1. Introduction

1.1 Project Overview

ShopSmart is a sleek, modern online shopping web application built with TypeScript, CSS (Tailwind), and Vite. It features a responsive product landing page designed to engage users across desktop and mobile. (https://github.com/tulasi-lakkimsetti/Shopsmart.git)

1.2 Purpose

To deliver a fast, visually appealing shopping interface that showcases products effectively, encourages user interaction, and provides a smooth experience across devices.

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2. Ideation Phase

2.1 Problem Statement

Users often abandon shopping sites due to poor navigation, cluttered interfaces, and lack of responsive design. ShopSmart aims to solve this by offering clarity, speed, and aesthetic appeal.

2.2 Empathy Map Canvas

- **Think & Feel**: “I want an intuitive, visually pleasing site.”
- **See**: High-quality product sections.
- **Say & Do**: “This is easy to browse!”
- **Pain Points**: Slow load times, unresponsive UI.
- **Gains**: Engaging design, fluid navigation, quick load.

2.3 Brainstorming

- Emphasize clean UI and eye-catching hero sections
- Ensure graphics are optimized
- Use call-to-action buttons and smooth scrolling
- Make it fit all screen sizes effortlessly

3. Requirement Analysis

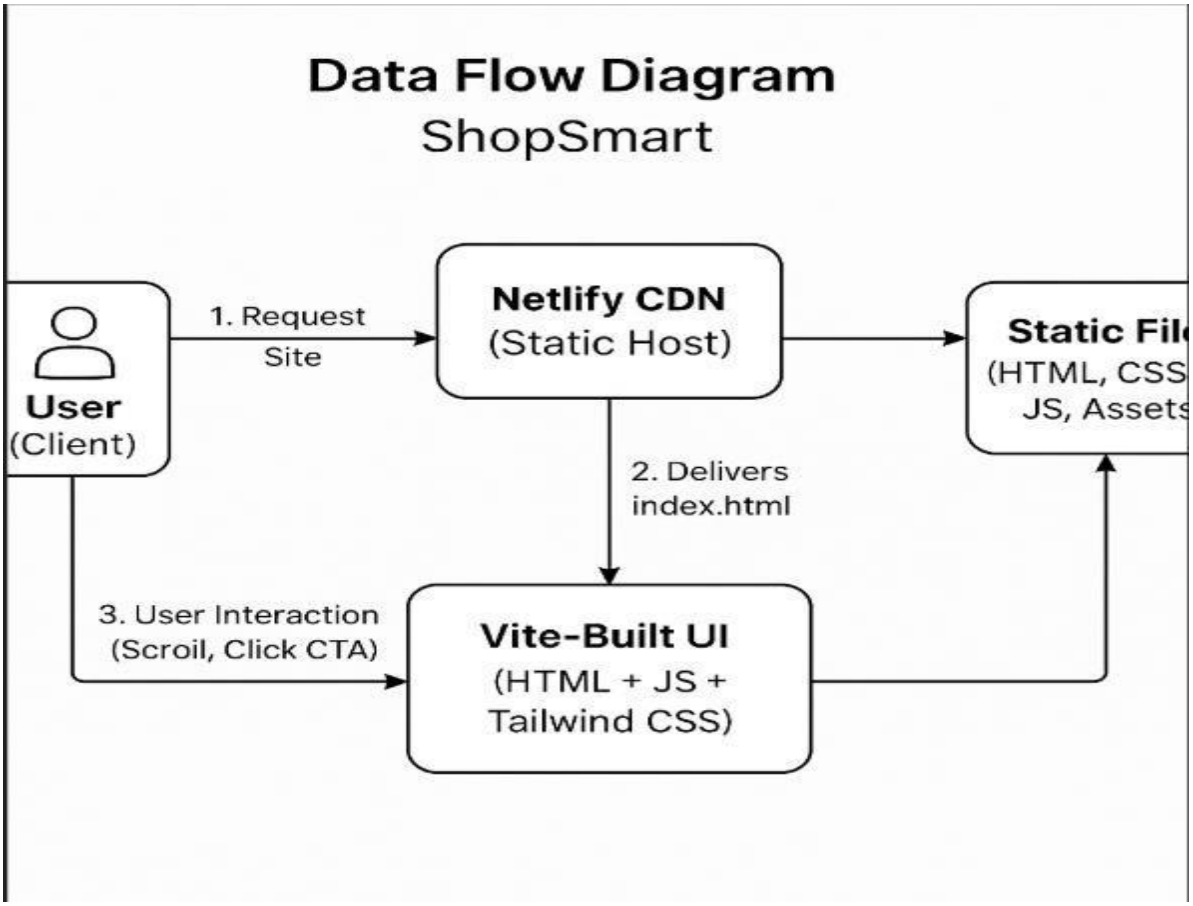
3.1 Customer Journey Map

1. **Discover** ShopSmart via social or search
2. **Browse** product highlights
3. **Drink in visuals** and read CTAs
4. **Take action** — click to view or “Shop Now”
5. **Enjoy responsiveness** across devices

3.2 Solution Requirements

- **Functional**: Landing page, CTA buttons, responsive nav
- **Non-functional**: Quick load (static assets), mobile-first design, cross-browser compatibility

3.3 Data Flow Diagram



3.4 Technology Stack

- **Frontend**: TypeScript + Vite
- **Styling**: Tailwind CSS, PostCSS

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4. Project Design

4.1 Problem-Solution Fit

The static, responsive page solves the need for a fast, engaging shopping interface without complex backend overhead.

4.2 Proposed Solution

A single-page landing UI with featured product sections, smooth scrolling, and bold CTAs across mobile and desktop.

4.3 Solution Architecture

```
SHOPSMART/
├── public/              # Static assets (e.g. favicon, images)
├── src/                 # Core source code
│   ├── components/      # Reusable UI components (e.g. Header, Footer)
│   ├── layouts/         # HTML templates (base layouts with EJS)
│   ├── content/         # Pages content (home.ejs, about.ejs, etc.)
│   ├── main.css         # Tailwind CSS entry file
│   └── index.html       # Entry HTML template
├── tailwind.config.ts   # Tailwind configuration
├── postcss.config.cjs   # PostCSS + Autoprefixer settings
├── vite.config.ts       # Vite project config
├── tsconfig.json        # TypeScript configuration
└── package.json         # Dependencies and scripts
```

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5. Project Planning & Scheduling

5.1 Project Planning

- **Week 1**: Define scope, wireframe UI

- **Week 2**: Implement frontend structure + Tailwind styling
- **Week 3**: Integrate responsiveness, polish UI
- **Week 4**: Test across devices, deploy to Netlify, finalize README

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6. Functional and Performance Testing

6.1 Performance Testing

- Lighthouse audit to ensure high scores on accessibility, performance, best practices
- Manual tests on mobile and desktop browsers
- Asset optimization to reduce load times

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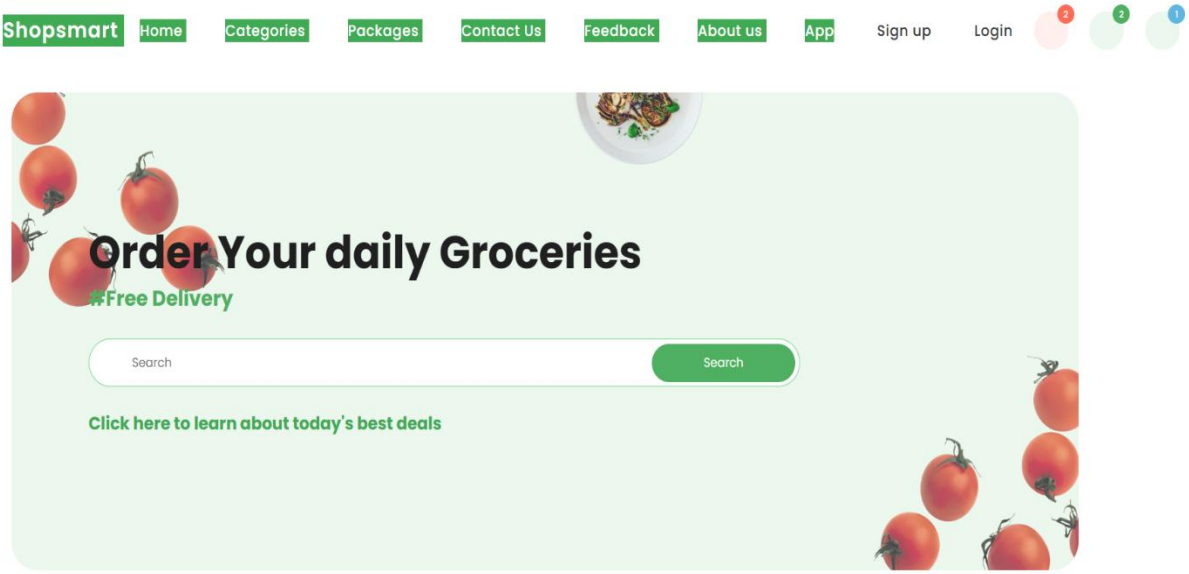
7. Results

7.1 Output Screenshots



Popular Bundle Pack

Big Pack
Lemon, Tomato, Potato,+4
Rs. 500
Add to Cart

Large Pack
Lemon, Tomato, Potato,+2
Rs. 800
Add to Cart

Small Pack
Lemon, Tomato, Potato
Rs. 300
Add to Cart

Big Pack

Large Pack

Small Pack

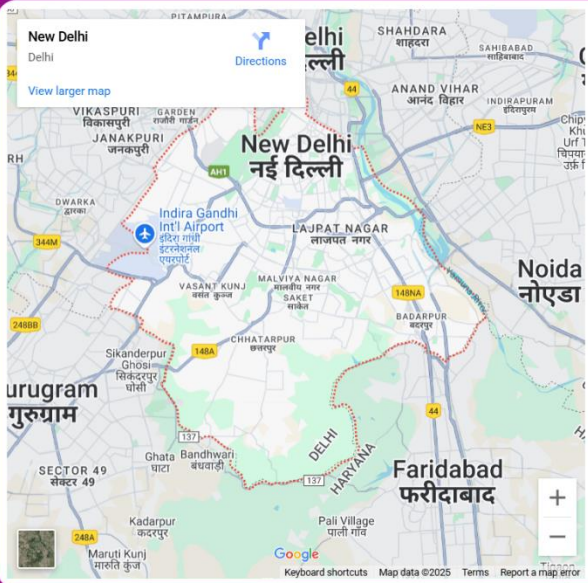
Wishlist

Chakki Fresh Atta
Rs. 350
50%
Qnt: 1
Remove

Maggie
Rs. 10
20%
Qnt: 1
Remove

Total Price	Rs. 183
No. of Items	2
You Save	Rs. 177

Buy Now



Details For Delivery

Name
Address
Email-ID
Locality/Apartment
Pincode
Contact No.
Date (Format: dd/mm/yyyy)
Time Slot (Format: Starting Time - Ending Time. Give a duration of 2 hours.)
SUBMIT

8. Advantages & Disadvantages

Advantages

- Clean, modern, responsive UI
- Fast load times via static assets
- Easy to spin up and scale (Netlify)
- Fully mobile-compatible

Disadvantages

- No dynamic backend for product data or cart
- Lacks user accounts, checkout flow, real-time data
- Limited to presentation; not an actual e-commerce engine yet

9. Conclusion

ShopSmart is a well-crafted presentation-layer prototype for shopping sites—quick to deploy, visually stunning, and great for showcasing products. It nails responsiveness and performance, making it ideal for portfolios or static showcases.

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10. Future Scope

- Integrate backend (e.g., Node.js + MongoDB) for dynamic products
- Add shopping cart, user authentication, and checkout
- Enhance with animations (CS transitions, AOS)
- SEO metadata, sitemap, analytics
- Multi-language support and accessibility audits

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11. Appendix

- **Source Code**: Available on GitHub at