shopez-one-stop-shop-for-online-purchases

1. INTRODUCTION

1.1 Project Overview

Shopez is a MERN-stack-based online purchases system that allows users to browse items, filter by category, place orders, and view order history, all through a user-friendly interface.

1.2 Purpose

To provide an efficient, secure, and visually appealing online platform for customers to explore and order grocery items with ease.

2. IDEATION PHASE

2.1 Problem Statement

Existing online grocery platforms lack proper category filtering, order history visibility, and often suffer from poor user interface.

2.2 Empathy Map Canvas

* User Needs: Easy grocery browsing, clear filtering, seamless ordering
* Pain Points: Complex UI, missing order tracking
* Goals: Intuitive website with secure order placement and history tracking

2.3 Brainstorming

The team discussed multiple approaches including different technology stacks, UI designs, and feature priorities, finalizing MERN stack with JWT-based authentication for optimal performance.

3. REQUIREMENT ANALYSIS

3.1 Customer Journey Map

1. User registers/login
2. Browses available grocery items
3. Filters by category
4. Places an order
5. Views order history

3.2 Solution Requirements

* User authentication
* Grocery listing with images, prices, brands
* Category filtering
* Order placement and order history
* Responsive UI with clear styling

3.3 Data Flow Diagram
Data Flow Diagram will be added here.

3.4 Technology Stack

* Frontend: React JS
* Backend: Node.js + Express
* Database: MongoDB Atlas
* Authentication: JWT
* Styling: CSS

4. PROJECT DESIGN

4.1 Problem Solution Fit
ShopSmart offers a secure, feature-rich, and easy-to-use platform that addresses key gaps in online grocery shopping.

4.2 Proposed Solution
A MERN stack application with category filtering, order history, secure login, and clean UI.

4.3 Solution Architecture
Solution Architecture Diagram will be added here.

5. PROJECT PLANNING & SCHEDULING

5.1 Project Planning
Two Sprints: Backend & Database (Sprint 1), Frontend & Styling (Sprint 2)
Velocity: 15 Story Points per Sprint

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

* Fast API response time
* Secure authentication tested
* Orders placed successfully
* Filter functionality working

7. RESULTS

7.1 Output Screenshots
Screenshots of the grocery listings, filtering, order placement, and order history pages will be added here.

8. ADVANTAGES & DISADVANTAGES

Advantages:

* Secure and efficient
* User-friendly interface
* Category filtering and order history
* Responsive design

Disadvantages:

* Initial deployment only on localhost
* Future scaling required for large datasets

9. CONCLUSION

ShopSmart successfully delivers a clean, functional, and secure online grocery shopping platform addressing common issues in existing systems.

10. FUTURE SCOPE

* Deployment on cloud platforms
* Payment gateway integration
* Admin panel for managing grocery items
* Improved UI features

11. APPENDIX

* Source Code: Provided
* Dataset Link: N/A (User-entered grocery data)