

Fresh Flow Grocery Mobile App



Project Title – Transforming Grocery Food Ordering and
Delivery through a Digital Platform

Written By: Akshay Dawal

Date: October 2024

Table of Content

1.0	Executive Summary.....	4
1.1	Project Overview.....	4
1.2	Objectives and Impact.....	5
1.3	Expected Outcomes.....	6
2.0	Introduction.....	7
2.1	Background.....	7
2.2	Importance of digitization in grocery sector.....	8
2.3	Scope of the project.....	8
3.0	Problem Statement.....	9
3.1	Current issues in Grocery stores.....	9
3.2	Impact of these issues on customers and store owners.....	9
4.0	Project Objectives.....	10
4.1	Specific goals.....	10
4.2	Key performance indicators (KPIs).....	10
5.0	Methodology.....	11
5.1	Phase of the project.....	11
5.1.1	Initiation Phase.....	11
5.1.2	Analysis Phase.....	14
5.1.2.1	Process maps.....	15
5.1.2.2	Comparison of As-Is and To-Be phase.....	17
5.1.3	Design Phase.....	18
5.1.3.1	Wireframing.....	18
5.1.3.2	Stakeholder validation.....	22
5.1.4	Development Support Phase.....	23
5.1.5	Testing Phase.....	24
5.1.6	Deployment Phase.....	24
5.1.7	Post-Launch Phase.....	24
5.2	Tools and Technology Used.....	24

6.0	Documentation.....	25
6.1	Business Requirement Document (BRD).....	25
6.2	Functional Requirement Document (FRD).....	25
7.0	User Stories.....	26
8.0	Challenges and risks assessment.....	30
8.1	Challenges and mitigation strategies.....	30
9.0	Expected Outcomes.....	31
9.1	Employee productivity and satisfaction.....	31
9.2	Operational efficiency and cost saving	31
10.0	Conclusion and recommendations.....	31
11.0	Appendices.....	32
11.1	Updated workflows and process diagrams.....	32
11.2	Documentation (e.g., BRD, FRD, Use case diagram, User Stories)	32
12.0	References and Resources.....	32

Fresh Flow Grocery Mobile App

1.0 Executive Summary

The “Fresh Flow Grocery Mobile App” project is an innovative solution designed to transform the grocery shopping experience by leveraging a digital platform that seamlessly connects customers, grocery stores, and delivery personnel. By addressing inefficiencies in the current grocery ordering and delivery ecosystem, the app aims to provide a user-centric solution that enhances convenience, optimizes delivery processes, and supports local businesses.

The “Fresh Flow Grocery Mobile App” offers features such as AI-powered product recommendations, real-time delivery tracking, and advanced inventory management tools, creating a robust and scalable solution for all stakeholders. With a strong focus on usability, security, and scalability, the Fresh Flow Grocery Mobile App sets a new benchmark for efficiency and customer satisfaction in the grocery sector.

1.1 Project Overview

The “Fresh Flow Grocery Mobile App” is a comprehensive digital platform designed to bridge the gap between traditional grocery shopping and modern consumer demands. The app empowers customers to browse, order, and track groceries from local stores with ease.

For grocery store owners, the platform provides a suite of tools to manage inventory, update product availability, and reach a broader customer base. Delivery personnel benefit from optimized routing and real-time updates, ensuring timely and efficient deliveries.

The project encompasses a full development lifecycle, starting from problem analysis to feature design, prototyping, and implementation. By adopting a user-centric approach, the platform is tailored to meet the diverse needs of its stakeholders while addressing critical pain points in the existing process.

Key Features of the Project:

- **For Customers:** Easy search, personalized recommendations, real-time order tracking, flexible delivery, and multiple payment options.
- **For Store Owners:** Inventory management, order tracking, and sales analytics.
- **For Delivery Personnel:** Optimized routes and real-time updates.
- **General Features:** Multi-language support, secure access, and customer support.
- **Sustainability:** Eco-friendly deliveries.

1.2 Objectives and Impact

Objectives of the Fresh Flow Grocery Mobile App:

- **Enhance Customer Convenience:** Provide an intuitive user interface for seamless browsing, ordering, and delivery tracking.
Implement AI-powered recommendations for personalized shopping experiences.
- **Support Local Businesses:** Equip grocery store owners with digital tools to manage inventory and improve visibility.
Foster connections between local stores and customers through the app.
- **Optimize Delivery Efficiency:** Minimize order-to-delivery times using route optimization and real-time tracking.
Enable real-time communication between customers and delivery personnel.
- **Promote Sustainability:** Minimize environmental impact through eco-friendly delivery options and reduced packaging.
- **Build a Scalable Platform:** Ensure the app can handle growing user demands with a focus on security and performance.

Impact of the Fresh Flow Grocery Mobile App:

- **For Customers:** Save time with faster and more efficient grocery ordering and delivery processes.
Enjoy a personalized shopping experience tailored to their needs.
- **For Store Owners:** Boost sales through increased visibility and digital tools for efficient inventory and order management.
Strengthen customer relationships by providing a seamless shopping experience.
- **For Delivery Personnel:** Improved job satisfaction through optimized routes and simplified delivery management.
- **For the Community:** Promote sustainable practices by reducing the carbon footprint of deliveries.
Foster economic growth by empowering local businesses to compete in a digital economy.

1.3 Expected Outcomes

Expected Outcomes of the Fresh Flow Grocery Mobile App

- **Customer Experience:** Faster, convenient shopping with a user-friendly interface and personalized recommendations.
Increased customer retention through real-time tracking, flexible delivery, and promotions.
- **Business Operations for Store Owners:** Expanded sales and reach through the digital platform.
Efficient inventory management with real-time stock updates and sales insights.
- **Optimized Delivery Process:** Faster and more efficient deliveries with GPS-based route optimization.
Improved transparency and accuracy in delivery timings.
- **Sustainability Goals:** Reduced environmental impact with eco-friendly delivery options and minimal packaging.
Encouragement of sustainable choices through carbon footprint tracking.
- **Platform Growth and Scalability:** Scalable infrastructure to support growing user demands.
Potential to become a market leader in the grocery delivery space.
- **Economic and Community Impact:** Support for local businesses and job creation in tech, logistics, and customer service.

2.0 Introduction

The “Fresh Flow Grocery Mobile App” aims to revolutionize the grocery shopping and delivery experience by leveraging a digital platform. This project seeks to bridge the gap between traditional grocery shopping and modern customer demands, providing a seamless and efficient solution for customers, grocery stores, and delivery personnel. With technology advancing rapidly, the grocery sector needs to adapt to stay competitive, and this app aims to offer a modern solution to address existing challenges and improve the overall shopping experience.

2.1 Background

The grocery shop currently operates manually, which creates several challenges for both the business and customers:

- **In-Store Shopping:** Customers must physically visit the store to purchase groceries, which can be inconvenient and time-consuming, especially for those with busy schedules.
- **Manual Inventory Management:** The shop relies on manual stock tracking, which increases the chances of stockouts, overstocking, and errors in inventory management, leading to inefficiencies.
- **Limited Customer Reach:** With a physical-only presence, the store is limited to serving only local customers who can visit the store, restricting growth and limiting access to a broader audience.
- **Inefficient Order Processing:** Orders are processed manually, requiring customers to interact with staff for each transaction, leading to long wait times, order mistakes, and inconsistent service.
- **Delivery Management:** If the store offers delivery, it's typically managed manually, making it difficult to track delivery times, optimize routes, and ensure timely deliveries, which may result in delays and high costs.
- **Lack of Data Insights:** Without a digital platform, the store has limited access to insights regarding customer preferences, sales trends, and operational efficiency, hindering growth and decision-making.

2.2 Importance of digitization in the grocery sector.

Digitization is crucial for improving efficiency and customer satisfaction in the grocery sector. Here are the key benefits:

- **Convenience for Customers:**
Online Ordering: Customers can shop from anywhere, saving time and avoiding the need to visit the store.
24/7 Access: Customers can place orders at any time, offering more flexibility.
Easy Shopping: Digital platforms make it simple to browse, order, and pay.
- **Efficient Operations:**
Inventory Management: Real-time tracking helps avoid stockouts and overstocking.
Automated Orders: Orders are processed automatically, reducing mistakes and speeding up service.
Employee Efficiency: Staff can focus on higher-value tasks by automating routine work.
- **Cost Savings:**
Lower Costs: Digital systems reduce the need for manual labor and paperwork.
Cheaper Deliveries: Route optimization helps reduce delivery costs and time.
- **Better Customer Service:**
Faster Support: Quick responses to customer inquiries and issues.
Order Tracking: Customers can track their orders in real-time, improving satisfaction.
- **Valuable Insights:**
Customer Data: Businesses can analyze customer preferences to personalize offers and marketing.
Trend Spotting: Sales data helps predict demand and adjust stock levels.

2.3 Scope of the project

The scope of the Fresh Flow Grocery Mobile App includes the following key aspects:

- **Customer Experience:** Creating a user-friendly mobile app where customers can easily browse products, place orders, make payments, and track deliveries, all without visiting the store.
- **Store Management:** Developing features for grocery store owners to manage inventory, process orders efficiently, and update product availability in real-time.
- **Delivery Optimization:** Implementing a delivery management system that tracks orders, optimizes delivery routes, and ensures timely deliveries.
- **Sustainability Features:** Incorporating eco-friendly delivery options and minimizing packaging to promote sustainability.
- **Scalability:** Designing the app to handle growing user demands, additional product categories, and expanded delivery areas.

3.0 Problem Statement

The “Fresh Flow Grocery Mobile App” aims to solve the challenges faced by grocery stores operating manually. Current systems lead to inefficiencies, customer dissatisfaction, and limited growth. This project focuses on digitizing ordering, inventory management, and delivery to create a more efficient and customer-friendly experience.

3.1 Current Issues in Grocery Stores

- **Customer Inconvenience:** Customers are required to visit the store, which can be time-consuming and inconvenient, especially for those with busy schedules.
- **Lack of Real-Time Updates:** Customers and store owners lack real-time insights into order status, stock availability, or delivery timelines.
- **Manual Order Processing:** Orders are processed manually, leading to longer wait times and potential errors in fulfilling orders.
- **Limited Reach:** Stores can only serve local customers who physically visit the store, limiting business growth.
- **Inventory Management Challenges:** Manual tracking of stock leads to inaccuracies, such as stockouts or overstocking, and makes it difficult to forecast demand.

3.2 Impact of these Issues on Customers and Store Owners

- **Impact on Customers:**
 - Inconvenience: Customers face the hassle of physically visiting the store, leading to wasted time and effort.
 - Limited Product Availability: Inaccurate stock information can result in customers being unable to find the items they need, leading to missed purchases.
 - Poor Experience: A manual system can lead to order mistakes, long checkout times, and a lack of personalized service, negatively affecting the customer experience.
- **Impact on store owners:**
 - Operational Inefficiency: Manual systems require more staff time and effort, leading to higher labor costs and slower service.
 - Lost Sales Opportunities: The inability to reach a broader customer base through online platforms limits potential sales and business growth.
 - Inventory Management Problems: Inaccurate stock tracking leads to lost revenue, either from stockouts or overstocking, and complicates reordering processes.
 - Difficulty Competing: Without a digital presence, store owners are at a disadvantage compared to larger competitors that offer online ordering and faster, more efficient services.

Fresh Flow Grocery Mobile App

4.0 Objectives

The primary objective of the “Fresh Flow Grocery Mobile App” is to transform a manually operated grocery store into a fully digitized platform. The project aims to enhance customer convenience, improve operational efficiency, and expand business opportunities for the store owner.

4.1 Specific Goals

- **Digitize Order Processing:** Allow customers to place orders through a mobile app, eliminating the need for physical store visits.
- **Streamline Inventory Management:** Enable real-time stock tracking to avoid overstocking or stockouts.
- **Improve Delivery Efficiency:** Introduce a delivery management system to optimize routes and ensure timely deliveries.
- **Enhance Customer Experience:** Offer features like product browsing, easy payment options, and real-time order tracking.
- **Expand Customer Reach:** Serve a wider audience by allowing online ordering and delivery.

4.2 Key Performance Indicators (KPIs)

- **Order Processing Time:** Measure the time taken from order placement to fulfillment and aim for a significant reduction.
- **Customer Satisfaction Rate:** Track feedback and reviews to maintain a satisfaction rate of 90% or higher.
- **Delivery Time Accuracy:** Ensure that at least 95% of deliveries are completed within the promised time frame.
- **Inventory Accuracy:** Maintain stock accuracy of at least 98% through real-time tracking.
- **Customer Retention Rate:** Aim for a retention rate of 80% or higher by providing a seamless shopping experience.
- **Revenue Growth:** Achieve a 20% increase in sales within the first six months of launching the app.

5.0 Methodology

The “Fresh Flow Grocery Mobile App” project follows a systematic methodology to ensure its successful planning, development, and deployment. The process involves multiple phases to address the needs of both the grocery store and its customers while ensuring efficiency, usability, and scalability.

5.1 Phases of the project

5.1.1 Initiation Phase

- **Stakeholder Identification:**

Stakeholders	Role in the project	Interest in the App
Store Owner	Decision-maker	Who approves the app and wants digitize operations, increase revenue and better efficiency.
Employees / Store admin	Operational Staff	Use the app to manage stock and handle orders.
Customers	End-users	Use the app to browse products, place orders, and track deliveries.

"The stakeholders in this project include the store owner, who seeks to enhance business efficiency through digitization; employees, who require a system to streamline daily tasks; and customers, who expect a convenient and seamless shopping experience. Their inputs and needs shape the app's design and functionality."

- **Requirement Elicitation:**

In this phase, I simulated various requirement gathering techniques to understand the needs of the stakeholders.

- ❖ **Interview:**

The purpose of the interviews was to gain deeper insights into the challenges faced by the store owner, employees, and customers, and to explore potential solutions for digitizing the store's operations and improving the shopping experience.

- **Interview Methodology:**

- Interview Type: Structured interviews, conducted face-to-face or virtually. Each interview lasted approximately 10-15 minutes.
- Participants:
 - Store Owner: 1 participant who oversees operations and business decisions.
 - Employees / store admin: 4 employees who handle inventory, customer service, and order processing.
 - Customers: 4 regular customers who frequently shop at the store.

Fresh Flow Grocery Mobile App

- Procedure: A structured interview framework was developed with predefined questions. Participants were invited via phone calls and scheduled for interviews.
- Notes and key insights were recorded during each session.

- **Interview Framework**

- For Store Owner:

Section	Details
Introduction	Thank the participant and explain purpose of the interview
Questions	<ol style="list-style-type: none">1. What challenge do you face with the current manual system?2. How do you manage inventory and stocks?3. What are your goals for introducing digital solutions in your stores
Follow-Up	Ask for examples of challenges in managing the store manually.
Conclusion	Summarizing the feedback and thanking store owner for their time.

- For Employees / store admin:

Section	Details
Introduction	Thank the participant and explain the purpose of the interview.
Questions	<ol style="list-style-type: none">1. What tasks do you perform daily that takes the most times?2. How do you currently manage inventory and update stock levels?3. How would a mobile app improve your daily work?
Follow-Up	Ask an example of inefficiencies in daily operations
Conclusion	Summarizing the feedback and thanking them for their time.

Fresh Flow Grocery Mobile App

○ For Customers:

Section	Details
Introduction	Thank the participant and explain the purpose of the interview.
Questions	<ol style="list-style-type: none">1. How do you usually shop for groceries at this store?2. What challenges do you face while shopping in the stores?3. Would you prefer ordering groceries online for delivery?
Follow-Up	Ask more details about their shopping habits and preferences.
Conclusion	Summarizing the feedback and thank the customer for their time.

Fresh Flow Grocery Mobile App

- **Key Findings**

- Employees / store admin face challenges with time-consuming manual tasks such as stock tracking and order processing.
- The store owner is concerned about inventory visibility and the lack of efficient order tracking.
- Customers experience long wait times and limited store hours.

- **Insight**

- Employees / store admin support a mobile app to automate tasks and manage orders.
- The store owner seeks a digital solution to improve stock management and reduce errors.
- Customers want a more personalized, convenient shopping experience with features like pre-ordering and home delivery.

5.1.2 Analysis Phase

The Analysis Phase focuses on understanding the current manual grocery store operations and identifying how the proposed digital solution will transform these processes. This includes As-Is Analysis (current state) and To-Be Analysis (future state).

❖ As-Is Analysis (Current State)

The current process involves manual tasks such as:

- Customers: Must visit the store to browse products and wait in long queues for checkout.
- Employees / store admin: Manually update inventory, leading to inefficiencies and delays.
- Store Owner: Has no visibility into real-time stock levels or customer trends.

❖ To-Be Analysis (Future State)

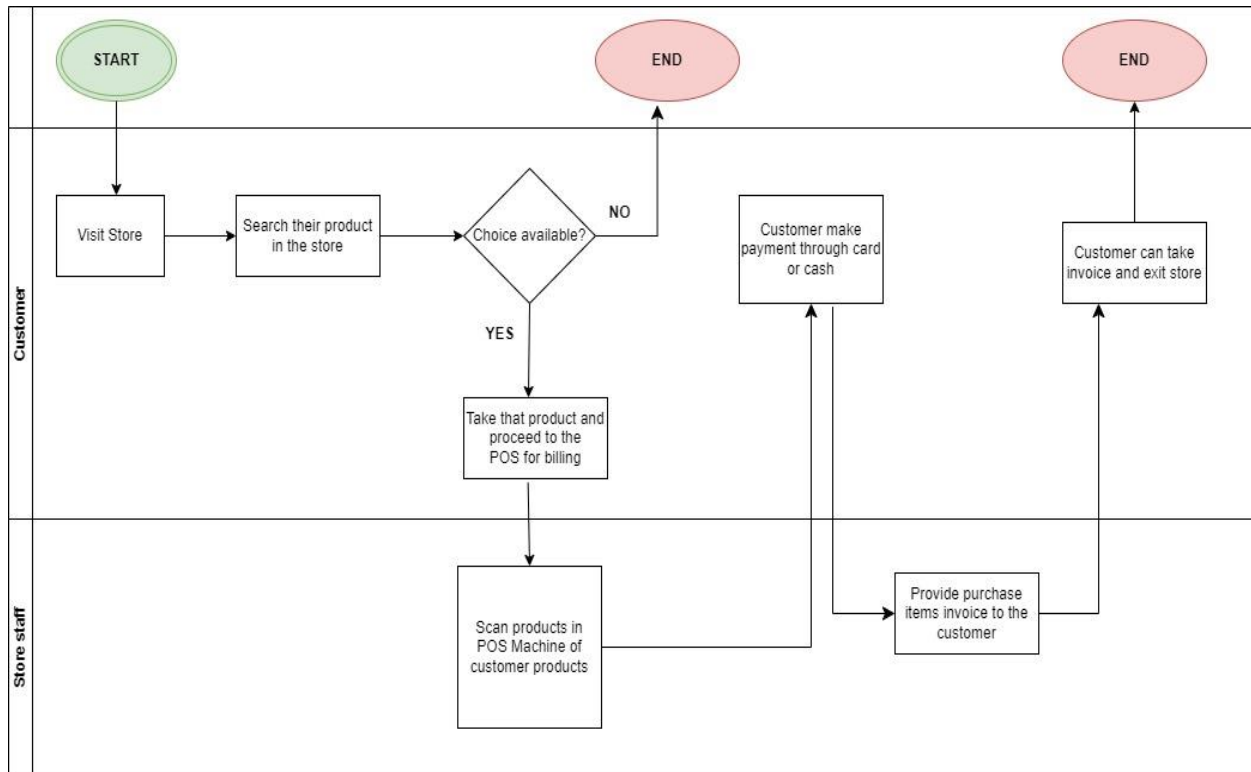
The future process with the app includes:

- Customers: Can browse products, order online, and get home delivery through the app.
- Employees / store admin: Use the app for inventory updates and order management.
- Store Owner: Monitors real-time stock and sales trends via app analytics.

Fresh Flow Grocery Mobile App

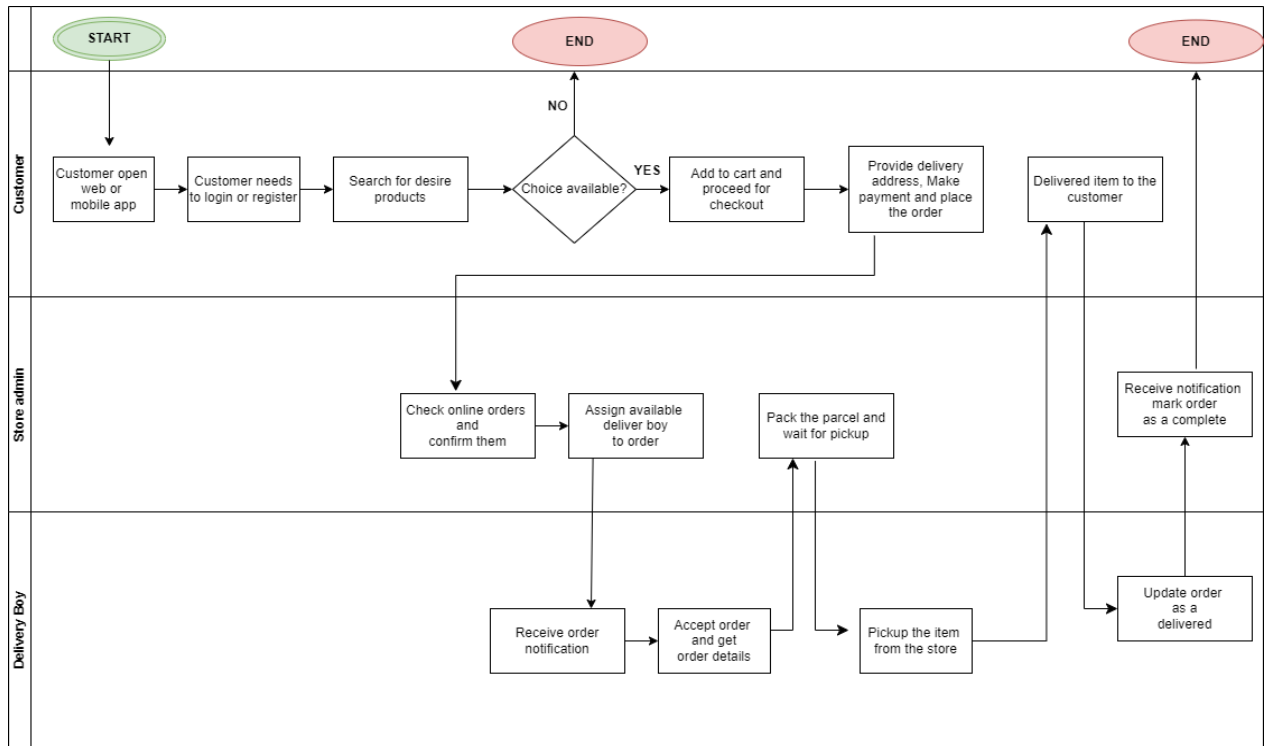
5.1.2.1 Process Maps

❖ As-Is Process Map



Fresh Flow Grocery Mobile App

❖ To-Be Process Map



Fresh Flow Grocery Mobile App

5.1.2.2 Comparison of As-Is and To-Be Process:

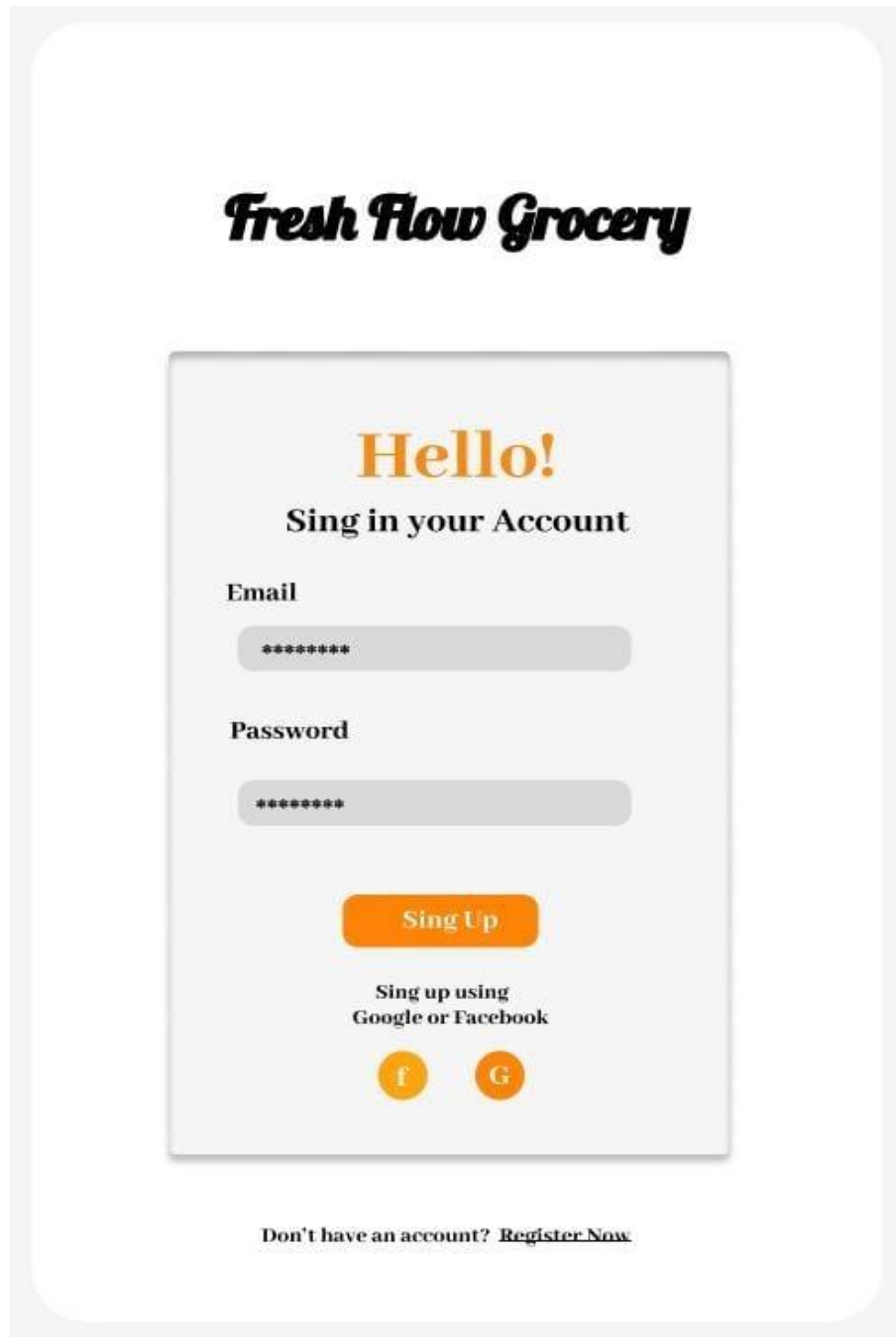
Aspect	As-Is (Manual)	To-Be (Digital)
Order Placement	Customers visit the store to place orders.	Customers can place orders via mobile app from anywhere.
Inventory Management	Inventory tracked manually, leading to errors.	Real-time inventory tracking with automated updates.
Customer experience	Long wait time during peak hours	Reduce waiting time with pre-order and delivery option.
Customer reach	Limited customers who physically visit the store.	Broader customer base with digital access.
Order tracking	Customers have no visibility of order status.	Real-time order tracking through the app

5.1.3 Design phase

5.1.3.1 Wireframes

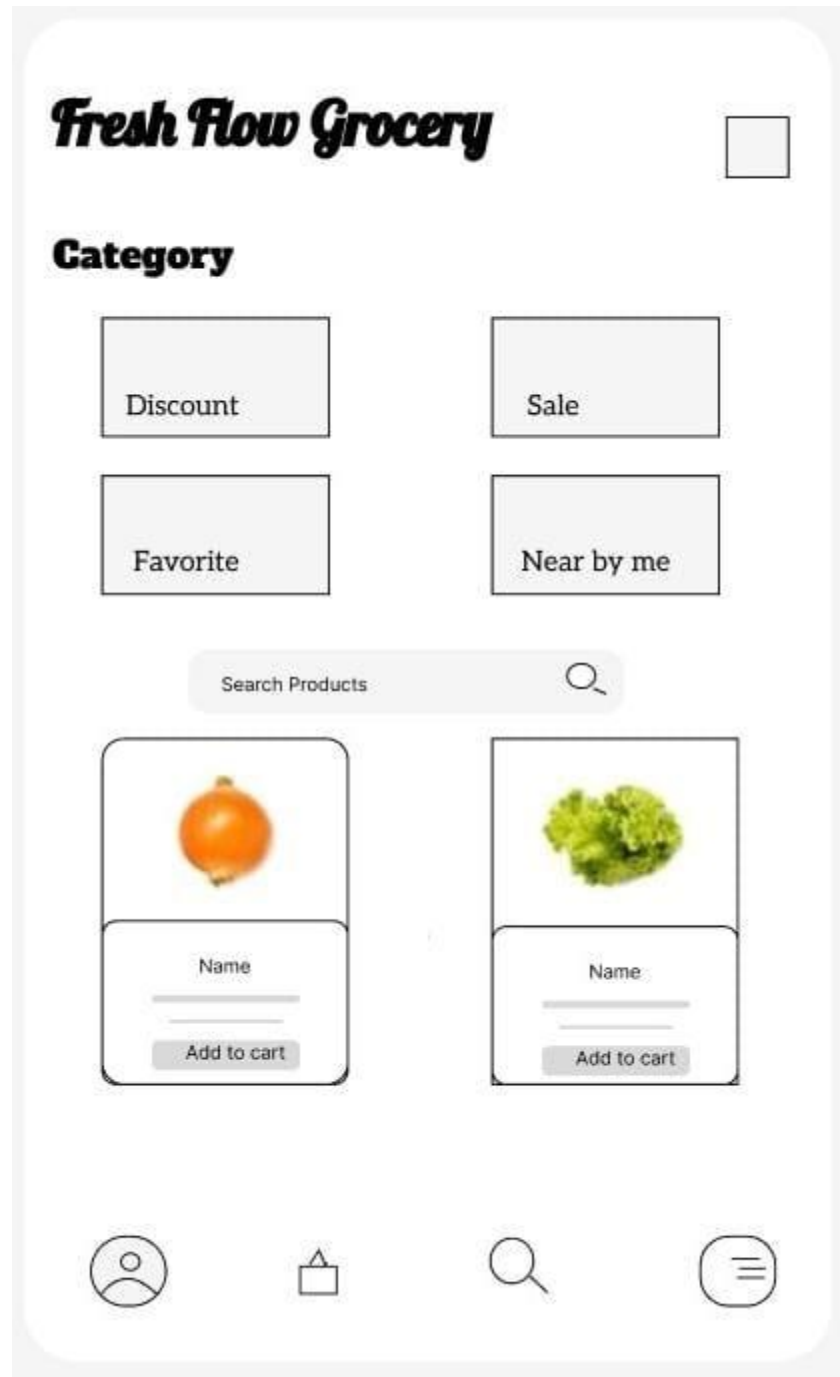
Wireframes are simple, visual representations of the app's layout and functionality. They help define the structure of key screens and provide a foundation for development. For this project, wireframes were created for the following screens:

- **Sing Page Wireframe**



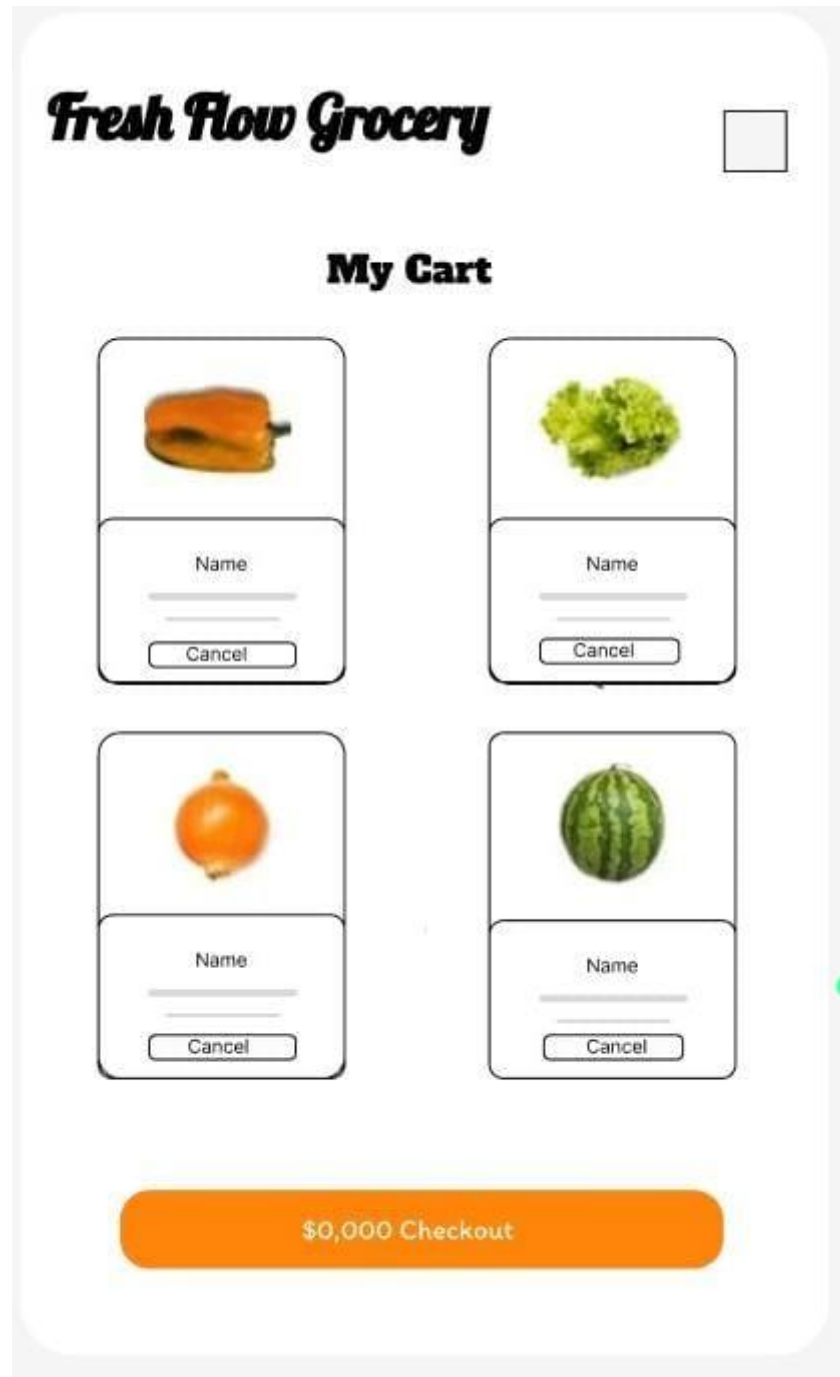
Fresh Flow Grocery Mobile App

- Home Page Wireframe



Fresh Flow Grocery Mobile App

- Shopping cart Wireframe





Fresh Flow Grocery Mobile App


- Checkout Wireframe

Fresh Flow Grocery

Checkout Now

Credit Card
1234 **** * 1234 5678 ☐

Paypal
Your Name ☐

Debit Card
1234 **** * 1234 5678 ☐

Add Coupon

Coupon Code

>

Items (4)

\$00.00

Delivery Services

\$00.00

Total Price

\$0000.00

Confirm Order

Fresh Flow Grocery Mobile App

5.1.3.2 Stakeholder Validation

Stakeholder validation ensures the design aligns with business objectives and user expectations.

Feedback Point	Action Taken	Outcome
Simplify cart navigation	Reduced steps to access the cart	Faster checkout process
Highlight delivery charges upfront	Added delivery fees in cart summary	Improved transparency for users.
Enhance product search functionality	Added filters for categories and price	Easier product Discovery

5.1.4 Development Support Phase

The Development Support Phase ensures smooth collaboration between stakeholders and the development team, focusing on clarifying requirements and managing changes in scope to maintain project alignment.

5.1.4.1 Requirement Clarification

In the Development Support phase, my main job as a Business Analyst was to help the development team by providing the necessary support and clarifications. This phase involved regular communication to keep the project on track and ensure the team had everything they needed to move forward.

Key activities included:

- **Regular Check-ins:** I attended daily stand-up meetings and weekly progress reviews to check on how things were going. These meetings were a chance to address any issues and make sure the team was clear on the project goals.
- **Clarification Sessions:** Whenever there were questions or unclear requirements, I helped set up clarification sessions. This allowed the developers to get the information they needed from the business side to avoid misunderstandings.
- **Updating Documents:** As development progressed, I made sure the project documents, like BRDs and user stories, were up to date. If there were any changes or feedback from the development team, I updated the documents accordingly.
- **Real-Time Support:** I provided real-time support by answering any questions from the developers and ensuring they had the right guidance to stay aligned with the business requirements. My goal was to help keep the project moving smoothly.

5.1.4.2 Scope Management

In the Scope Management phase, my focus was on managing any changes and ensuring the project stayed on track.

- **Handling Change Requests:** When stakeholders requested changes, I reviewed them and worked with the team to see if they could be added without affecting the project's timeline or budget.
- **Impact Analysis:** I quickly assessed how changes would affect the project, including potential delays or extra costs, to ensure everything still met business goals.
- **Stakeholder Approval:** After analyzing the impact, I got approval from stakeholders for any changes to make sure they were on board with the new direction.
- **Version Control:** I made sure all documents were updated and tracked, so everyone had the latest versions and we avoided confusion.

Fresh Flow Grocery Mobile App

5.1.5 Testing Phase

In the Testing Phase, my role was to support the testing process and ensure the app met the required standards.

- **Test Case Review:** I worked closely with the Quality Assurance (QA) team to review test cases and ensure they covered all the key requirements. This helped identify and address any gaps early on.
- **User Acceptance Testing (UAT):** I coordinated User Acceptance Testing by involving stakeholders to test the app and confirm it met their expectations. I collected their feedback and ensured that any issues were communicated to the development team for fixes.

5.1.6 Deployment Phase

- **Training and Support:** As a Business Analyst, I needed to prepare training materials and conduct sessions to ensure the store owner and employees could use the app efficiently.
- **Stakeholder Communication:** I was responsible for keeping stakeholders updated on the deployment plan, addressing their concerns, and ensuring alignment for a smooth launch.

5.1.7 Post-Launch Phase

- **Feedback Collection:** As a Business Analyst, I want to gather user feedback through surveys and discussions to identify areas for improvement.
- **KPI Monitoring:** I aim to monitor key metrics like app adoption rates and customer satisfaction to evaluate the app's success.
- **Continuous Improvement:** I plan to work with the team to implement updates or additional features based on the feedback received.

5.2 Tools and Technology Used

Category	Tools/Technology	Purpose
Requirement Gathering	Microsoft Word	Create BRD (Business Requirement Document) and FRD (Functional Requirement Document)
Visual Representation	Draw.io	Process map Diagram
Wireframing	Figma	Design App interface

6.0 Documentation

6.1 Business Requirement Document (BRD) [View Full Document](#)

The Business Requirements Document (BRD) serves as the foundation for the Fresh Flow Grocery Mobile App project. It captures the following key aspects:

- **Purpose and Objectives:** Highlights the goals of digitizing grocery operations to enhance customer experience and streamline workflows.
- **Scope:** Focuses on transforming manual operations into a digital platform with features like product browsing, online ordering, and payment processing.
- **Stakeholders:** Identifies stakeholders such as customers, store admins, and delivery partners, detailing their roles and expectations.

6.2 Functional Requirement Document (FRD) [View Full Document](#)

The Functional Requirements Document (FRD) delves into the technical and functional aspects of the Fresh Flow Grocery Mobile App. It includes:

Functional Requirements: Details the features and functionalities for customers, store admins, and delivery partners, such as:

- **Customer:** Product browsing, shopping cart, order management, and payment processing.
- **Admin:** Product management, order tracking, and inventory management.
- **Delivery Partner:** Delivery status updates and communication with customers.

Non-Functional Requirements: Addresses performance, security, scalability, and usability expectations.

7.0 Users stories

These User stories outline the features and functionalities needed to address the needs of customers, store admins, and delivery partners.

EPIC	USER STORY TITLE	MOSCOW	USER STORIES	ACCEPTANCE CRITERIA
Customer functions	Account Creation	Must	As a customer, I want to create an account using my email or phone number so that I can manage my orders and preferences.	The customer successfully registers using valid email or phone and sets a secure password.
	Password Reset	Should	As a customer, I want to reset my password in case I forgot it so that I can access my account without issue.	The customer receives a password reset link via email or SMS and successfully updates their password.
	Product Search	Must	As a customer, I want to search for products using keywords so that I can quickly find what I need.	The system displays relevant products when a keyword is entered.
	Product Filters	Should	As a customer, I want to filter products by category, price, range, or availability so that I can narrow down my choices.	Filters apply correctly and the customer can see a refined product list based on their selections.
	Add items to cart	Must	As a customer, I want to add multiple products to my cart so that I can buy them all in one transaction.	Selected products appear in the cart with correct quantity and price.

	View items in cart	Must	As a customer, I want to view all the items which are added to my cart so that I can review my selection before purchase	The cart displays all added items with their names, quantity and prices.
	Place an Order	Must	As a customer, I want to place an order and select a delivery time slot so that I can receive my groceries conveniently.	The order is successfully placed and the delivery time slot is confirmed in the confirmation email or SMS.
	Receive order confirmation	Must	As a customer, I want to receive an order confirmation with a unique id so that I can track my purchase.	A confirmation message with a unique order id is displayed immediately after placing the order.
	Order Tracking	Must	As a customer, I want to track the real-time status of my order so that I know when it will arrive.	The system displays real-time updates for order status (e.g., preparing, out for delivery, delivered)
	Payment options	Must	As a customer, I want to choose from various payment methods (card, UPI, wallet, COD) so that I can pay in my preferred way.	The payment gateway supports all listed payment methods and transactions are completed securely.
	Generate payment receipt	Must	As a customer, I want to receive a payment receipt after	A receipt is generated automatically and includes order details, payment

			completing my payment so that I have proof of my transaction	method and transaction Id.
	View past orders	Must	As a customer, I want to view my past orders so that I can keep track of my purchase history	All completed orders are displayed chronologically with order Id, date and total amount.
	Cancel Order	Must	As a customer, I want to cancel an order before its dispatched so that I can manage my purchases.	Customers can cancel orders only if the status is processing.
Store Admin Functions	Admin dashboard	Must	As a store admin, I want to log in to a secure dashboard so that I can manage store operations.	The admin successfully logs in with secure credentials and access the dashboard.
	Product Management	Must	As a store admin, I want to add, edit, or remove products from the inventory so that the product catalog is up-to-date.	The admin can add, edit, or remove products and change reflect in the customer-facing catalog.
	Order Management	Must	As a store admin, I want to view all customer orders so that I can manage fulfillment efficiently.	The admin dashboard displays all current orders with their status (pending dispatch completed).
	Low stock-alerts	Should	As a store admin, I want to receive alerts for low stock items so	Notifications are sent for items reaching a predefined low stock threshold.

			that I can restock before items run out.	
	Assign delivery person	Must	As a store admin, I want to assign orders to delivery person so that orders are delivered efficiently.	The admin dashboard allows assign of delivery person based on availability and location.
	Track delivery status	Must	As a store admin, I want to track the real-time status of deliveries so that I can ensure timely completion.	The system displays current location and status (out for delivery, delivered) for all active orders.
Delivery Partner Functions	Assigned orders	Must	As a delivery partner, I want to receive assign orders with customer details so that I can deliver them correctly.	The delivery partner app shows the assign orders with all relevant details (address, contact info).
	Status Updates	Must	As a delivery partner, I want to update the order status after delivery so that the system is accurate.	Delivery partners can mark order as delivered and the system reflects the update for the customer and store admins.
	Customer Communication	Should	As a delivery partner, I want to contact customers in case of delivery issues so that I can resolve them quickly.	Delivery partners can initiate call and message to customers directly from the app.

8.0 Challenges and risks assessment

The challenges and risks assessment for the “Fresh Flow Grocery Mobile App” aims to identify potential hurdles during the project lifecycle and propose effective mitigation strategies to address them. These challenges may arise due to technical complexities, user adoption, and operational adjustments.

8.1 Challenges and mitigation strategies

Challenge	Description	Mitigation strategy
User Adoption Resistance	Customers and store staff may be hesitant to adopt the new system.	Conduct training sessions for store staff.
		Provide onboarding tutorials for customers.
Technical glitches in the app	Bugs or crashes during app usage might frustrate users.	Conduct thorough testing before release.
Integration with payment gateway	Difficulty in integrating with payment platform could delay development.	Collaborate closely with payment gateway providers during integration.
Delivery logistic management	Challenges in assigning and tracking deliveries in real time.	Use GPS-enabled tracking solutions for delivery personnel.
Data Security and privacy	Ensuring secure transactions and protecting user data from breaches.	Implement encryption for sensitive data.
Inventory management inaccuracies.	Real-time inventory update may not reflect actual stock's level accurately.	Conduct regular inventory audits and updates in the system.

9.0 Expected outcomes

The “Fresh Flow Grocery Mobile App” project is designed to deliver tangible benefits to customers, employees, and store management. This section outlines the anticipated outcomes in terms of improved productivity, customer satisfaction, operational efficiency, and cost savings.

9.1 Employee productivity and satisfaction

- **Enhanced Workflows:** Employees will have access to a user-friendly admin dashboard for managing inventory, orders, and deliveries efficiently.
- **Reduced Errors:** Digitized systems minimize manual errors in billing, stock tracking, and order fulfillment.
- **Improved Satisfaction:** Training and streamlined workflows lead to better understanding and satisfaction with job roles.

9.2 Operational Efficiency and cost saving

- **Streamlined Processes:** Real-time inventory tracking ensures that stock levels are updated automatically, reducing overstocking or stockouts.
- **Cost Savings:** Reduced dependency on manual labor for inventory management and order tracking decreases operational costs.

10.0 Conclusion and Recommendation

- Conclusion

The “Fresh Flow Grocery Mobile App” project demonstrates a clear strategy to modernize grocery store operations by digitizing manual processes. This app is designed to enhance customer experience, streamline store operations, and improve overall business efficiency.

- Recommendation
 - Prioritize a user-friendly interface for seamless customer interactions.
 - Ensure regular updates to integrate customer feedback and add new features.
 - Provide robust customer support to address user queries and build trust.

11.0 Appendices

11.1 Updated Process flow Diagrams

Updated workflow has been covered in section 5.1.2

- **As-Is Process:** See Section 5.1.2.1 for a detailed view of the current manual process.
- **To-Be Process:** See Section 5.1.2.1 for the improved digital workflow.
- **Comparison of As-Is and To-Be:** See section 5.1.2.2

11.2 Documentation

Detailed documentation provided in section 6.0 Documentation. Below is a summary of their purpose

Document Name	Purpose	Link to full document
Business requirement document (BRD)	Defines business goals, scope and high-level requirements.	View BRD
Functional Requirement document (FRD)	Detailed functional and non-functional app requirements	View FRD
Use Case diagram	User interaction with the system/App.	View use case diagram
User Stories	Provide clear, user-centered requirements	View User Stories table
Wireframing	It provides a visual blueprint of a system layout and functionality.	View Wireframe
Jira Board	Jira board is visually track and manage tasks, user stories and workflows in an organized manner.	View Jira Board

12.0 References and Resources

- References

This section lists references and tools utilized during the project.

- **Business Analysis Techniques** - From online training modules
- Resources
 - **Wireframing:** Figma, for designing user interface prototypes.
 - **Workflow Diagrams:** Draw.io for creating As-Is and To-Be workflows.
 - **Documentation Tools:** Microsoft Word, Google Docs.
 - **File Sharing:** Google Drive, for collaboration and storing project artifacts.

