Project Charter: Customizable eCommerce Website Builder

1. Project Purpose and Objectives

The objective of this project is to build a multi-shop, customizable eCommerce platform that allows businesses of any domain (e.g., clothing, electronics, groceries) to create their own online store using a single adaptable template. The system will include role-based login (Admin and Customer), product inventory management, and a demo payment gateway integration using Stripe. The ultimate goal is to make online selling accessible to small businesses with no technical expertise.

Mind Map: Concept Overview



2. Justification and Market Demand

With the exponential rise in online shopping and the increasing digitalization of small businesses, the demand for easy-to-use, affordable online store builders is stronger than ever. Platforms like Shopify and Wix dominate the market, but many small business owners find them complex or expensive. Our platform targets this gap by offering a simplified, ready-to-use solution tailored to micro and small businesses.

3. Business Requirements and Feature Scope

Core Features:

- Email OTP login system for authentication
- Role-based access: Admin (shop owner) and Customer (end user)
- Shop customization (name, logo, color theme)
- Product inventory management (add/edit/delete products)
- Customer management
- Product browsing, add to cart, and checkout for customers
- Stripe integration for demo payment

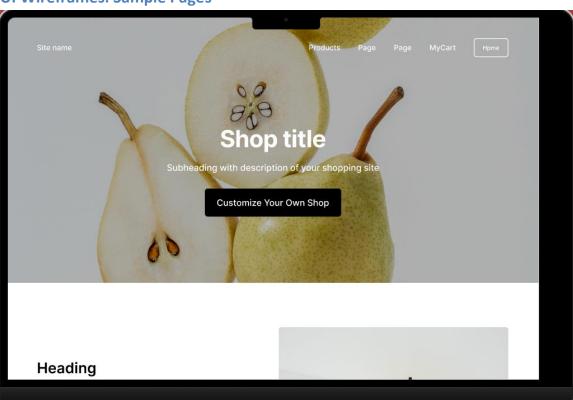
Admin Panel Capabilities:

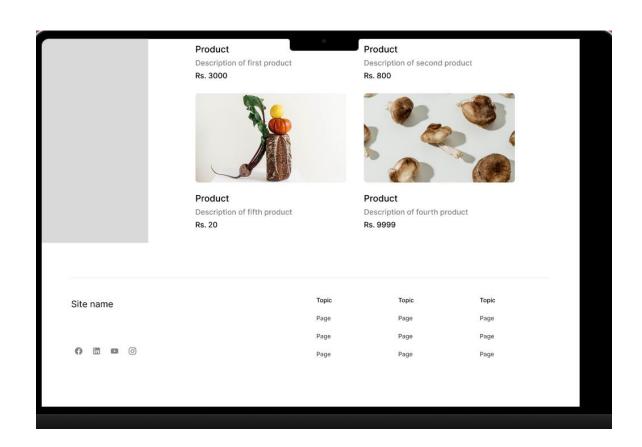
- Manage shop branding and layout
- CRUD operations for products
- View and manage customer details

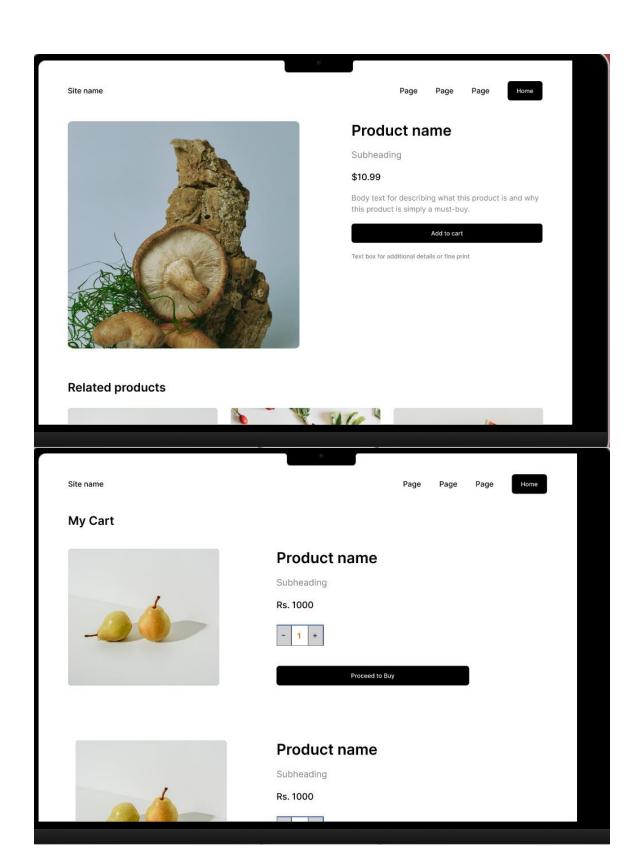
Customer View:

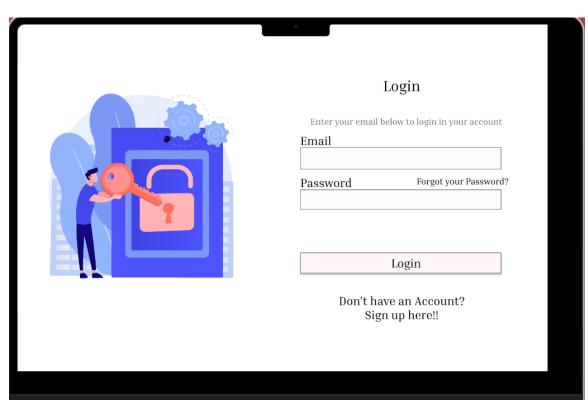
- Browse products
- Add items to cart
- Checkout with demo payment system

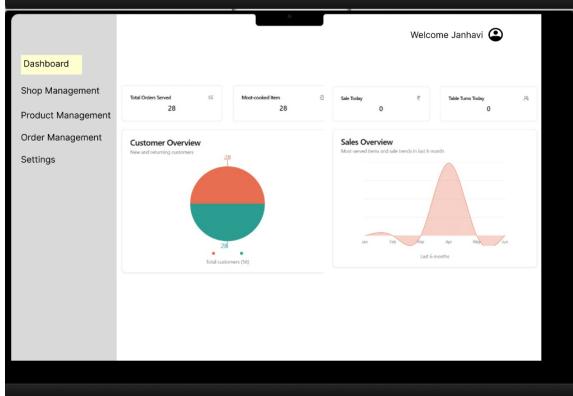
UI Wireframes: Sample Pages

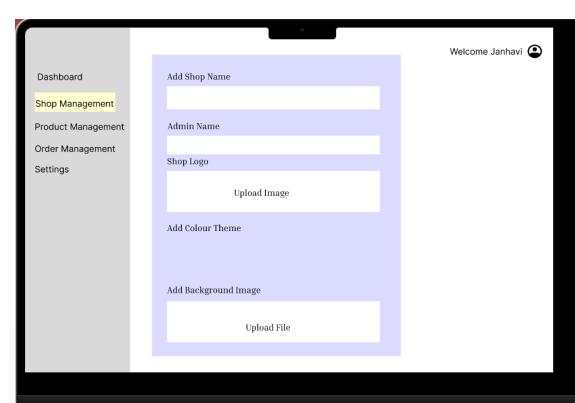


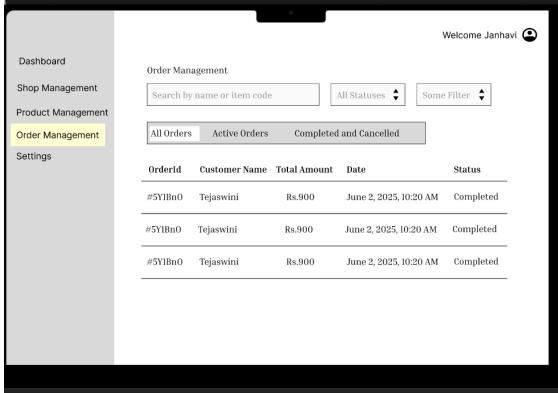


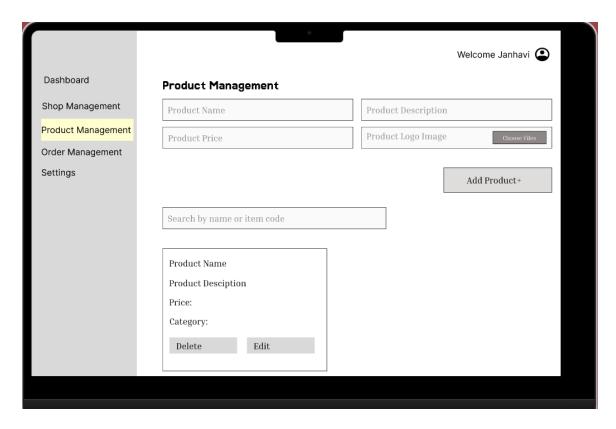












4. Technical Requirements

In today's market, there is a strong technical need for lightweight, scalable, and customizable eCommerce platforms. Small businesses require:

- A **multi-tenant system** to host multiple shops on one platform
- **No-code customization** for layout, branding, and products
- Responsive design for mobile-first access
- **Secure, OTP-based login** to simplify user authentication
- Role-based access control for Admin and Customers
- API-driven backend for flexible integration and scaling
- Stripe or UPI-like payment integration for smooth checkout

Frontend:

- React.js
- JavaScript
- HTML/CSS

Backend:

- Node.js
- Express.js

Database:

- MongoDB

Authentication:

- Email-based OTP login
- Role-based access control

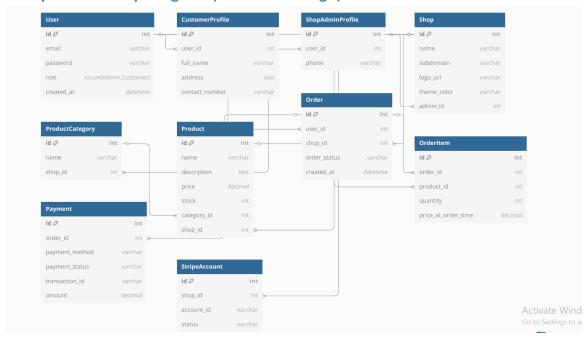
Payment Gateway:

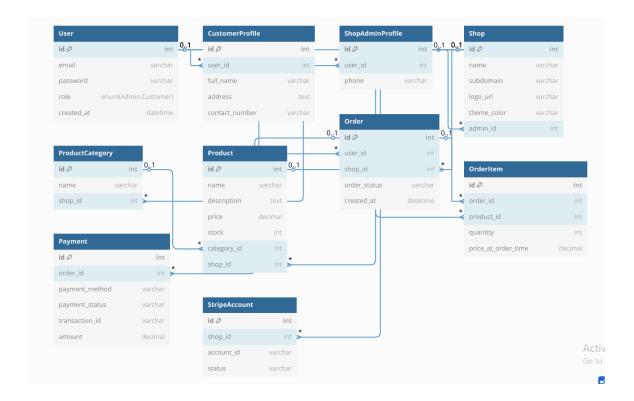
- Stripe (test/demo mode)

Hosting:

- To be Finalized

Entity-Relationship Diagram (Database Design)





5. Key Stakeholders

Stakeholder	Role
Project Team (4 Members)	Design, development, integration & testing
End Users	Shop owners (Admins) and Customers
Reviewers/Faculty	Project evaluation and guidance
Payment Gateway (Stripe)	Demo integration partner (in test mode)

6. Estimated Real-Life Cost

Item	Cost
Web Hosting (annual)	₹4,000 – ₹8,000

Domain name	₹800 – ₹1,200
SMTP/OTP Email Service	₹1,500 – ₹3,000/month
Stripe Integration (Live use)	2.9% + ₹3 per transaction
Developer Cost (optional)	₹50,000+ (for a dev team)

7. Resources and Technologies

Resource	Description
React.js	Frontend UI framework
Node.js	Backend JavaScript runtime
Express.js	Backend framework for REST APIs
MongoDB	NoSql Database system
Git + GitHub	Version control and collaboration
Stripe	Demo payment gateway
Nodemailer	For sending OTP emails (optional)
To be Finalized	Hosting platforms

8. Risk Assessment

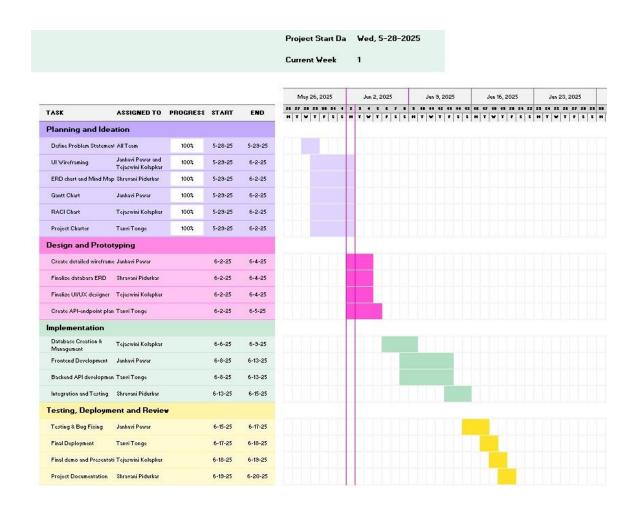
Risk	Mitigation Strategy
Time constraints	Prioritize core features, limit scope per review
OTP delivery delays	Use test OTP/email library or mock in review
Stripe test issues	Integrate using official test cards and keys
Team coordination	Use Git or Github to track task ownership
Template overload	Stick to 1 reusable template for all shops

9. Timeline & Time Management

Date	Task
May 28-May 29	Define Problem Statement
May 29- June 2	UI Wireframing, ERD Chart, Mind Map, Gantt Chart, RACI Chart, Project Charter
June 2- June 5	Create detailed wireframe, Finalize ERD, Finalize UI/UX designer and Create API-endpoint plan

June 6–9	Database creation & management
June 8–13	Frontend and Backend API development
June 13-15	Integration and testing
June 15-20	Testing & bug fixing, Final deployment, Final demo and Project Documentation

Gantt Chart: Project Timeline Overview



10. RACI Matrix

Task/Deliver	Tejaswini	Tanvi	Shravani	Janhavi	Jayesh Raut
Coding the Website	А	С	R	R	Ι
Design Implementat ion	R	С	А	R	I
Database & API Setup	R	R	С	А	I
Testing & Optimization	А	R	R	С	I

- R (Responsible): Person who performs the work.
- A (Accountable): Person accountable for task completion.
- C (Consulted): Person whose input is needed before proceeding.
- I (Informed): Person who must be kept updated.