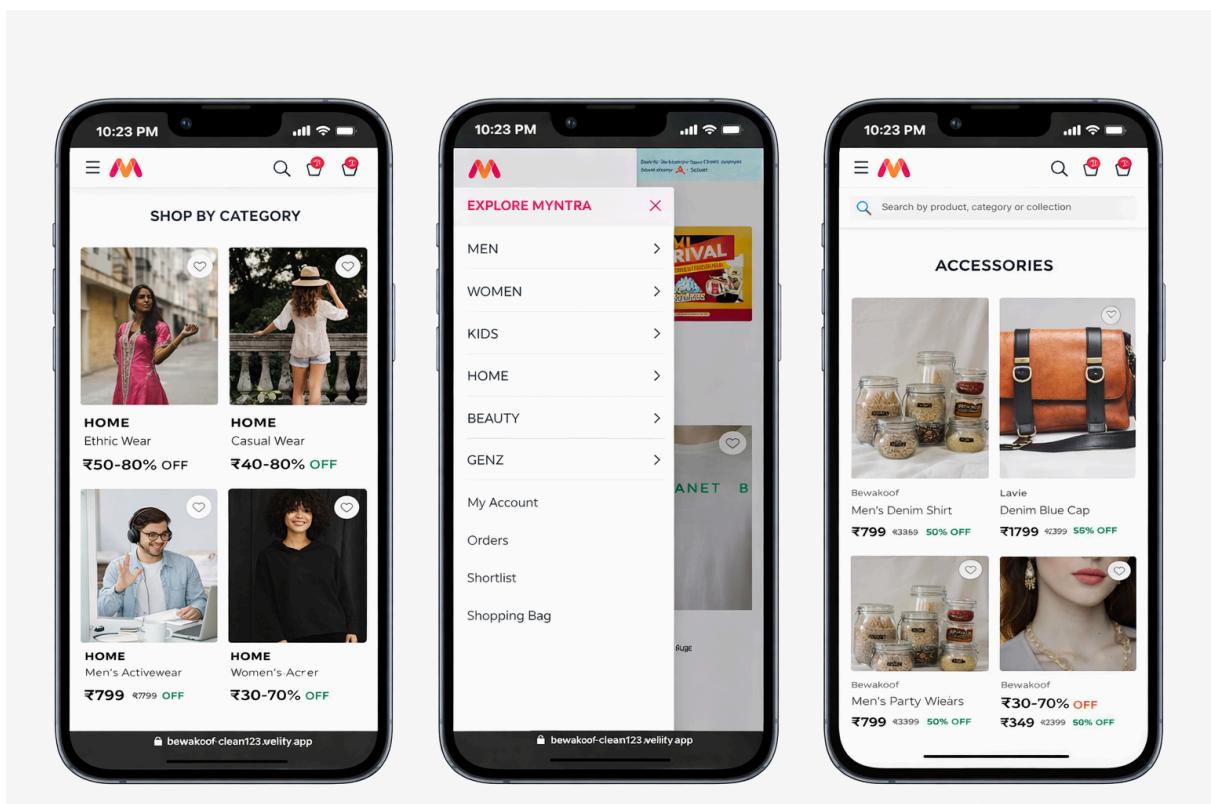
REMOVE EDIT

Work Office WORK
Tech Park, Outer Ring Road
Bellandur, Bengaluru - 560102
Karnataka

PRICE DETAILS (3 ITEMS)
Total Amount ₹4497

CONTINUE

Mobile View: A responsive preview showing that the website layout automatically adapts for mobile and tablet devices.



- **Footer:** A global section displayed across all pages that provides important site information, helpful links, and secondary navigation for users.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

The screenshot shows the header of the Mynta clone website. At the top left is the Mynta logo. To its right are navigation links: MEN, WOMEN, KIDS, HOME, BEAUTY, and GENZ. A search bar with the placeholder "Search for products, brands and more" is positioned next. On the far right are icons for PROFILE (with a user icon), WISHLIST (with a heart icon and a '5' notification), and BAG (with a shopping bag icon).

ONLINE SHOPPING

- Men
- Women
- Kids
- Home
- Beauty
- Genz
- Gift Cards
- Mynta Insider

USEFUL LINKS

- Blog
- Careers
- Site Map
- Corporate Information
- Whitehat

CUSTOMER POLICIES

- Contact Us
- FAQ
- T&C
- Terms Of Use
- Track Orders
- Shipping
- Cancellation
- Returns
- Privacy policy
- Grievance Redressal
- FSSAI Food Safety
- Connect app

EXPERIENCE MYNTA APP ON MOBILE

GET IT ON Google Play Download on the App Store

KEEP IN TOUCH

Facebook icon Twitter icon YouTube icon Instagram icon

100% ORIGINAL guarantee for all products at mynta.com

Return within 14 days of receiving your order

The screenshot shows a different layout of the Mynta clone website. It includes a header with the Mynta logo, navigation links (MEN, WOMEN, KIDS, HOME, BEAUTY, GENZ), a search bar, and user icons for PROFILE, WISHLIST, and BAG.

POPULAR SEARCHES

Makeup | Dresses For Girls | T-Shirts | Sandals | Headphones | Babydolls | Blazers For Men | Handbags | Ladies Watches | Bags | Sport Shoes | Reebok Shoes | Puma Shoes | Boxers | Wallets | Tops | Earrings | Fastrack Watches | Kurtis | Nike | Smart Watches | Titan Watches | Designer Blouse | Gowns | Rings | Cricket Shoes | Forever 21 | Eye Makeup | Photo Frames | Punjabi Suits | Bikini | Mynta Fashion Show | Lipstick | Saree | Watches | Dresses | Lehenga | Nike Shoes | Goggles | Bras | Suit | Chinos | Shoes | Adidas Shoes | Woodland Shoes | Jewellery | Designers Sarees

In case of any concern, [Contact Us](#)

© 2025 Mynta Clone by Maneesha. All rights reserved.

Educational Project

Registered Office Address

Buildings Alyssa,
Begonia and Clover situated in Embassy Tech Village,
Outer Ring Road,
Devarabeesanahalli Village,
Varthur Hobli,
Bangalore – 560103, India

CIN: U72300KA2007PTC****
Telephone: +91-80-615****

Project GitHub Link: <https://github.com/Maneesha-7386/Mynta-clone>



Learning and Reflection

New Learnings

Technical Learnings:

Advanced State Management (Redux): I learned how to use the Redux Toolkit as a "central brain" for the app. This allowed me to keep the shopping bag and wishlist updated perfectly across different pages without any data errors.

API Data Handling: I mastered how to connect my frontend to an external server (MockAPI). I learned how to fetch product data, handle loading screens, and display real-time information to the user.

Modern Styling (Tailwind CSS): I learned how to use Tailwind CSS to build a professional UI. This helped me match Myntra's exact look (buttons, colors, margins) while making the website look great on mobile and desktop.

Dynamic Routing: I understood how to use React Router to create a smooth browsing experience. I learned how to move between categories and create specific pages for every single product automatically.

Soft Skills & Management:

Full Ownership: By building the entire Myntra Clone from scratch, I learned how to plan a project, manage the code files, and solve complex bugs independently.

Priority Planning: I learned how to focus on the most important features first (like the Shopping Bag and Navbar) before moving on to smaller design details.

Problem-Solving: My debugging skills improved significantly by using Chrome DevTools to find and fix errors in my logic and styling.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Overall Experience

Building the "Myntra Clone" as a solo developer was an incredibly rewarding journey that pushed my technical limits.

Complete Understanding: Creating this app helped me understand the full "big picture"—from how data is stored on a server to how it transitions through Redux and finally appears on the user's screen.

Increased Confidence: Successfully implementing difficult features, like the filters and the bag count logic, has given me the confidence to build any modern e-commerce application.

Career Readiness: This project simulated a real-world job environment. By managing the development lifecycle—from coding to GitHub and Netlify deployment—I feel fully prepared for a professional role in software engineering.



Conclusion and Future Scope

Conclusion and Future Scope

- **Recap objectives and achievements**

The primary goal of this project was to architect and develop a fully functional, high-fidelity clone of the Myntra e-commerce platform.

By simulating a real-world development lifecycle, I successfully turned theoretical knowledge into a professional-grade application.

- **Key Achievements:**

Exact UI Replication: Successfully recreated Myntra's complex visual identity, including the Mega Menu, Product Grids, and responsive layouts that work seamlessly across desktop and mobile devices.

Centralized State Management: Engineered a robust global state system using Redux Toolkit to handle dynamic data for the Shopping Bag, Wishlist, and User Authentication.

Dynamic API Integration: Built a functional data layer that fetches real-time product information from external REST APIs, enabling features like live filtering and sorting.

Modern Build Pipeline: Delivered a high-performance Single Page Application (SPA) using Vite and React Router, ensuring fast load times and instant page transitions.

- **Future scope of this project**

While the current version serves as a comprehensive educational milestone, there is significant potential for evolving it into a production-ready commercial platform.

- **Planned Enhancements:**



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)

Backend Migration: Transitioning from a mock API to a scalable backend using Node.js and MongoDB to handle secure user databases and real product management.

Payment Gateway Integration: Implementing secure third-party processors like Stripe or Razorpay to enable real monetary transactions and secure checkout flows.

Admin Dashboard: Developing a dedicated portal for merchants to manage inventory, update product details, and track real-time sales analytics.

AI Recommendations: Integrating machine learning algorithms to suggest personalized products to users based on their browsing history and preferences.

SEO Optimization: Refactoring the application to Next.js for Server-Side Rendering (SSR) to improve search engine rankings and initial page load speeds.



Innovation & Entrepreneurship Hub for Educated Rural Youth (SURE Trust – IERY)