

**A
Project Report
On
“ E-Commerce Shopping Website-Swagsy ”**

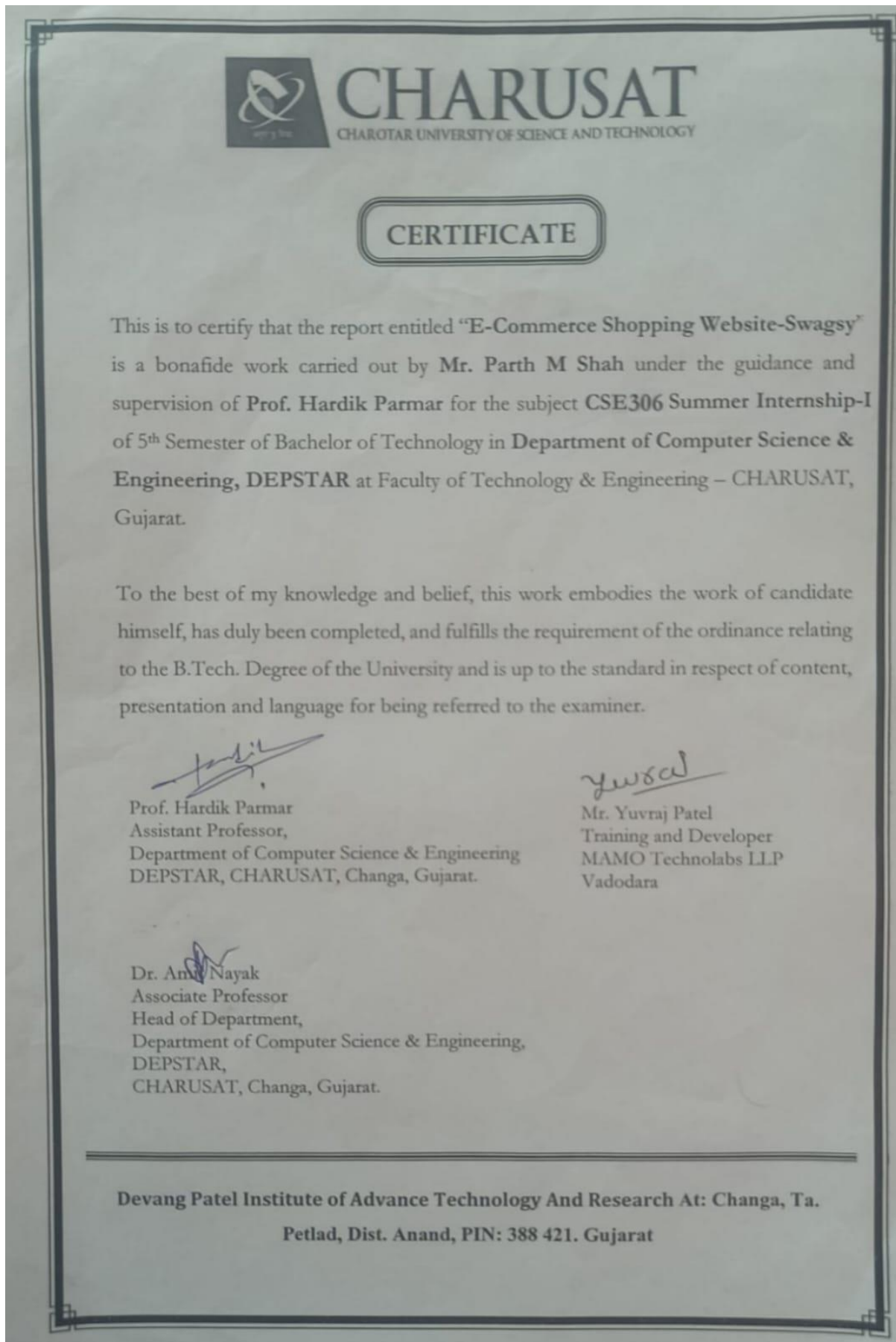
**Prepared by
Parth Shah(23DCS120)**

**Under the guidance of
Prof. Hardik Parmar**

**A Report Submitted to
Charotar University of Science and Technology
For Partial Fulfillment of the Requirements for the
5th Semester Summer Internship-I (CSE306)
Submitted at**



**Department of Computer Science & Engineering
Devang Patel Institute of Advance Technology and Research
At: Changa, Dist: Anand – 388421
July 2025**



MAMO|HR|EXP|138



Parth Shah

for the successful completion of a 1.5 months internship as a
Web Developer at Mamo Technolabs LLP from
12/05/2025 to 26/06/2025



A handwritten signature in black ink, appearing to read 'Parth Shah', written over a horizontal line.

Human Resources
Manager

DECLARATION BY THE CANDIDATES

I hereby declare that the project report entitled “**E-Commerce Shopping Website-Swagsy**” submitted by us to Devang Patel Institute of Advance Technology and Research (DEPSTAR), Changa in partial fulfilment of the requirements for the award of the degree of **B.Tech Computer Science & Engineering**, from the Department of Computer Science & Engineering, DEPSTAR, FTE is a record of bonafide **CSE306 Summer Internship-I** carried out by me under the guidance of Prof.Hardik Parmar I further declare that the work carried out and documented in this project report has not been submitted anywhere else either in part or in full and it is the original work, for the award of any other degree or diploma in this institute or any other institute or university.



PARTH SHAH – 23DCS120

This is to certify that the above statement made by the candidate is correct to the best of my knowledge.

ACKNOWLEDGEMENT

I, the developer of the web application “Swagsy,” with immense pleasure and gratitude, present this project as a significant step in my academic and practical learning. The development of this e-commerce platform has provided me with a deep understanding of modern web technologies, project management, and real-world problem-solving.

I am sincerely thankful to my internal guide, **Assistant Professor Hardik Parmar**, for his invaluable guidance, support, and consistent encouragement throughout the project. His insights and constructive feedback have played a pivotal role in shaping the success of this work.

I also extend my heartfelt gratitude to all faculty members, friends, and well-wishers who contributed directly or indirectly to the successful development and completion of the “Swagsy” project.

Thank you,

Parth Shah

ABSTRACT

Swagsy is a full-stack online clothing and fashion e-commerce web application designed to provide users with a seamless shopping experience for apparel and accessories. Developed using the MERN Stack (MongoDB, Express.js, React.js, Node.js), the platform includes features such as browsing products by category (Men, Women, Kids), filtering by size and season, cart management, and secure order placement.

The frontend is built with React.js and Tailwind CSS, ensuring a responsive and user-friendly interface for mobile and desktop users. Key user modules include Home Page, Shop by Category, Product Listing, Product Details, Cart, Login/Signup, Order History, and Profile Management.

On the backend, Node.js and Express.js manage API endpoints, JWT-based authentication, and interaction with a MongoDB database. The admin panel enables efficient product management, order tracking, and customer insights through data visualization tools.

Swagsy represents a complete solution for modern e-commerce needs, combining sleek UI/UX with robust backend functionality. It is built with scalability in mind and lays the foundation for future integration of features like mobile apps, payment gateways, and real-time order tracking.

TABLE OF CONTENTS

Acknowledgement	5
Abstract.....	6
Chapter 1: Introduction.....	10
1.1 Project Defination	10
1.2 Objective.....	10
1.3 Tools & Technologies.....	10
Chapter 2: Description.....	11
Chapter 3: Software & Hardware Requirements.....	12
3.1 Software Requirements	12
3.2 Hardware Requirements	12
Chapter 4: Major Functionality	13
4.1 Database	13
4.2 How To Use The Webapp?	13
Chapter 5: Flow Chart.....	14
Chapter 6: Screenshots	15
Chapter 7: Limitations.....	<u>18</u>
Chapter 8: Outcomes	<u>19</u>
Chapter 9: Future Enhancement	<u>20</u>
Chapter 10: References.....	<u>21</u>

List of Figures

Fig 6.1 login page	15
Fig 6.2 men section page	15
Fig 6.3 Product Detail	16
Fig 6.4 Add To Cart	16
Fig 6.5Admin Panel	17
Fig 6.6 Payment Gateway	17

List of Tables

Table 2.1 Comparative Analysis.....	11
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CHAPTER 1: INTRODUCTION

1.1 Background of the Project

Online shopping for clothing and fashion has become a mainstream trend, especially in urban and semi-urban areas. Users expect fast, visually appealing, and easy-to-use platforms to browse, filter, and purchase clothing items. However, many fashion websites are either overloaded with features or lack customization options for small or emerging businesses.

1.2 Problem Definition

There is a growing need for a **customizable, cost-effective, and user-friendly** online clothing store solution that can be deployed by small businesses, boutiques, or student developers. Most existing platforms are either too expensive or lack full admin control and backend flexibility.

1.3 Motivation for the Project

To build a full-stack online clothing e-commerce platform (Swagsy) from scratch using modern web technologies, providing a clean user experience, robust admin control, and responsive design. Swagsy aims to bridge the gap between functionality and accessibility in fashion commerce platforms.

1.4 Objectives and Scope of the Project

- Allow users to browse clothing items by category, gender, and size
- Enable cart management and user account features like profile and order history
- Provide an admin panel with:
 - ✓ Dashboard (analytics)
 - ✓ Product management (add/edit/delete)
 - ✓ User management
 - ✓ Order monitoring
- Implement secure login/signup for both users and admins using JWT
- Design a fully responsive UI for seamless experience on both mobile and desktop

CHAPTER 2: DESCRIPTION

2.1 Research and Existing Solutions

Platforms like **Myntra** and **Ajio** dominate the Indian market but are built on closed, complex architectures and are not easily adaptable for educational or small-scale projects.

2.2 Comparative Analysis

Platform	Features	Limitations
Myntra	Advanced filters, large inventory, offers	Closed system, not customizable
Ajio	Trend-driven design, brand collections	No access to backend, high cost

Table 2.1

2.3 How Swagsy Differs

- Open-source, customizable clothing e-commerce system
- Complete MERN stack codebase with modular frontend and backend
- Admin panel for managing products, users, orders, and viewing dashboard analytics
- Fully owned MongoDB database with secure JWT-based authentication

CHAPTER 3: TECHNOLOGY STACK

3.1 SOFTWARE REQUIREMENTS

- Frontend: React.js
- Backend: Node.js with Express.js
- Database: MongoDB
- Authentication: JWT
- Visualization: Chart.js
- Development Environment: VS Code, Postman

3.2 HARDWARE REQUIREMENTS

- RAM: 4GB or higher
- Processor: Intel i3 or above
- OS: Windows/Linux/MacOS
- Storage: 10GB minimum
- Internet: Required for API calls and hosting

CHAPTER 4: MAJOR FUNCTIONALITY

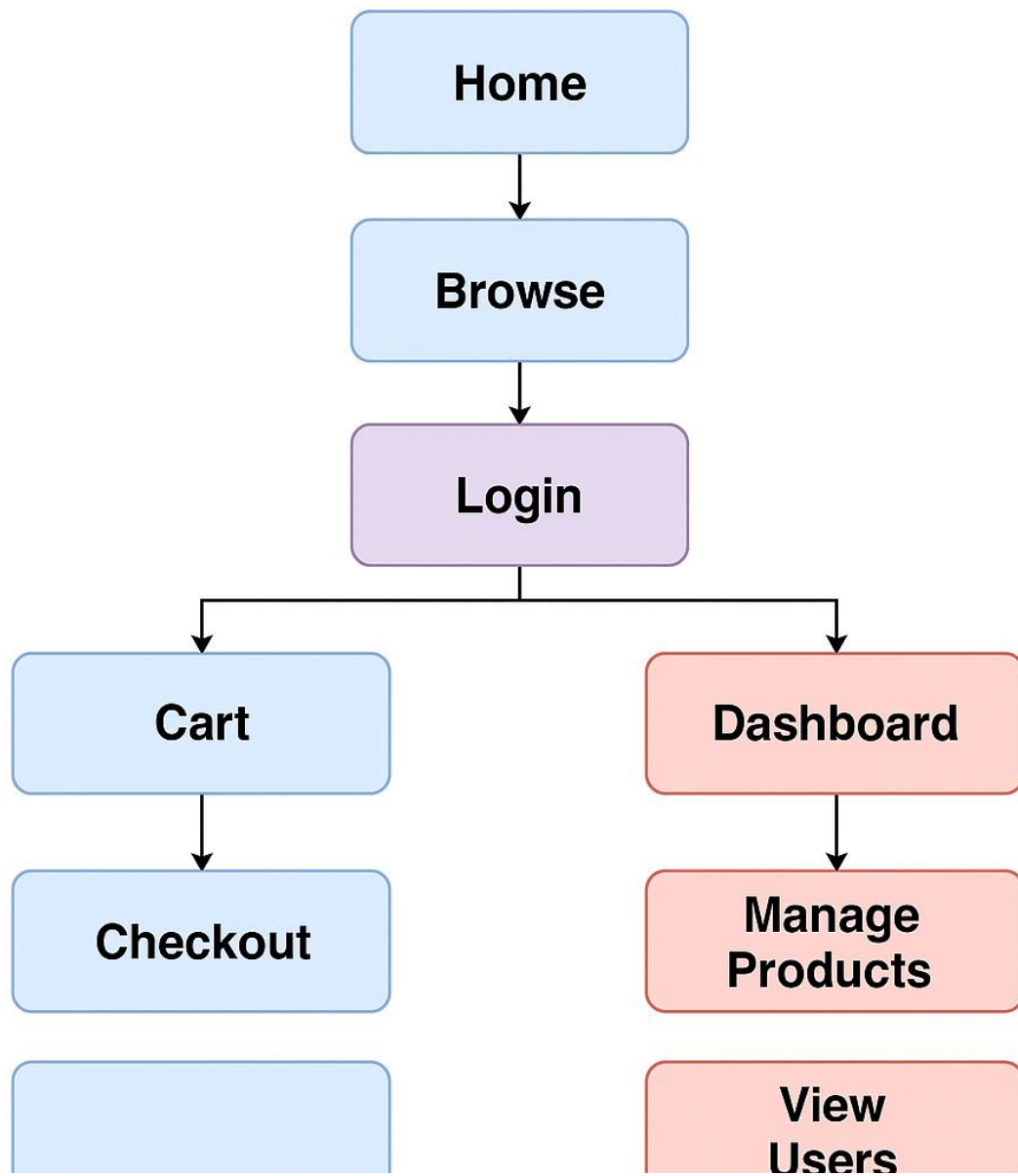
4.1 Database

- Swagsy uses MongoDB as its primary database to store and manage all application data efficiently. The main collections in the database include:
 - Users: Stores user credentials, profile information, and order history
 - Products: Contains product details such as name, description, price, size, category, stock, and images
 - Orders: Keeps records of placed orders including user ID, products, quantity, payment status, and timestamps
 - Admins: Contains admin account credentials and access control
 - Analytics (Optional): Used for storing insights like most purchased items, revenue reports, etc.

4.2 How To Use The Webapp?

- **For Customers (Users):**
 - Register or login to your account
 - Browse clothing by category (Men, Women, Kids)
 - View product details and filter by size, style, or offer
 - Add desired items to the cart
 - Proceed to checkout and confirm the order
 - Track order status and view history in the profile section
- **For Admins:**
 - Login to the secure admin portal
 - View real-time stats on the **Dashboard** (total products, revenue, orders)
 - Use **Add Product** to insert new clothing items with images and details
 - Manage the **Product List** (edit or delete products)
 - View and manage all registered users under the **Users** section
 - Track and update order status from the admin pan

CHAPTER 5: FLOWCHART



CHAPTER 6: SCREENSHOTS

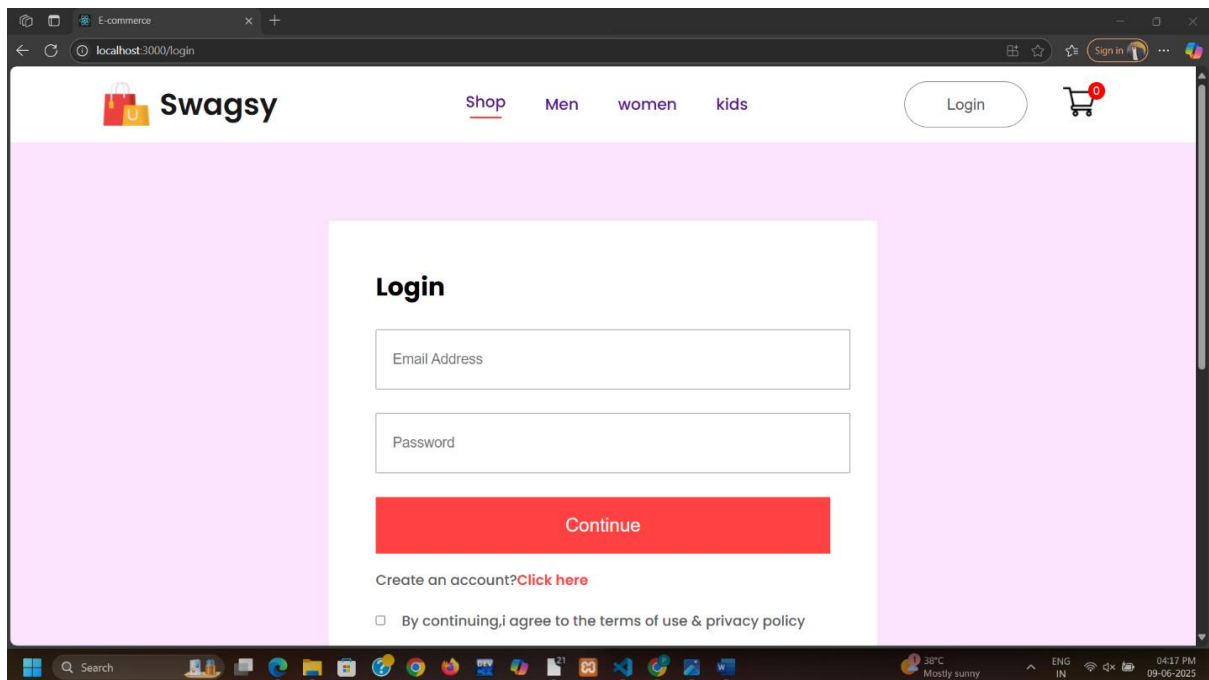


Fig6.1:login page

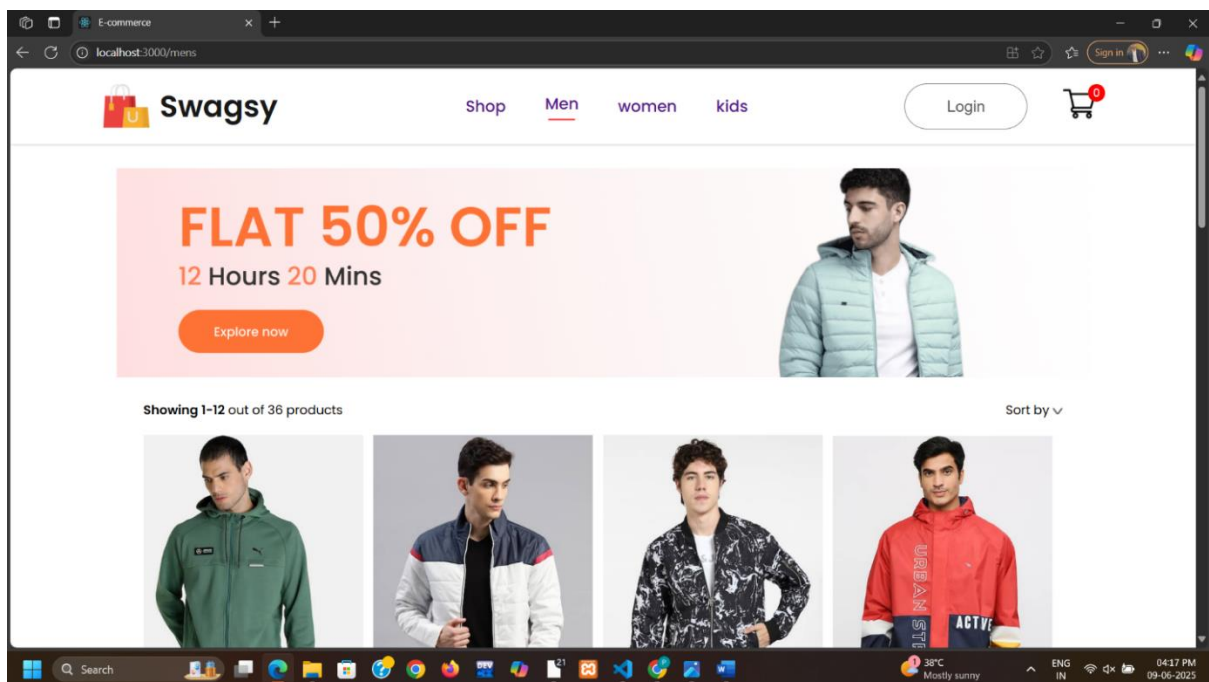


Fig6.2:men section page

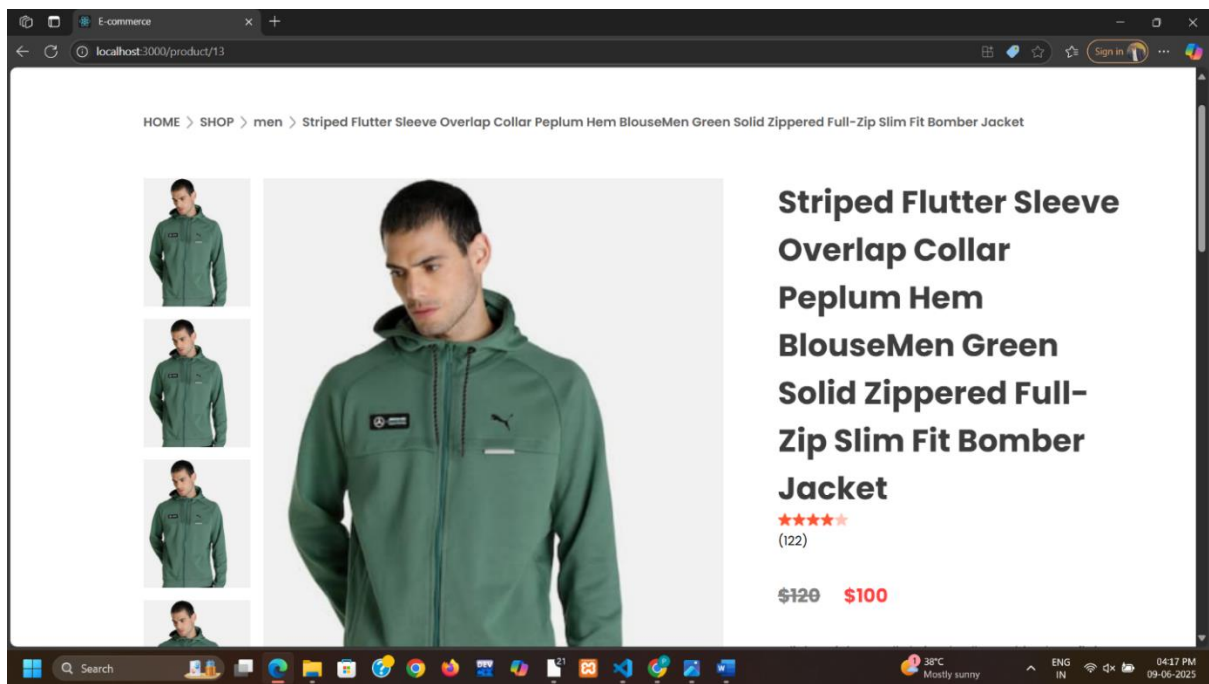


Fig6.3:product detail

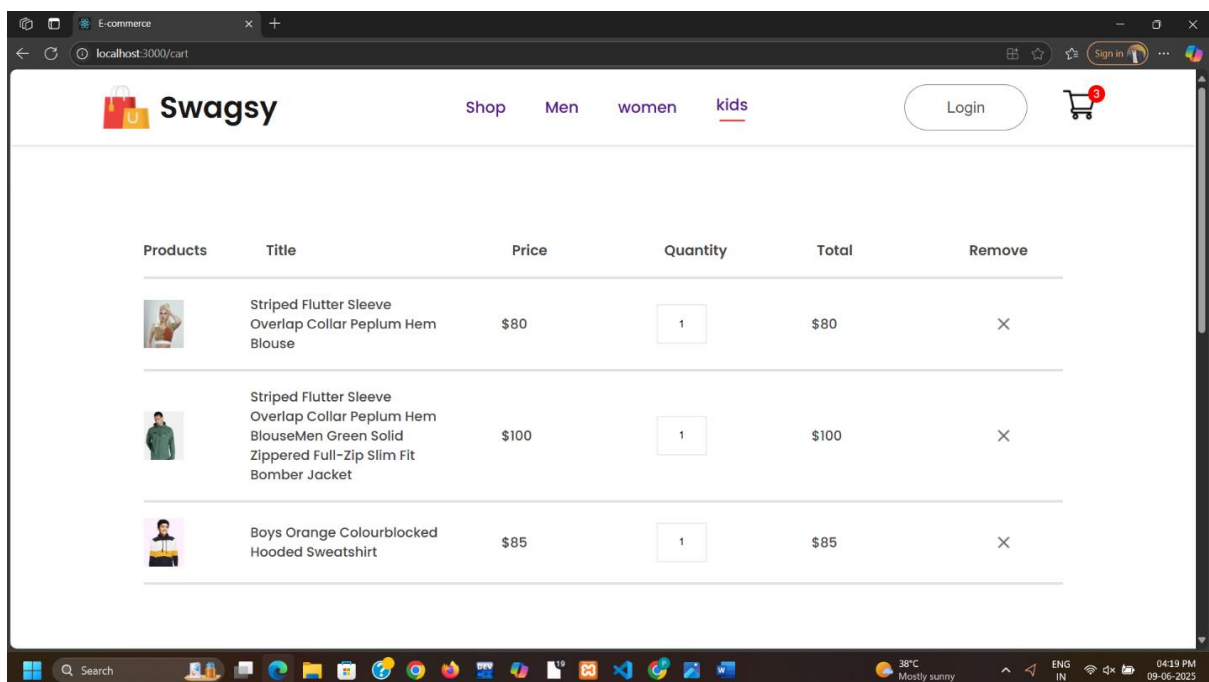


Fig6.4:Add to Cart

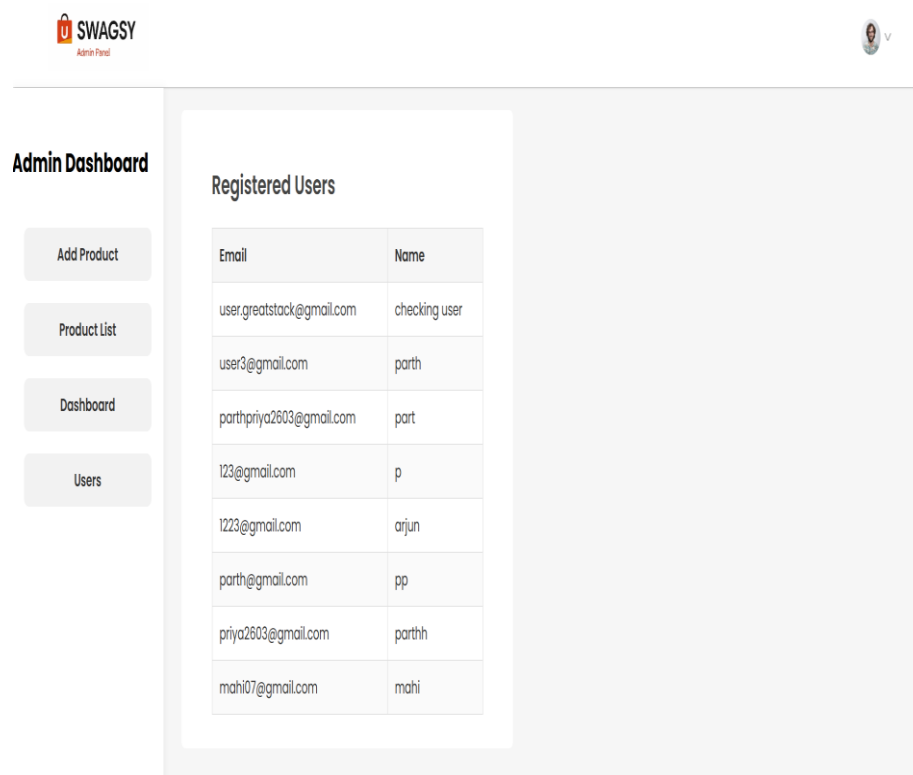


Fig6.5:Admin Panel

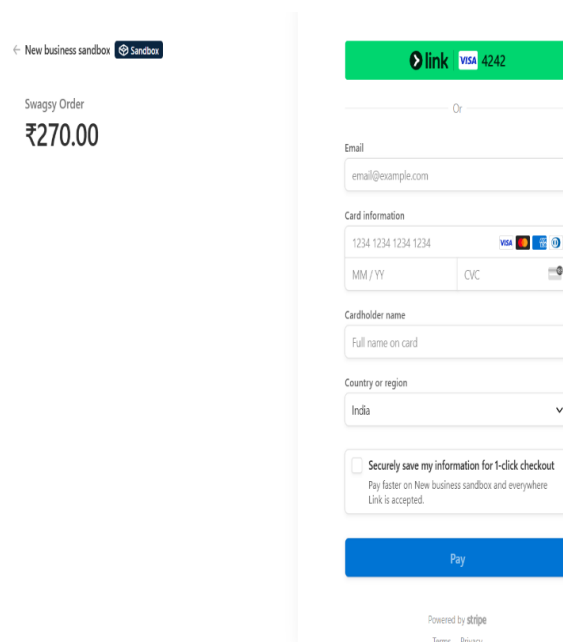


Fig6.6:Payment Gateway

CHAPTER 7: LIMITATIONS

- **No mobile application** – Swagsy is optimized for mobile browsers but does not yet have a native Android or iOS app.
- **Limited admin control over returns/refunds** – The current admin panel does not include dedicated modules for managing product returns or refunds.
- **No real-time stock alert system** – Admins must manually monitor stock levels; there is no automated low-stock notification.
- **Lack of AI-based recommendations** – Swagsy does not offer smart product suggestions or personalized recommendations.
- **No multi-vendor support** – The system is designed for a single vendor/admin. Support for multiple sellers is not yet implemented.
- **Limited product review system** – Users cannot currently leave reviews or ratings for purchased products.
- **No email/SMS notifications** – Swagsy does not send order confirmation or delivery updates via email or SMS.

CHAPTER 8: OUTCOME

- Successfully developed a full-stack clothing e-commerce web application using the MERN stack (MongoDB, Express.js, React.js, Node.js).
- Implemented key e-commerce functionalities such as product browsing, filtering, cart management, order placement, and secure user authentication.
- Designed and integrated a fully functional **Admin Panel** with Dashboard, Add Product, Product List, and User Management features.
- Achieved a **responsive and user-friendly UI** using React.js and Tailwind CSS, ensuring accessibility across devices.
- Enabled a basic **payment gateway integration** for real-time order placement and checkout.
- Gained hands-on experience with modern web technologies, REST APIs, JWT authentication, and MongoDB data management.

CHAPTER 9: CONCLUSION AND FUTURE SCOPE

➤ Summary

- Swagsy is a fully functional e-commerce website designed for online clothing shopping. It offers user authentication, product browsing with filters, real-time cart updates, and admin product management. Built using React.js, Node.js, and MongoDB, it ensures a smooth and responsive shopping experience.

➤ Future Scope

- Launch Mobile App (React Native)
- User Reviews & Ratings System
- Delivery status tracking
- AI-based recommendation engine

CHAPTER 10: REFERENCES

10.1 References links:

➤ References links:

[Youtube link](#): A tutorial for building a full-stack e-commerce website using React.js, Node.js, Express.js, and MongoDB. It covers key features like product listing, cart management, user authentication, and admin panel.

[React.js tutorial](#): A tutorial for React.js concept

[MongoDB](#):A tutorial for MongoDB

[Node.js](#):A tutorial for Node.js

[Javascript](#) :A tutorial for javascript