FINAL REPORT

Date: 21 April 2025

Team Id: SWTID1743782632

Project Name: Shopez – Online Shoe Store

1. INTRODUCTION

1.1 Project Overview

Shopez is a web-based e-commerce platform designed for selling shoes online. It offers users the ability to browse through a variety of shoe types, view detailed product information, add items to a cart, and proceed with a secure checkout process. The platform also includes features for user authentication, a cart management system, and an admin dashboard to manage products, users, and orders.

1.2 Purpose

The primary goal of Shopez is to provide a seamless shopping experience for users, enabling them to easily browse, select, and purchase shoes from the comfort of their homes. For store administrators, Shopez offers tools to manage inventory, process orders, and track sales, ensuring efficient business operations.

2. IDEATION PHASE

2.1 Problem Statement

Traditional shoe shopping can be time-consuming and limited by geographical constraints. Users may find it difficult to browse through a variety of options or compare prices without physically visiting multiple stores. Shopez addresses these issues by offering an online platform that streamlines the shoe shopping process.

2.2 Brainstorming

- **Product Catalog**: A categorized and filtered listing of shoes for easy browsing.
- User Registration & Login: Secure login and registration system for personalized shopping.
- Cart & Checkout: Add items to the cart and proceed with a smooth checkout experience.
- Admin Dashboard: Admin panel for managing products, users, and orders.
- **Responsive Design**: Accessible across devices, from desktop to mobile.

2.3 Empathy Map Canvas

(Include a diagram or detailed descriptions of each user group, such as customers, admins, and store managers.)

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

Stage Actions		Thoughts	Emotions	Opportunities
1. Awareness	Sees ad or hears about Shopez	"I need new shoes, this looks like a good option."	Curious, Excited	Online ads, influencer reviews, social media
2. Consideration	Visits website, explores products and categories	"Will I find the right fit here?"	Hopeful, Evaluating	Clear product descriptions, high- quality images
3. Registration	Signs up and creates an account	"This was easy and quick."	Confident, Satisfied	Social login, simple registration form
4. Browsing	Filters by size, color, and type of shoe	"Let's find the perfect pair."	Focused, Determined	Smart filters, category suggestions
5. Cart	Adds items to cart, reviews selections	"Do I want to buy these now?"	Anxious, Decisive	Easy cart management, discounts, reviews
6. Checkout	Completes checkout process and payment	"Is my payment secure?"	Worry, then Relief	Multiple payment methods, secure checkout
7. Post- Purchase	Receives order confirmation and delivery updates	"Excited to get my new shoes!"	Happy, Anticipating	Real-time updates, easy tracking
8. Feedback	Leaves a review or rating after receiving the product	"I'll share my experience to help others."	Empowered, Grateful	Review system, loyalty program

3.2 Solution Requirement

- User Module: Search and filter shoes, add to cart, checkout.
- Admin Module: Manage products, users, orders, and track sales.
- Authentication System: Secure user login and registration.
- Payment Integration: Secure online payment system.

3.3 Functional Requirements

FR No.	Functional Requirement (Epic)	Sub-Requirement (Story/Sub-Task)
FR-1	User Registration	Register via email, Google, Facebook
FR-2	Cart Management	Add products to the cart, update cart, remove items
FR-3	Checkout	Complete payment via Razorpay or cash on delivery
FR-4	Admin Dashboard	Manage products, track orders, monitor user activity

FR No.	Functional Requirement (Epic)	Sub-Requirement (Story/Sub-Task)
FR-5	Product Management	Add, update, and delete products from the store
FR-6	Authentication	Secure login and password reset
FR-7	Order Management	View order history, update order status
FR-8	Notifications	Order confirmations, shipping updates, promotional offers

3.4 Non-Functional Requirements

NFR No.	Non-Functional Requirement	Description		
NFR-1	Usability	Simple, intuitive interface, optimized for various devices		
NFR-2	Security	Secure login with JWT, SSL for payments, data encryption		
NFR-3	Reliability	System uptime of 99.9%, no data loss		
NFR-4	Performance	Fast load time for product pages, cart, and checkout		
NFR-5	Availability	24/7 availability, use of uptime monitoring tools		
NFR-6	Scalability	System can handle increasing number of products and users		

3.5 Technology Stack

Frontend: React.js, Tailwind CSSBackend: Node.js, Express.js

Database: MongoDB
Authentication: JWT

• Payment Integration: Razorpay API

• **Deployment**: AWS, Heroku (or similar platforms)

4. PROJECT DESIGN

4.1 Problem-Solution Fit

Shopez addresses the inefficiencies in traditional shoe shopping by providing a convenient, online shopping experience with real-time updates, product variety, and secure payment methods.

4.2 Proposed Solution

Shopez is a responsive e-commerce platform with a user-friendly design, allowing users to browse shoes, add items to their cart, and securely complete transactions.

4.3 Solution Architecture

Parameter	Description
Problem Statement	Difficulty in purchasing shoes online with limited options and slow processes.
Solution Description	A streamlined platform for browsing shoes, secure checkout, and admin control.
Business Model	Revenue through product sales, premium listings for sellers, and affiliate marketing.
Scalability	Designed to scale with increasing users, products, and transactions.

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning

- **Sprint 1**: User Registration & Authentication
- **Sprint 2**: Product Catalog & Filtering
- **Sprint 3**: Cart & Checkout System
- **Sprint 4**: Admin Panel Development
- Sprint 5: Payment Integration & Order Management

5.2 Sprint Schedule & Release Dates

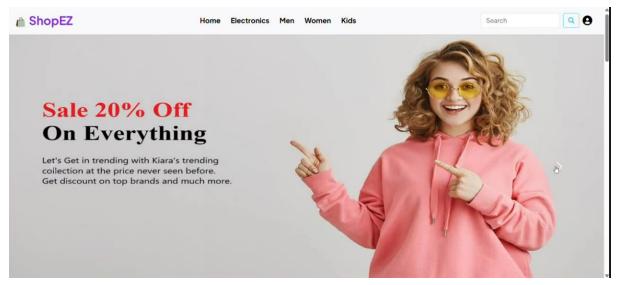
Sprint	Total Story Points	Duration	Start Date	End Date (Planned)	Story Points Completed	Release Date (Actual)
Sprint-1	15	6 Days	17 April 2025	22 April 2025	15	22 April 2025
Sprint-2	12	6 Days	23 April 2025	28 April 2025	10	29 April 2025

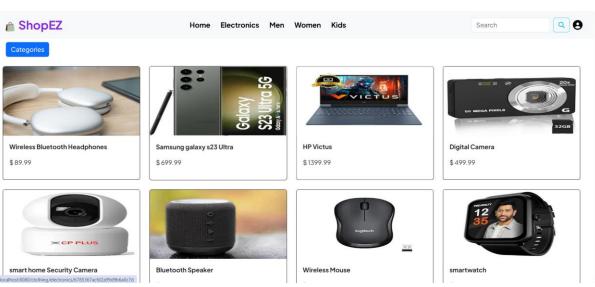
6. FUNCTIONAL AND PERFORMANCE TESTING

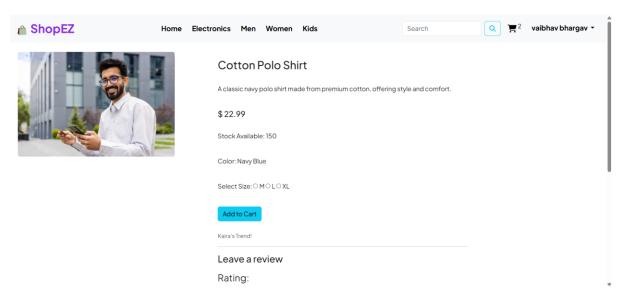
6.1 Performance Testing

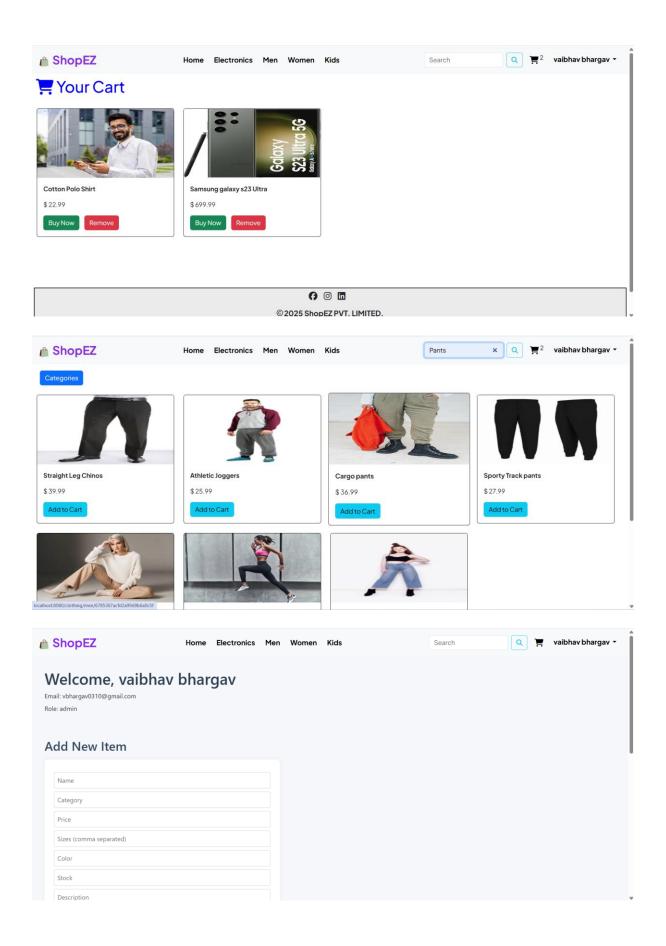
- Load testing during peak traffic (e.g., sale events)
- Stress testing for simultaneous checkouts
- Speed testing for product searches

7. RESULTS









8. ADVANTAGES & DISADVANTAGES

Advantages

- Easy access to a wide range of shoe products
- Secure, multi-payment options
- Admin control over product listings and order management

Disadvantages

- Requires internet access
- Limited to users with digital payment methods
- Dependency on accurate inventory data

9. CONCLUSION

Shopez is an innovative e-commerce platform that simplifies the shoe-buying process through an intuitive interface, secure payments, and a robust backend for managing products and orders. It has the potential to improve the user experience for online shoe shopping while providing an efficient system for administrators to manage their inventory and track orders.

10. FUTURE SCOPE

- Mobile app development for iOS and Android
- Integration with more payment providers
- AI-based product recommendations

11. APPENDIX

GitHub Repository: https://github.com/vaibhav-0310/shopez