

ISDS 551

INFORMATION RESOURCES AND IT PROJECT MANAGEMENT

Team NEXA

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INTRODUCTION

Green Vibe Cafe is the response to Cal State Fullerton's ever-increasing demand for greater variety. Since the inception of time, students have consistently sought out an optimal location to sip coffee while studying. The primary concern pertains to the scarcity of spaces available after the customary closing hours of the majority of establishments. Green Vibe Cafe endeavors to accommodate the majority of students by providing convenient hours, an enticing menu, and convenient location for those who reside in the heart of the school campus. Due to its location directly outside the CSUF campus, the business will primarily attract faculty, staff, and students. The organization's mission is to facilitate the advancement and prospects of individuals who operate most efficiently in a setting populated by individuals who share similar values and objectives. Our objective is to furnish a workspace that is conducive to productivity, featuring essential supplies, beverages, and like-minded individuals who are open to working both independently and collectively. Annie Xu, Arundhathi Roy, Rewa Garg and Srija Vellanki will each hold an equal share of the management. Given that every founding member is an active Cal State Fullerton student, we deem it highly appropriate to unite in order to foster an atmosphere that promotes personal growth and inspires others to do the same. Green Vibe Cafe's product is primarily distinguished by the manner in which we accommodate students in particular: extended hours, reasonable prices, and an atmosphere that encourages individuals of all types to concentrate on their education. Although situated directly outside the school campus, the establishment welcomes all individuals seeking a beverage or a place to hold a meeting. Second part of the project will be application development.

BUSINESS IDEA

Green Vibe Cafe aims to address the growing demand for diverse and accessible spaces at Cal State Fullerton, particularly for students looking for a conducive environment to study, work, and collaborate. The cafe distinguishes itself by offering extended hours, a compelling menu, and a location at the heart of the campus. It targets faculty, staff, and students, positioning itself as a hub for productivity and community.

Our entrepreneurial endeavor revolves around opening a coffee shop that boasts a distinctive focus on locally grown ingredients, a diverse and tempting menu selection, and a welcoming space for reading and studying. This venture seeks to harmonize the love for coffee with a commitment to supporting local agriculture. By using locally sourced ingredients, we aim to offer our customers the freshest and most sustainable products while simultaneously contributing to the growth of the community. Our wide-ranging menu will cater to a broad spectrum of tastes, from artisanal coffee and specialty brews to a delectable assortment of pastries, sandwiches, and health-conscious options. Furthermore, we envision our coffee shop as a sanctuary for students, professionals, and book enthusiasts, providing a serene and inspiring environment for reading, studying, and contemplation. This report outlines the essential IT systems required to support our coffee shop's operations and customer engagement.

IT Systems

GreenVibe Café uses IT Systems to enhance operational efficiency by streamlining tasks such as order management, inventory tracking, and employee scheduling. By facilitating data-driven decision-making, the cafe optimizes its offerings, reduces waste, and manages resources effectively. We boost sales and revenue by promoting customer engagement and loyalty through personalized interactions, online ordering, and digital marketing. Additionally, IT Systems is utilized in financial management and security, ensuring the cafe's fiscal health and safeguarding its assets. Overall, IT systems play a vital role in creating a sustainable cafe that operates efficiently, minimizes its environmental impact, and fosters customer satisfaction and loyalty. GreenVibe Café utilizes the following IT Systems:

Point of Sale (POS) System:

- Purpose: Managing transactions, tracking sales, and inventory management
- Functionality: Maintain record of SKUs, handle customer orders, process payments, and maintain sales data
- Benefits: Increase efficiency in the checkout process which shorten queues, generate sales report and trend analysis

Inventory Management Software:

- Purpose: Tracking ingredients, supplies, and coffee product inventory levels
- Functionality: Automated alerts for low inventory, preventing shortages or overstocking
- Benefits: Reduce food waste and environment impact, optimize order accuracy, enhance cost savings

Customer Relationship Management (CRM) System:

- Purpose: Building and maintaining customer relationships
- Functionality: Track customer preferences, gather feedback, and engage in targeted marketing campaigns to enhance customer loyalty
- Benefits: Enhance customer loyalty and promote efforts to improve services by gathering customer feedback

Online Ordering and Delivery System:

- Purpose: Facilitating online ordering and delivery services
- Functionality: User-friendly website or mobile app for customer orders, efficient management of orders and delivery logistics
- Benefits: Increase accessibility, streamline operations, and optimize delivery routes which reduces gas usage and environmental impacts.

Social Media and Digital Marketing Tools:

- Purpose: Promoting the coffee shop and engaging with the audience
- Functionality: Run social media accounts, execute email marketing, and online advertising campaigns
- Benefits: Expand online presence, attract new customers, promote sustainable practices

Employee Scheduling Software:

- Purpose: Efficient staff management
- Functionality: Assign shifts, track employee hours, and ensure smooth staffing for different times of the day
- Benefits: Optimized shift assignments lead to reduced overtimes and increased employee satisfactions, which can decrease employee churn rate

Accounting and Financial Management Software:

- Purpose: Proper financial management
- Functionality: Manage expenses, revenue, taxes, and other financial aspects of the coffee shop
- Benefits: Maintain clear budget plannings and help ensure financial health

Feedback and Review Management Tools:

- Purpose: Improve services and reputation
- Functionality: Collect and manage customer feedback and reviews
- Benefits: Provides a clear overview of consumer opinion, helps maintain a positive reputation.

TARGET AUDIENCE

In the strategic delineation of our cafe as a nascent entrepreneurial endeavor, it is imperative to dissect the intricacies of our target audience. A nuanced comprehension of their demographics, preferences, behaviors, and exigencies is foundational to the formulation of our business strategy. The target audience for our cafe is a multifaceted tapestry, primarily rooted in the local milieu of Fullerton, California, and its proximate environs.

Primary Niche: College Students

- Demographics: Our primary focus is on the vibrant college student community, especially those enrolled at California State University, Fullerton (CSUF). This demographic encompasses individuals aged 18 to 24, representing a diverse range of academic disciplines and cultural backgrounds.
- Needs and Preferences: College students grapple with demanding academic schedules, recurrent study sessions, and a quest for affordable, easily accessible sustenance. They are in search of a welcoming and conducive environment for scholarly pursuits and social interactions.
- Behaviors: A significant proportion of these students are connoisseurs of coffee, relying on caffeine to fuel protracted study sessions and invigorate their cognitive faculties. They also exhibit a predilection for tech-savvy solutions, favoring online ordering systems and loyalty programs.

Secondary Ambit: Professors, Staff, and Faculty

- Demographics: Our secondary audience includes academic faculty, staff members, and professors at CSUF. This group spans a broader age spectrum, typically aged 25 and above, with diverse roles within the academic ecosystem.
- Needs and Preferences: Professors, staff, and faculty seek a serene and comfortable haven that complements their intellectual pursuits and professional interactions. Their preferences may lean towards health-conscious dietary options during breaks from their academic responsibilities.
- Behaviors: This cohort appreciates a tranquil ambiance that fosters relaxation and enhances scholarly endeavors.

Latent Clientele: Local High School Students

- Demographics: Local high school students, aged 15 to 18, represent a latent customer base. They hail from diverse backgrounds and are emblematic of youthful vibrancy.
- Needs and Preferences: High school students, especially during exam periods, desire dedicated study spaces that enhance their academic performance. They may also be interested in our gastronomic offerings to satisfy their youthful palates.
- Behaviors: Beyond scholastic obligations, during post-school hours, intermissions, and weekends, high school students may frequent our cafe for recreational diversions and academic pursuits.

This nuanced analysis of the distinct segments within our target audience empowers us to tailor our product offerings, marketing strategies, and services to meet their unique requirements and preferences. The cafe aspires to cultivate an ambiance that is both welcoming and inclusive, creating a haven where diverse demographics converge, fostering a sense of community, refreshment, and intellectual inspiration.

IT Artifact:

Project team members followed the Agile scrum project management framework. Team members worked on the requirements and has project management tools like Jira, Google cloud and zoom for collaboration. Team had a designated product owner, scrum master and a development team. As a team we used Figma for designing the application. As the final project deliverable we provided prototypes of the application.

MAJOR COMPETITORS

Understanding the competitive landscape is essential for our coffee shop's success. Competitors can be classified into diverse segments based on factors such as scale, offerings, and unique characteristics. Here's a comprehensive overview of potential competitors for our coffee shop.

Chain Coffee Shops

a. Starbucks

- Overview: Starbucks is the world's largest coffeehouse chain, with a staggering 30,000+ stores worldwide. Their extensive presence is supported by a highly successful mobile app and rewards program.
- Key Strengths: The Starbucks mobile app allows customers to order ahead, pay with their phone, and earn rewards, enhancing convenience and customer loyalty.

b. Dunkin' (formerly Dunkin' Donuts)

- Overview: Dunkin' is an American multinational coffee and doughnut company with a strong presence. They have invested in their mobile app and DD Perks loyalty program.
- Key Strengths: Dunkin' offers customers the ability to order ahead, pay with their phone, and earn rewards through their loyalty program, creating a competitive edge.

c. McCafé (by McDonald's)

- Overview: McCafé is McDonald's answer to the coffee market, and it has expanded its presence globally. They focus on providing coffeehouse-quality beverages at a more affordable price point.
- Key Strengths: McCafé's strategy of offering premium coffee at a competitive price compared to rivals like Starbucks has gained traction.

Local Independent Coffee Shops

Overview: Local independent coffee shops are often unique single-location or few-location establishments. They differentiate themselves through various factors, such as specialty brews, locally sourced ingredients, distinctive atmospheres, and strong community connections.

Bakeries and Pastry Shops

Overview: Bakeries and pastry shops often serve coffee alongside their baked goods, making them a relaxed destination for customers seeking both quality coffee and a bite to eat. The combination of fresh pastries and coffee can be a significant draw.

Fast-Food Restaurants

Overview: Many fast-food chains, such as Burger King and Wendy's, have been making significant improvements in their coffee offerings. These establishments cater to customers seeking convenience and are expanding their coffee menus to compete in the market.

Supermarkets and Convenience Stores

Overview: Supermarkets have increasingly incorporated coffee kiosks or standalone coffee shops within their premises. Convenience stores have also begun offering higher-quality coffee options, making them a convenient choice for customers on the go.

UNIQUE FEATURES

Our coffee shop faces a competitive landscape consisting of a mix of industry giants, local independents, complementary businesses like bakeries, and even non-traditional competitors like fast-food chains, supermarkets, and convenience stores. To thrive in this competitive environment, we must leverage our distinctive focus on locally sourced ingredients, diverse menu selection, and a welcoming environment for reading and studying, aligning with our commitment to supporting local agriculture. This will set us apart and create a unique value proposition in the coffee market. Additionally, we need to effectively utilize the IT systems outlined in the previous section to streamline operations and enhance customer engagement, ensuring our coffee shop's success in this dynamic market.

1. Extended Hours: Green Vibe Cafe stands out by providing extended hours, addressing the issue of limited spaces available after regular closing hours. This accommodates students with varied schedules and those who prefer late-night study sessions.
2. Convenient Location: Being situated directly outside the CSUF campus positions Green Vibe Cafe as a convenient spot for the university community, making it easily accessible for faculty, staff, and students.
3. Affordable Prices: The emphasis on reasonable prices makes the cafe an attractive option for budget-conscious students. This affordability factor can contribute to building a loyal customer base.
4. Inclusive Atmosphere: Green Vibe Cafe aims to foster a workspace that encourages both independent and collaborative work. The inclusive atmosphere welcomes individuals from all walks of life, creating a diverse and dynamic community.
5. Mission-Driven: The cafe's mission to facilitate personal growth and inspire a sense of community among individuals who share similar values aligns with the university's educational objectives. This mission-driven approach can resonate well with the target audience.

TEAM CONTRACT

Code of Conduct: As a project team, we will:

- Proactively anticipate prospective issues and make concerted efforts to mitigate their occurrence.
- Please ensure that all team members are well-informed of any project-related information.
- Keep the interests of the entire project team in mind.

Participation: We will:

- Proactively anticipate prospective issues and make concerted efforts to mitigate their occurrence.
- Please ensure that all team members are well-informed of any project-related information.
- Team will be committed to goals and objectives.
- Keep the interests of the entire project team in mind.

Meetings: We will:

- Meet weekly or as needed to discuss the status and goals of the project that need to be achieved.
- Decisions will be made democratically during team meetings, with each member having one vote.
- Conflicts should be addressed promptly and respectfully during meetings.
- Respect for each other's time zones and working hours .
- The Project Manager will present the prioritized backlog items, and the team will collaboratively decide on the Sprint scope.

Problem Solving: We will:

- Encourage all individuals to engage in problem-solving.
- Utilize only constructive criticism and concentrate on problem-solving rather than assigning blame.
- Develop and expand upon one another's concepts.

PROJECT COST ESTIMATE

Physical Infrastructure estimate is based on the amount required for the building lease, equipment, licensing and permits, decorations and utilities. Point-Of-Sale(POS) systems centralizes the sales, stock, payment processing, customer data, marketing tool and staff tracking within one streamlined dashboard. Licensed softwares can be used for book-keeping and account management. The budget expert for this undertaking proposed employing a labor rate of \$100 per hour for the project manager and \$75 per hour for each team member, predicated on their working 160 hours per month on average in a full-time capacity. The total number of hours devoted to this category by the project manager is 960 ($160 / 2 * 12 = 960$). Expenses are also accounted for for the four members of the project team, each of whom works 25 percent of the time: 160 hours per month for the entire project staff ($160 * 12 = 1920$). So for 3 team members it will be $5760(3 * 1920 = 5760)$. Green Vibe Coffee shop is planning to open on both weekdays and weekends from 9am to 7pm. So the in-shop employees will be working on a part time basis. Each associate will be paid \$15/hr and shop manager will be paid \$21/hr. There will be 2 shop managers for part-time and there will be 6 associates. Total number of hours for each shop associate per month is 155 hrs that makes each associate's working hours to be 5hrs/day. The total number of hours devoted to this category per year by 2 store managers is calculated as $3720(2 * 155 * 12 = 3720)$ and for the associates it will be $11,160(6 * 155 * 12 = 11,160)$.

Green Vibe Cafe Project Cost Estimate Created Nov 7, 2023

	#Units /Hrs	Cost/Unit	Subtotals	WBS Level 2 Totals	% of Total
WBS Items					
1.Physical Infrastructure				\$109,300	8.84%
Building Lease	1	\$100,000.00	\$100,000.00		
Insurance		\$3000	\$3000		
Licensing/Permits		\$1500	\$1500		
Decoration	100	\$250	\$2500		
Utilities			\$2300		
2.Equipments				\$176,330.56	14.26%
Coffee Grinder	6	\$200	\$1200		
Coffee machine	6	\$699	\$4194		
Blender	4	\$72.99	\$291.96		
Soda maker	6	\$139.00	\$834		
Commercial baking oven	2	\$36,178.00	\$72,356		
Freezer	3	\$2500	\$7500		
Toaster	3	\$399	\$1197		
Conveyor Pizza Ove	4	\$8015.65	32,062.6		
Refrigerator	2	\$2499.00	\$4998		
Countertop display refrigerator	3	\$1299.00	\$3897		
Tablewares and flatwares sets	200	\$239	\$47800		
3.Hardwares				\$18,287	1.48%
POS System Register Kit	3	\$1269	\$3807		

Computers	2	\$3000	\$6000		
Servers	2	\$4000	\$8000		
4. Softwares				\$525	0.04%
Licensed book-keeping softwares	4	\$120	\$480		
Designer Software(monthly plan)	1	\$45	\$45		
5. Supplies				\$143,750	11.62%
Office			\$2500		
Table and chair sets	170	\$550	\$96,250		
Grocery			\$45000		
6. Employees				\$773,520	62.55%
Project Manager	960	\$100	\$96000		
Project Team	5760	\$75	\$4,32,000		
Shop Manager	3720	\$21	\$78,120		
Associates	11,160	\$15	\$167,400		
7. Advertising				\$13,750	1.11%
Boards	2	\$1000	\$2000		
Screens	4	\$750	\$3000		
Menu cards	175	\$50	\$8750		
8. Travel				\$1225	0.10%
Marketing	15	\$25	\$375		
Purchase commute	10	\$15	\$150		
External meetings	20	\$35	\$700		
Total project estimate cost				\$1,236,687.56	

PROJECT CHARTER

<p>Project Title: Green Vibe Cafe Project</p>	
Project Start Date: Nov 5, 2023	Project Finish Date: Dec 4, 2023
<p>Key Schedule Milestones:</p> <ul style="list-style-type: none"> ● Budget estimation completed by November 15. ● Identify potential location near Cal State Fullerton. Negotiate and finalize the lease agreement by November 20. ● Finalize cafe design focusing on sustainable and inviting aesthetics. Begin renovation and customization of the selected site by November 23. ● Inventories and equipment delivered by November 24. ● Finalize agreements with local farmers and suppliers. Develop and test the cafe menu by November 29. ● Launch a pre-opening marketing campaign in university and local area by December 2. ● Complete hiring of shop managers and associates by December 2. Conduct comprehensive training focusing on customer service, product knowledge, and operational efficiency. ● Green Vibe application released to the customers by December 4. 	
<p>Budget Information: Total project estimate cost is \$1,236,687.56.</p>	
<p>Project Manager : Annie Xu, (415)-696-4972, ajxu@csu.fullerton.edu</p>	
<p>Project Objective: Green Vibe Cafe, a unique coffee shop near the Cal State Fullerton campus. The cafe will offer a range of locally grown, healthy food and drink options in a welcoming, green environment. The goal is to cater primarily to students, faculty, and staff of the university, providing a conducive space for studying, collaboration, and relaxation.</p>	
<p>Main Project Success Criteria: Achieve a profit of \$50,000 by the end of the first year, with a gradual increase in performance to break even by the end of three years and double sales by the end of year four. Establish a loyal customer base, particularly among the student and faculty populations, with an average of 300 daily customers. Become a recognized and preferred destination for coffee and healthy meals in the Cal State Fullerton area.</p>	
<p>Approach:</p> <ul style="list-style-type: none"> ● Target market (students, faculty, and nearby residents) and tailor the cafe's offerings and ambiance accordingly. ● Focus on providing high-quality, fresh, locally sourced food and beverages, ensuring consistent quality and taste. ● Implement a robust marketing strategy, leveraging social media, campus events, and word-of-mouth to build brand awareness and attract customers. ● Emphasize the cafe's commitment to sustainability, from sourcing ingredients to waste management, to appeal to environmentally conscious consumers. ● Actively participate in community events and collaborations, offering a venue for local gatherings, study groups, and cultural events. ● Closely monitor financial performance, optimizing costs and maximizing revenue 	

- through strategic pricing, menu management, and operational efficiency.
- Regularly gather feedback from customers and staff to continuously improve the cafe's offerings, services, and overall customer experience.

ROLES AND RESPONSIBILITIES

Name	Role	Responsibility
Annie Xu	Project Manager	Plan and monitor the project
Arundhathi Roy	Director of Purchasing and Marketing Management	Assist in purchasing inventories, softwares and hardwares and estimate the budget.
Rewa Garg	VP, Human Resources	Hire and train the new hires.
Srija Vellanki	Director of IT Operations	Plan and monitor the application development.

Sign-off: (Signatures of all the above stakeholders)

Annie Xu	Arundhathi Roy
Rewa Garg	Srija Vellanki

Comments:

“This project needs to be completed by Dec 4” — Annie Xu, Project Manager
 “All new hires need to be trained for continuous skill enhancement and service quality improvement” — Rewa Garg, VP Human Resources

PROJECT SCOPE

Project Title: GreenVibe Café

Date: 11/09/2023 Prepared by: Team Nexa

Project Justification: GreenVibe Café is a symbol of innovation and progress set to be in Fullerton, California. Our business initiative seeks to establish a coffee shop with a focus on locally grown ingredients, a comfortable space for reading and a diverse menu. We expect our Café to have the following impact:

1. Environmental Protection – With the rise in environmental challenges such as Climate change, food waste, GreenVibe Café seeks to tackle these problems by implementing eco-friendly practices.
2. Supporting Local Agriculture – By sourcing ingredients locally for the café, the aim is not only to support local farmers but also to reduce carbon footprint related to food transportation.
3. Creating a welcoming space – The plan is to designate certain areas of the cafe as ‘Quiet zones’ which will allow readers to enjoy a peaceful stay. Creating partnerships with the local bookstores and displaying bookshelves with a wide variety of books, especially those related to sustainability will provide an edge to creating a more welcoming space for reading.

Product Characteristics and Requirements:

1. Locally grown ingredients – Several partnerships with various local farmers are required along with a decent schedule for timely delivery to serve the freshest products.
2. Eco-friendly packaging – Adopting packaging made of renewable materials like compostable lids and straws. Broadcasting the message to customers to get their own mugs to receive a discount whilst moving towards the goal of getting more eco friendly.
3. Green Décor – Eco-friendly décor pieces and live plants are to be used in the interior design of the café.
4. Effective IT system – Installation of software to enhance experience like, Inventory management software, Point of sale system, Customer relationship management system, online ordering and delivery system, social media and marketing tools, Employee scheduling system, Accounting and Financial management system.

Summary of Project Deliverables

Project management-related deliverables:

- 1.Implementing a team contract that is favorable to everyone involved.
- 2.A scope statement which gives a proper idea of what is to be expected from the project.
- 3.A Work Breakdown Structure which provides a visual representation of timely deliverable deconstruction of the project.
- 4.A fixed cost baseline to use as a reference while continuing the project.
- 5.Punctual status reports that provide us with a glimpse of where the project stands.
- 6.A final project presentation and final project report containing evaluations with statistical and case study analysis, conclusions and recommendations based on said analysis.

Product-related deliverables:

- 1.Conducting and creating an analysis report of various cafes with a similar theme that are successful and make developments based on them.
- 2.Creating code for an app that can be used swiftly to enhance accessibility.
- 3.Creating a menu that offers fresh food and beverages to different kinds of palates.
- 4.Creating an exclusive brand for the café so that it is more recognizable.
- 5.A functioning location with the required amenities.

Project Success Criteria: The project fulfills the scope provided above and fulfills the social responsibility it promises.

WORK BREAKDOWN STRUCTURE FOR GREEN VIBE CAFE PROJECT

1.0 Physical Infrastructure

- 1.1 Secure Building Lease
- 1.2 Insurance
 - 1.2.1 Research Insurance Providers
 - 1.2.2 Select Insurance Plan
- 1.3 Obtain Licensing/Permits
 - 1.3.1 Identify Required Licenses/Permits
 - 1.3.2 Submit Applications
 - 1.3.3 Obtain Approvals
- 1.4 Decoration
 - 1.4.1 Design Interior Theme
 - 1.4.2 Source Sustainable Decor Materials
 - 1.4.3 Decor Installation
- 1.5 Utilities

- 1.5.1 Electricity Setup
- 1.5.2 Water and Plumbing Setup
- 1.5.3 Internet and Communication Setup

2. Equipment

- 2.1 Coffee Grinder
 - 2.1.1 Research Coffee Grinder Options
 - 2.1.2 Purchase Coffee Grinder
 - 2.1.3 Install and Test Coffee Grinder
- 2.2 Espresso Machine
 - 2.2.1 Research Espresso Machine Options
 - 2.2.2 Purchase Espresso Machine
 - 2.2.3 Install and Test Espresso Machine
- 2.3 Other Equipments
 - 2.3.1 Identify Additional Equipment Needs
 - 2.3.2 Purchase Other Equipments

3. Hardware

- 3.1 Point of Sale (POS) System
 - 3.1.1 Research POS Systems
 - 3.1.2 Purchase POS System
 - 3.1.3 POS System Integration
- 3.2 Computers
 - 3.2.1 Determine Computer Requirements
 - 3.2.2 Identify the number of computers needed for the cafe
 - 3.2.3 Assess the specifications (e.g., processing power, memory, storage) required for cafe operations
 - 3.2.4 Consider the software compatibility and licensing needs for each computer
- 3.3 Security Cameras
 - 3.3.1 Identify Security Camera Requirements
 - 3.3.2 Purchase and Install Security Cameras

4. Software

- 4.1 Secure Licensed Software
 - 4.1.1 Identify Software Needs
 - 4.1.2 Purchase Licenses
 - 4.1.3 Install and Configure Software
- 4.2 Develop Mobile Application
 - 4.2.1 Develop Preliminary Budget
 - 4.2.2 Hire App Development Team
 - 4.2.3 Design Mobile Application
 - 4.2.4 Develop and Test Mobile Application

5. Supplies

- 5.1 Office
 - 5.1.1 Create a Comprehensive Office Supplies List
 - 5.1.2 Source Sustainable Office Supplies
 - 5.1.3 Organize and Distribute Supplies
- 5.2 Table and Chair
 - 5.2.1 Assess Dining Area Furniture Needs

5.2.2 Research and Select Sustainable Dining Furniture

5.2.3 Purchase and Arrange Delivery

5.3 Grocery

5.3.1 Supplier Identification

5.3.2 Research Local and Sustainable Suppliers

5.3.3 Negotiate Terms and Agreements

5.3.4 Place Initial Orders

5.3.5 Monitor Inventory Levels

5.3.6 Coordinate Deliveries

6. Employees

6.1 Develop Roles and Responsibilities

6.1.1 Define Job Descriptions

6.1.2 Recruit Staff

6.1.3 Conduct Training Sessions

6.2 Employee Onboarding

6.2.1 Prepare Onboarding Materials

6.2.2 Welcome and Integrate New Employees

7. Advertising

7.1 Marketing Strategy

7.1.1 Define Target Audience

7.1.2 Develop Marketing Campaign

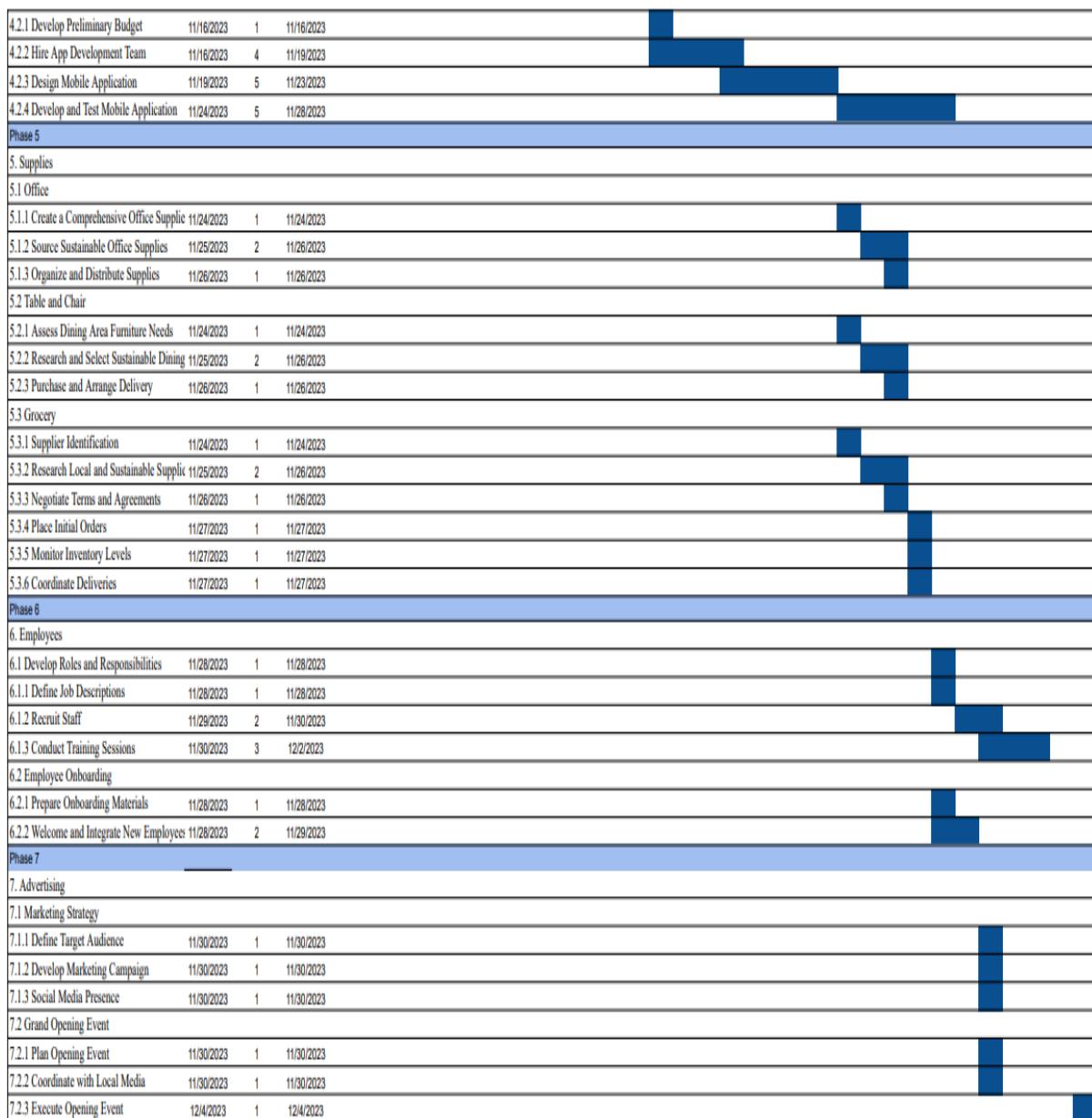
7.1.3 Social Media Presence

7.2 Grand Opening Event

7.2.1 Plan Opening Event

7.2.2 Coordinate with Local Media

7.2.3 Execute Opening Event



STRATEGY FOR SCOPE VALIDATION AND CHANGE CONTROL

Scope Validation and Change Control Strategy: Pioneering the GreenVibe Revolution.

Embarking on the exhilarating journey of birthing GreenVibe Café, our visionary team has sculpted an awe-inspiring Scope Validation and Change Control Strategy—a dynamic blueprint designed to not only embrace change but to elevate it into the heartbeat of our project.

Unleashing Enthusiastic Waves:

Stakeholder Symphony:

- Imagine a vibrant orchestra where every stakeholder, from team members to investors and future coffee enthusiasts, contributes to the harmonious validation of our project scope.
- We're not just having meetings; we're hosting spectacular symposiums where ideas dance freely, and expectations are serenaded into a chorus of unity.

Scope Documentation Extravaganza:

- Behold, our project documentation! A grand tapestry weaving together the Project Charter, Project Scope Statement, and the WBS—each thread pulsating with the energy of our collective vision.
- We're not just documenting; we're crafting an epic saga, ensuring everyone is immersed in the saga of GreenVibe.

Change Request Carnival:

- Step right up to the Change Request Carnival! A dazzling spectacle where proposed changes are juggled, spun, and catapulted into the limelight.
- This isn't just a process; it's a circus of innovation where every twist and turn brings us closer to a more spectacular GreenVibe experience.

Impact Assessment Extravaganza:

- Enter the Impact Assessment Arena! A coliseum of decision-making where the fate of changes is determined amidst roars of collaboration and cheers of feasibility.
- We're not just assessing impacts; we're choreographing a ballet of adaptability, ensuring each change pirouettes seamlessly into our project narrative.

Communication Carnival:

- Join the Communication Carnival! A jubilant fiesta of updates and revelations, where stakeholders revel in the joy of being part of a project that's evolving in real-time.
- We're not just communicating; we're hosting a carnival where each piece of news is a confetti explosion, celebrating the vibrant spirit of GreenVibe.

Digital Dreamland:

- Welcome to our Digital Dreamland, where Jira isn't just a tool—it's the enchanted portal that transforms change management into a magical journey.
- It's not just a collaboration platform; it's a digital canvas where the masterpiece of GreenVibe unfolds with every click and keystroke.

Continuous Marvel Monitoring:

- Marvel with us! As we continuously monitor and evaluate, envisioning a project that's not just on track but soaring to new heights.
- We're not just monitoring; we're creating a Marvel-ous universe where risks are superheroes, and deviations are the thrilling plot twists in our GreenVibe saga.

Documented Odyssey of Approval:

- Behold the Odyssey of Approval—a scripted saga where approval authorities become mythical guardians, ensuring that only the most daring and visionary changes make it to the grand stage.
- It's not just an approval process; it's a narrative where each approval is a triumph, propelling us closer to the climax of GreenVibe excellence.

In sculpting this strategy, Team NEXA is not merely managing a project; we're choreographing a revolution—one where change isn't just embraced; it's celebrated as the pulsating rhythm of GreenVibe Café's groundbreaking journey! Join us in this symphony of transformation, where every note resonates with the promise of a coffee revolution like never before. GreenVibe—it's not just a project; it's an exhilarating odyssey into the future of coffee culture!

PROPOSED CHANGES

Review and Proposal for Enhancements:

Changes in Activity:

Dynamic Eco-Friendly Packaging Design:

- Description: Collaborate with local artists and sustainable designers to create packaging that transforms into reusable items such as coasters, bookmarks, or plantable paper, providing a unique and eco-conscious customer experience.
- Rationale: This innovative packaging not only reduces waste but also gives customers a tangible and creative connection to the café.

Coffee Tasting AR Experience:

- Description: Enhance the mobile app to include an AR feature that allows customers to virtually explore the origin and flavor profile of each coffee blend by scanning QR codes on coffee bags or cups.
- Rationale: Providing an immersive coffee-tasting experience through AR adds a layer of education and engagement for customers, setting GreenVibe apart from traditional coffee shops.

Automated Coffee Art Generator:

- Description: Integrate a machine that uses edible ink to print custom designs or messages on coffee foam, offering customers a personalized and Instagram-worthy coffee experience.
- Rationale: This unique touch of customization adds a shareable and memorable aspect to the café's offerings, driving social media engagement.

New Activities:

GreenVibe Rewards Blockchain Token:

- Description: Introduce a blockchain-based loyalty program where customers earn unique GreenVibe tokens for eco-friendly actions (like bringing reusable cups) and redeem them for exclusive discounts, fostering a sense of community and sustainability.
- Rationale: This token system sets GreenVibe apart, gamifying sustainability efforts and creating a loyal customer base.

Local Artist Showcase Wall:

- Description: Dedicate a prominent café wall to rotating displays of local artists' work, creating a platform for the community's artistic talent and infusing the café with ever-changing visual appeal.
- Rationale: This innovative use of space not only supports local artists but also adds a dynamic and vibrant atmosphere to the café, distinguishing it from competitors.

Coffee Bean Subscription with Virtual Farmer Connection:

- Description: Offer a subscription service where customers receive fresh coffee beans regularly, accompanied by virtual connections to the local farmers who grew the beans, fostering a direct and transparent relationship.
- Rationale: Creating a direct link between consumers and farmers adds a storytelling element to the coffee experience, making GreenVibe a socially conscious choice.

These proposed enhancements align with the project's scope, providing unique and sustainable features that differentiate GreenVibe Café from traditional competitors. The additions aim to elevate customer engagement, promote eco-conscious practices, and create a vibrant community space. The proposed changes contribute to the cafe's innovative identity, enhancing its appeal and market positioning.

MILESTONES OF GREEN VIBE CAFE PROJECT

Milestone 1: Establishing Physical Infrastructure

Specific: Securing the location, permits, and setting up the cafe's physical space.

Measurable: Completion of building lease, insurance, licensing, decorations, and utilities.

Achievable: All necessary elements for the cafe's physical establishment are procured and set up.

Relevant: Essential for commencing further activities related to cafe operations.

Time-bound: Targeted completion by November 23.

Tasks:

1.1 Secure Building Lease:

- 1.1.1 Research potential locations near Cal State Fullerton.

- 1.1.2 Negotiate lease terms.
- 1.1.3 Finalize and sign the lease agreement.

1.2 Insurance

- 1.2.1 Research insurance providers
- 1.2.2 Select insurance plan

1.3 Obtain Licensing/Permits:

- 1.3.1 Identify and compile a list of required licenses and permits.
- 1.3.2. Submit applications to relevant authorities.
- 1.3.3. Obtain necessary approvals.

1.4 Decoration and Setup:

- 1.4.1. Design the interior theme in line with the cafe's vision.
- 1.4.2. Source sustainable decor materials.
- 1.4.3. Install and set up the cafe's interior decor.

1.5. Utilities Setup:

- 1.4.1. Arrange for electricity, water, plumbing, and internet connection.
- 1.4.2. Ensure all necessary utilities are functional for cafe operations.

Milestone 2: Procurement of Equipment and Hardware

Specific: Acquiring essential cafe equipment and hardware for operations.

Measurable: Procurement and installation of coffee machines, grinders, POS systems, computers, etc.

Achievable: Identifying needs and fulfilling them for smooth functioning.

Relevant: Essential for setting up the cafe's operational infrastructure.

Time-bound: Targeted completion by November 24.

Tasks:

2.1 Procurement of Equipment:

- 2.1.1 Research and select appropriate coffee machines, grinders, ovens, etc.
- 2.1.2. Purchase required equipment.
- 2.1.3. Install and test the equipment for functionality.

2.2. Hardware Setup:

- 2.2.1. Research and select necessary POS systems, computers, and security cameras.
- 2.2.2 Procure and install hardware required for cafe operations.

Milestone 3: Software Implementation and Employee Onboarding

Specific: Deployment of software systems and hiring/training of employees.

Measurable: Implementation of POS, inventory management, employee scheduling systems, and completion of employee onboarding.

Achievable: Ensuring smooth operations through technology and trained staff.

Relevant: Crucial for the cafe's daily functioning and customer service.

Time-bound: Targeted completion by December 2.

Tasks:

3.1. Software Implementation:

- 3.1.1. Purchase and install POS, inventory management, and scheduling software.
- 3.1.2 Integrate software systems for seamless operations.

3.2. Employee Hiring and Training:

- 3.2.1. Define job roles and descriptions.
- 3.2.2. Recruit and hire shop managers and associates.
- 3.2.3. Conduct comprehensive training sessions focusing on customer service and operational efficiency.

Gantt Chart_WT2

MILESTONES IN GANTT CHART

The project encompasses multiple tasks across distinct phases, each contributing to the establishment of a new cafe. The initial phase focuses on Establishing Physical Infrastructure, which involves securing a building lease, obtaining insurance, licensing/permits, and decorating the interior. These tasks span from November 5, 2023, to November 10, 2023, with varying durations. For instance, securing the building lease and obtaining insurance are accomplished within a day, while licensing/permits and decoration take five and two days, respectively. The culmination of this phase ensures the physical foundation for the cafe is in place, from the lease agreement to a decorated and utility-equipped space.

Following the infrastructure phase, the project transitions to Procurement of Equipment and Hardware. This stage involves researching, purchasing, and installing necessary equipment and hardware, such as coffee machines, grinders, POS systems, computers, and security cameras. These tasks occur between November 10, 2023, and November 15, 2023, with varying durations for each subtask. The completion of this phase ensures that the cafe is equipped with the necessary tools and technologies to operate efficiently.

The subsequent phase, Software Implementation and Employee Onboarding, commences on November 5, 2023, and concludes on December 4, 2023. It encompasses tasks related to software procurement, development, and integration, as well as comprehensive employee hiring and training. The project aims to implement Point of Sale (POS), inventory management, and scheduling software, develop a mobile application, and seamlessly integrate these systems to facilitate operational efficiency. Employee hiring and training span over 30 days, emphasizing the significance of building a competent and well-prepared team.

The project extends to Procurement of Supplies, specifically focusing on grocery supplies. This phase, occurring between November 19, 2023, and December 4, 2023, involves researching suppliers, negotiating terms, placing initial orders, and coordinating deliveries. The successful execution of this phase ensures a reliable and sustainable supply chain for the cafe's operations.

The final project phase, Advertisement and Travel, begins on November 12, 2023, and concludes on December 4, 2023. It encompasses tasks related to researching advertising agencies, defining campaign scopes, negotiating agreements, and planning external meetings to discuss partnerships, marketing strategies, and collaborations. This phase aims to establish the cafe's presence through effective advertising and networking with key stakeholders.

In summary, the project involves a comprehensive timeline of tasks covering physical infrastructure, equipment and hardware procurement, software implementation, employee onboarding, supplies procurement, and strategic advertising and travel planning. The varying durations for each task reflect the intricacies and importance assigned to different aspects of establishing and launching the cafe.

TIME TAKEN FOR EACH ROLE IN THE PROJECT

The table presents a breakdown of time taken for various roles within a project, outlining task descriptions, duration in days, assigned personnel, hours dedicated, cost per hour, and total cost incurred for each task.

S. No	Task Description	Duration (Days)	Person Assigned	Hours Assigned	Cost per hour (\$)	Total Cost (\$)
1.	Securing Building lease	2	Project Manager	16	54	864
2.	Enrolling in Insurance Plan	1	Facility Manager	7	58	406
3.	Obtaining License/Permits	5	Permit Specialist	28	55	1540
4.	Decoration	2	Interior Designer	40	62	2,480
5.	Utilities	1	Facility Manager	7	58	406
6.	Procurement of Equipment	4	Procurement Manager	23	63	1,449
7.	Hardware Setup	3	IT Specialist	24	76	1,824
8.	Software implementations	15	IT Specialist	105	76	7,980
9.	Employee Hiring and Training	30	Human Resources	120	42	5,040
10.	Procurement of Grocery	16	Procurement Manager	96	63	6,048
11.	Advertisement	13	Marketing Team	65	45	2,925
12.	Travel	9	Business Development Manager	72	65	4,680

COST MODEL FOR GREEN VIBE CAFE PROJECT

Physical Infrastructure estimate is based on the amount required for the building lease, equipment, licensing and permits, decorations and utilities. Point-Of-Sale(POS) systems centralizes the sales, stock, payment processing, customer data, marketing tool and staff tracking within one streamlined dashboard. Licensed softwares can be used for book-keeping and account management. The budget expert for this undertaking proposed employing a labor rate of \$100 per hour for the project manager and \$75 per hour for each team member, predicated on their working 160 hours per month on average in a full-time capacity. The total number of hours devoted to this category by the project manager is 960 ($160 / 2 * 12 = 960$). Expenses are also accounted for for the four members of the project team, each of whom works 25 percent of the time: 160 hours per month for the entire project staff ($160 * 12 = 1920$). So for 3 team members it will be $5760(3 * 1920 = 5760)$. Green Vibe Coffee shop is planning to open on both weekdays and weekends from 9am to 7pm. So the in-shop employees will be working on a part time basis. Each associate will be paid \$15/hr and shop manager will be paid \$21/hr. There will be 2 shop managers for part-time and there will be 6 associates. Total number of hours for each shop associate per month is 155 hrs that makes each associate's working hours to be 5hrs/day. The total number of hours devoted to this category per year by 2 store managers is calculated as $3720(2 * 155 * 12 = 3720)$ and for the associates it will be $11,160(6 * 155 * 12 = 11,160)$.

Green Vibe Cafe Project Cost Estimate Created Nov 29, 2023

	#Units /Hrs	Cost/Unit	Subtotals	WBS Level Totals	% of Total
WBS Items					
1.Physical Infrastructure				\$109,300	8.84%
Building Lease	1	\$100,000.00	\$100,000.0		
Insurance		\$3000	\$3000		
Licensing/Permits		\$1500	\$1500		
Decoration	100	\$250	\$2500		
Utilities			\$2300		
2.Equipments				\$176,330.56	14.26%
Coffee Grinder	6	\$200	\$1200		
Coffee machine	6	\$699	\$4194		
Blender	4	\$72.99	\$291.96		

Soda maker	6	\$139.00	\$834		
Commercial baking oven	2	\$36,178.00	\$72,356		
Freezer	3	\$2500	\$7500		
Toaster	3	\$399	\$1197		
Conveyor Pizza Oven	4	\$8015.65	32,062.6		
Refrigerator	2	\$2499.00	\$4998		
Countertop refrigerator	3	\$1299.00	\$3897		
Tablewares and flatwares sets	200	\$239	\$47800		
3.Hardwares				\$18,287	1.48%
POS System Register Kit	3	\$1269	\$3807		
Computers	2	\$3000	\$6000		
Servers	2	\$4000	\$8000		
4.Softwares				\$525	0.04%
Licensed book-keeping softwares	4	\$120	\$480		
Designer Software(month plan)	1	\$45	\$45		
5. Supplies				\$143,750	11.62%
Office			\$2500		
Table and chair sets	170	\$550	\$96,250		
Grocery			\$45000		
6.Employees				\$773,520	62.55%
Project Manager	960	\$100	\$96000		
Project Team	5760	\$75	\$4,32,000		
Shop Manager	3720	\$21	\$78,120		
Associates	11,160	\$15	\$167,400		

7.Advertising				\$13,750	1.11%
Boards	2	\$1000	\$2000		
Screens	4	\$750	\$3000		
Menu cards	175	\$50	\$8750		
8.Travel				\$1225	0.10%
Marketing	15	\$25	\$375		
Purchase commute	10	\$15	\$150		
External meetings	20	\$35	\$700		
Total project estimate cost				\$1,236,687.5	

Cost Baseline By Allocating The Costs Detailed In The WBS For Each Week

To create a cost baseline by allocating costs detailed in the Work Breakdown Structure (WBS) for each week of the project, we'll start by breaking down the costs into weekly allocations based on the information provided. The project duration or the number of weeks for the project needs to be defined to distribute the costs weekly. Here's a breakdown of the cost allocation by week:

Physical Infrastructure: Total Cost - \$109,300 (8.84% of total)

Breakdown by subcategories can be distributed evenly or based on a specific schedule, depending on when these expenses will be incurred.

Equipments: Total Cost - \$176,330.56 (14.26% of total)

Distribute these costs based on the delivery or purchase schedule of the equipment. Assign amounts per week accordingly.

Hardwares: Total Cost - \$18,287 (1.48% of total)

Similar to equipments, allocate these costs based on the procurement or installation schedule.

Softwares: Total Cost - \$525 (0.04% of total)

Allocate based on the licensing schedule or installation plan.

Supplies: Total Cost - \$143,750 (11.62% of total)

Distribute as per the purchasing plan or consumption rate.

Employees: Total Cost - \$773,520 (62.55% of total)

Distribute the labor costs based on the hours worked per week. Calculate the hourly rate for each resource and allocate accordingly.

Advertising: Total Cost - \$13,750 (1.11% of total)

Allocate as per the advertising campaign schedule or launch plan.

Travel: Total Cost - \$1,225 (0.10% of total)

Allocate these costs based on travel plans, marketing events, or meetings scheduled throughout the project.

Assuming a 4-week project duration, we can distribute the costs accordingly. Below is the breakdown of costs by week, based on the information provided:

Weekly Estimate:

1. Physical Infrastructure: \$27,325
2. Equipments: \$44,082.64
3. Hardwares: \$4571.75
4. Softwares: \$131.25
5. Supplies: \$143,750 (one-time purchase)
6. Employees: \$193,380
7. Advertising: \$3,437.50
8. Travel: \$306.25

BUDGET AT COMPLETION

To determine the Performance and Cost Indices and to answer the related questions, we'll start by calculating the Planned Value (PV), Earned Value (EV), and Actual Cost (AC) based on the information provided.

Given the information and assuming a 4-week project duration:

Calculation of PV, EV, and AC:

Planned Value (PV):

Considering a 4-week project duration, the PV for each category per week will be:

Physical Infrastructure: \$27,325/week

Equipments: \$44,082.64/week

Hardwares: \$4571.75/week

Softwares: \$131.25/week

Employees: \$193,380/week

Advertising: \$3,437.50/week

Travel: \$306.25/week

Supplies: \$143,750 (one-time purchase)

Total Planned Value per week = Sum of PV for each category per week
 $=273,234.39 \times 4 + \$143,750$ (one-time purchase of supplies) = \$1,236,687.56

***Earned Value (EV):**

For one-time purchases (Supplies), EV remains the total allocated cost (\$143,750).

For weekly allocated costs, EV for 4 weeks:

Physical Infrastructure: \$27,325 * 4 = \$109,300

Equipments: \$44,082.64 * 4 = \$176,330.56

Hardwares: \$4,571.75 * 4 = \$18,287

Softwares: \$131.25 * 4 = \$525

Employees: \$193,380 * 4 = \$773,520

Advertising: \$3,437.50 * 4 = \$13,750

Travel: \$306.25 * 4 = \$1,225

Total Earned Value (EV) = Sum of EV for each category = \$1,236,687.56

***Actual Cost (AC):**

AC will be the total cost incurred for each category within the 4-week period.

For one-time purchases (Supplies), AC remains the same as the allocated cost (\$143,750).

For other categories, the AC for 4 weeks will be determined based on the expenses incurred within this period.

Total Actual Cost (AC) = Sum of AC for each category = \$1,236,687.56

(* Based on assumptions)

Analysis of Project Performance:

a. **Cost Variance (CV):** $CV = EV - AC = 0$

Calculate CV for the entire project to assess if it's under or over budget.

b. **Schedule Variance (SV):** $SV = EV - PV = 0$

Calculate SV for the project to assess if it's ahead or behind schedule.

c. **Cost Performance Index (CPI):** $CPI = EV / AC = 1$

Evaluate whether the project is spending efficiently relative to the work performed.

d. **Schedule Performance Index (SPI):** $SPI = EV / PV = 1$

Assess whether the project is progressing as scheduled.

Based on the assumptions and calculations:

Project Status:

Schedule Variance (SV): $SV = EV - PV = \$0$ The project is on track with the planned schedule. There's neither a delay nor an advance in the project timeline.

Cost Variance (CV): $CV = EV - AC = \$0$ The project is neither over nor under budget. Costs are exactly in line with the earned value.

Cost Performance Index (CPI): $CPI = EV / AC = 1$ The CPI being equal to 1 indicates that the project is spending as planned concerning the work performed. It's utilizing resources as expected, without overspending or underspending.

Schedule Performance Index (SPI): $SPI = EV / PV = 1$ With an SPI of 1, the project is progressing as scheduled. The work accomplished aligns with the planned schedule.

Estimate at Completion (EAC) using CPI:

$$EAC = BAC / CPI$$

Given that $CPI = 1$, the Estimate at Completion (EAC) will be the same as the Budget at Completion (BAC): $EAC = \$1,236,687.56 / 1 = \$1,236,687.56$ The project is performing as planned, and based on the current spending rate, it is expected to complete within the original budget.

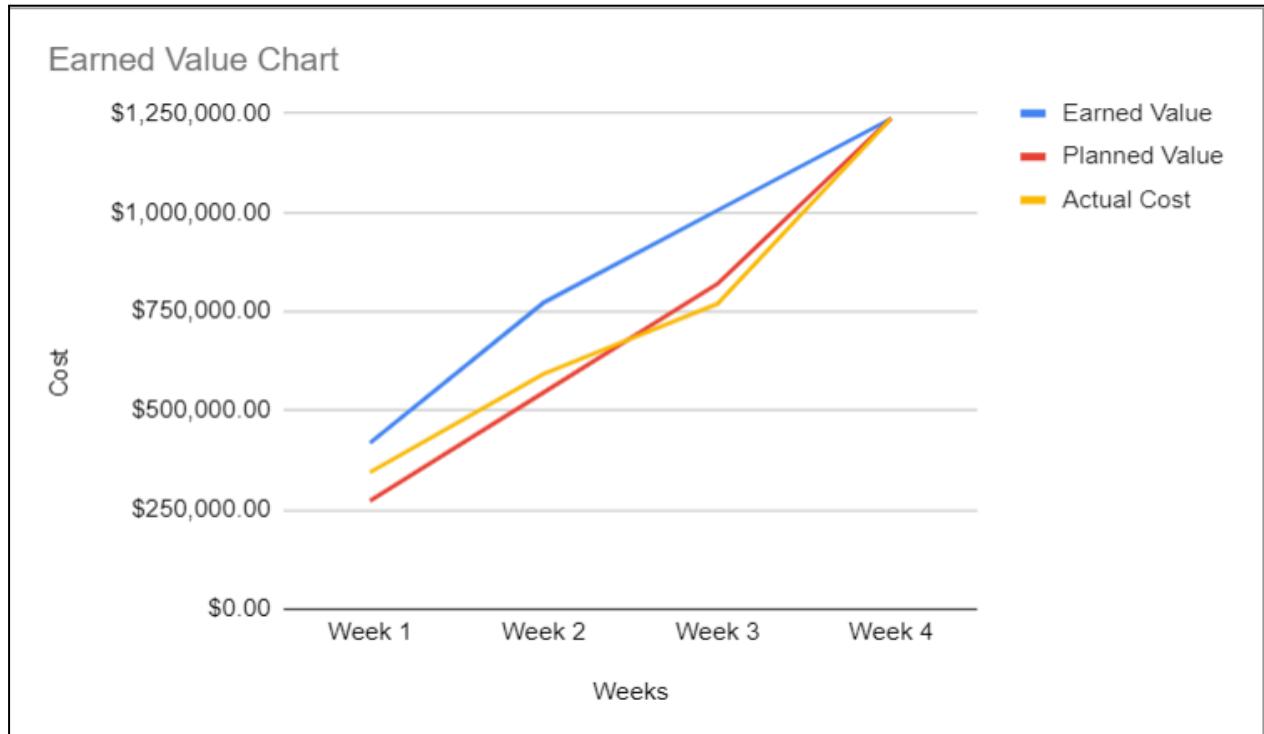
Estimated Time to Finish (ETF) using SPI:

$$ETF = ProjectDuration / SPI$$

As $SPI = 1$, the Estimated Time to Finish (ETF) remains the same as the initially planned project duration. There are no delays or advancements expected based on the current progress.

In summary, the project is proceeding exactly as scheduled and within the planned budget. There are no deviations in time or cost as per the current performance indices.

EARNED VALUE CHART



+ Earned Value Chart

FUTURE SCOPE

The future scope for the Green Vibe Cafe project encompasses various aspects that can contribute to its growth, sustainability, and continued success:

Expansion and Diversification:

Branch Expansion: Consider expanding to additional locations within the university or in nearby areas to cater to a broader audience and increase accessibility.

Menu Diversification: Continuously evolve and expand the menu to cater to changing tastes and preferences while maintaining a focus on locally sourced ingredients. Introduce seasonal specials and innovative offerings.

Technology Integration and Enhancement:

Advanced IT Systems: Continuously upgrade and integrate more advanced IT systems to enhance efficiency, improve customer engagement, and streamline operations. Explore AI-driven solutions for personalized customer experiences.

Enhanced Mobile App: Develop a robust mobile app that facilitates easy online ordering, loyalty programs, and personalized recommendations to improve customer satisfaction and convenience.

Sustainability Initiatives:

Environmental Focus: Strengthen the cafe's commitment to sustainability by adopting eco-friendly practices like composting, reducing single-use plastics, and sourcing from sustainable suppliers. Showcase these efforts to resonate with environmentally conscious customers.

Community Engagement: Engage with local farmers, suppliers, and community initiatives to strengthen ties with the local community and support sustainable practices.

Enhanced Customer Experience:

Customer-Centric Approach: Continuously gather customer feedback and implement improvements based on their preferences and suggestions. Focus on enhancing the overall customer experience, both in terms of service and ambiance.

Events and Workshops: Host events, workshops, and study groups within the cafe to promote community engagement and create a vibrant space for learning and collaboration.

Marketing and Branding:

Strategic Partnerships: Collaborate with university organizations, clubs, and events to establish the cafe as an integral part of campus life. Leverage partnerships for promotional activities and events.

Digital Marketing Strategies: Invest in targeted digital marketing campaigns, social media engagement, and influencer partnerships to expand the cafe's reach and attract new customers.

Employee Training and Development:

Training Programs: Implement ongoing training programs for staff to ensure consistent service quality and a welcoming atmosphere. Empower employees to embody the cafe's values and ethos.

Adapting to Trends and Demands:

Stay Agile: Continuously monitor industry trends, customer preferences, and market demands to adapt and innovate. Embrace new trends in food, technology, and customer experience to stay competitive.

Long-Term Vision:

Scaling Up: Explore the potential for scaling up operations beyond the university setting to other educational institutions or community hubs while maintaining the cafe's unique identity and values.

Community Impact: Deepen the cafe's involvement in the local community through initiatives, sponsorships, and events that contribute positively to education, sustainability, and well-being.

CONCLUSION

The GreenVibe Café project, led by the dynamic team of Annie Xu, Arundhathi Roy, Rewa Garg, and Srija Vellanki, is not just about coffee—it's a vibrant journey into sustainability, innovation, and community. Imagine a coffee haven at Cal State Fullerton where each sip is a commitment to a unique experience. The foundation and vision of Green Vibe Cafe emerge as a response to the burgeoning demand for a diverse and accessible space within Cal State Fullerton's academic landscape. The cafe's inception seeks to harmonize the need for an optimal study environment with a commitment to community, sustainability, and academic growth.

Our strategic location, directly adjacent to the CSUF campus, is not merely geographical but also a testament to our commitment to being an integral part of the campus community. We aspire to be more than a coffee shop; we aim to become a thriving hub where students, faculty, and locals converge, fostering an environment conducive to productivity, social interaction, and personal development. The competitive landscape presents formidable challenges, with established chains, local independents, and non-traditional competitors vying for market share. However, Green Vibe Cafe's unique value proposition, emphasizing locally sourced ingredients, an inclusive atmosphere, extended hours, and affordable prices, positions us as a distinct player in this diverse market.

Integral to our success are the meticulously designed IT systems, tailored to enhance operational efficiency, customer engagement, and sustainable practices. Leveraging technologies such as POS systems, online ordering platforms, and CRM tools, we aim to optimize our services, minimize waste, and foster lasting connections with our clientele. The delineation of our target audience, spanning college students, faculty, and even local high school students, underscores our commitment to inclusivity and catering to diverse needs and preferences. By understanding their demographics, behaviors, and preferences, we aspire to tailor our offerings and services to create a welcoming and enriching experience for each segment of our audience.

The collaborative effort of the project team, guided by a comprehensive team contract, embodies our commitment to professionalism, collaboration, and problem-solving. The adherence to a code of conduct, active participation, efficient meetings, and a problem-solving

culture ensures a cohesive and productive team environment, crucial for the realization of our goals. In essence, Green Vibe Cafe embarks on a journey not only to satiate the community's thirst for quality coffee but also to become an integral part of the CSUF ecosystem. Our commitment to sustainability, inclusivity, and academic growth positions us as more than just a coffee shop; we aim to be a catalyst for community engagement, personal development, and academic excellence. As we embark on this entrepreneurial endeavor, our unwavering dedication to our mission drives us forward, aspiring to create a haven where diverse minds converge, collaborate, and thrive.

APPENDIX

IT COMPONENT OF THE BUSINESS

Figma is a web-based collaborative interface design tool used primarily for creating user interfaces, prototypes, and interactive designs. It allows designers, developers, and other stakeholders to work together in real-time, fostering seamless collaboration and communication throughout the design and development process.

Figma, a collaborative interface design tool, can be highly beneficial in an Information Technology (IT) context in several ways:

1. Interface Prototyping and Design:

Figma allows IT teams to create and prototype user interfaces collaboratively. It streamlines the process of designing UI/UX elements, allowing designers and developers to work together in real-time on interface mockups, wireframes, and prototypes.

2. Team Collaboration and Communication:

Within IT, teams often work remotely or across different locations. Figma's collaborative features enable real-time collaboration, facilitating communication between designers, developers, product managers, and other stakeholders. Comments, annotations, and feedback can be provided directly on the design elements, fostering a more efficient workflow.

3. Design System and Component Libraries:

Figma offers the creation of design systems and reusable component libraries. In IT, this feature is invaluable as it ensures consistency across multiple projects and teams. Designers can create and maintain a centralized repository of UI elements, brand assets, and design patterns, enhancing efficiency and maintaining a unified design language.

4. Prototyping and User Testing:

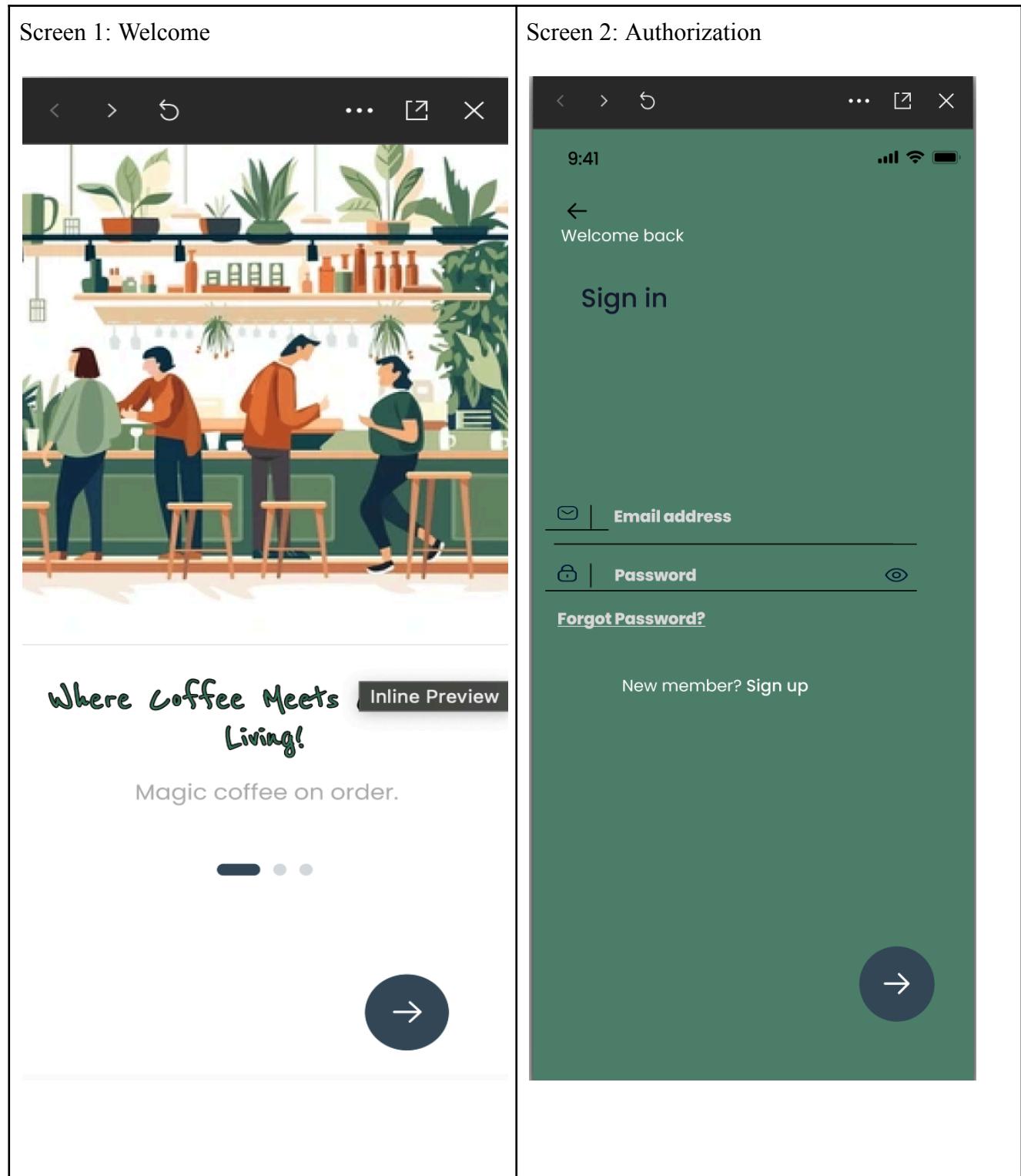
With Figma's prototyping capabilities, IT teams can create interactive prototypes to simulate user interactions. This facilitates user testing and validation of designs before development, helping to identify potential issues early and iterate on designs based on user feedback.

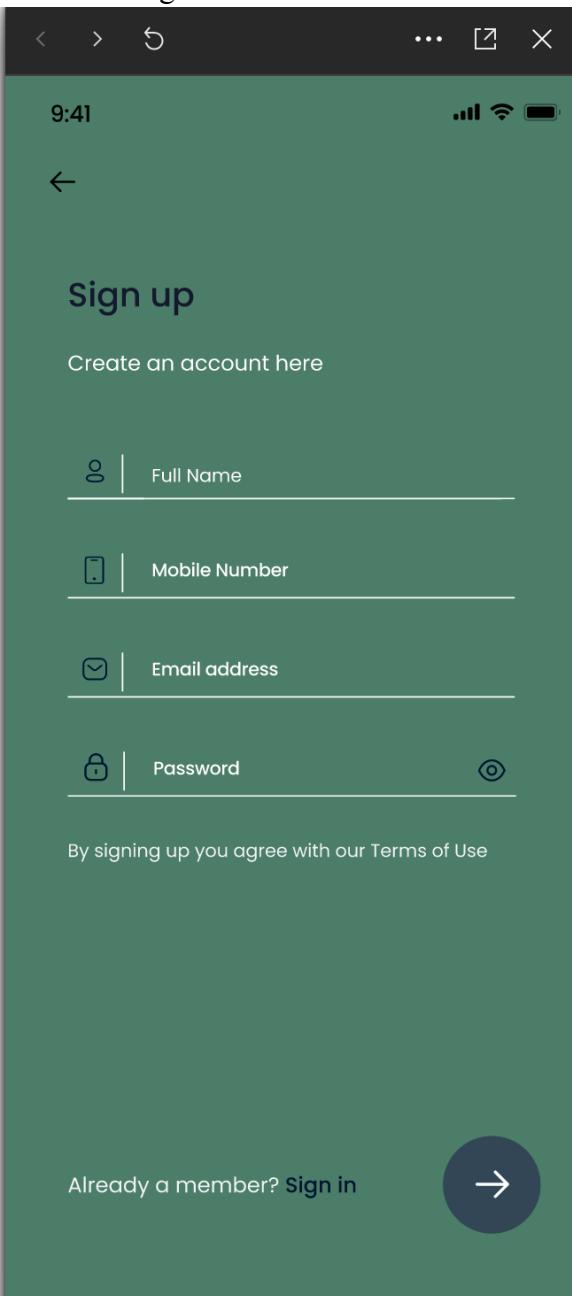
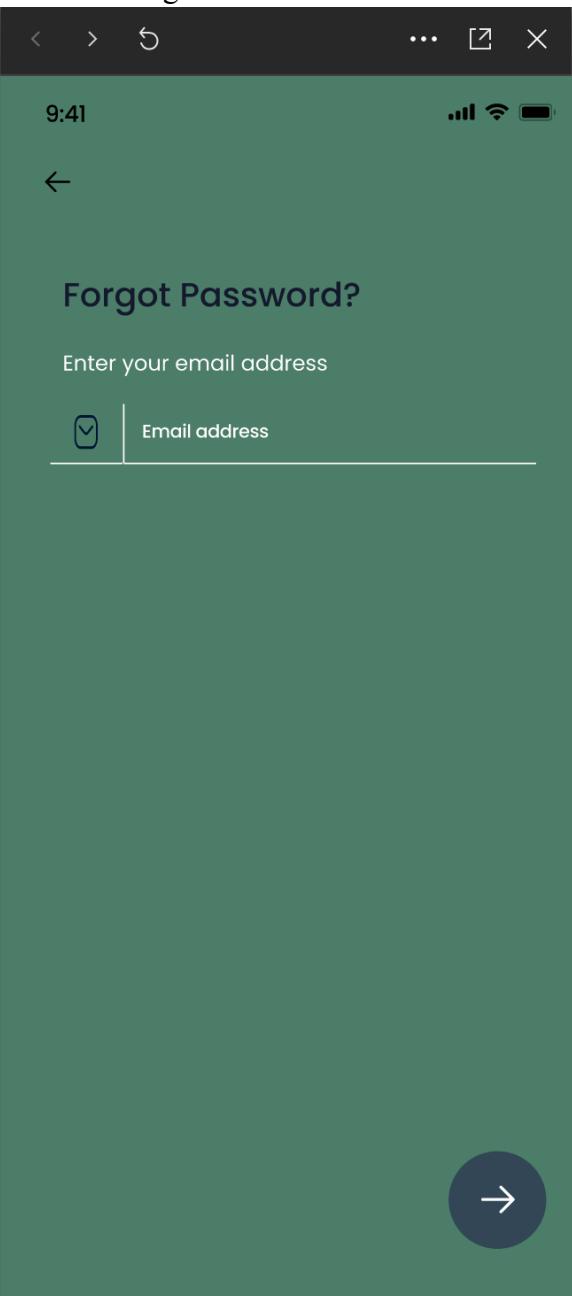
5. Version Control and History:

The version control feature in Figma allows IT teams to track changes, revert to previous versions, and view the design history. This is particularly useful when multiple team members are collaborating on a project and helps in maintaining a transparent design process.

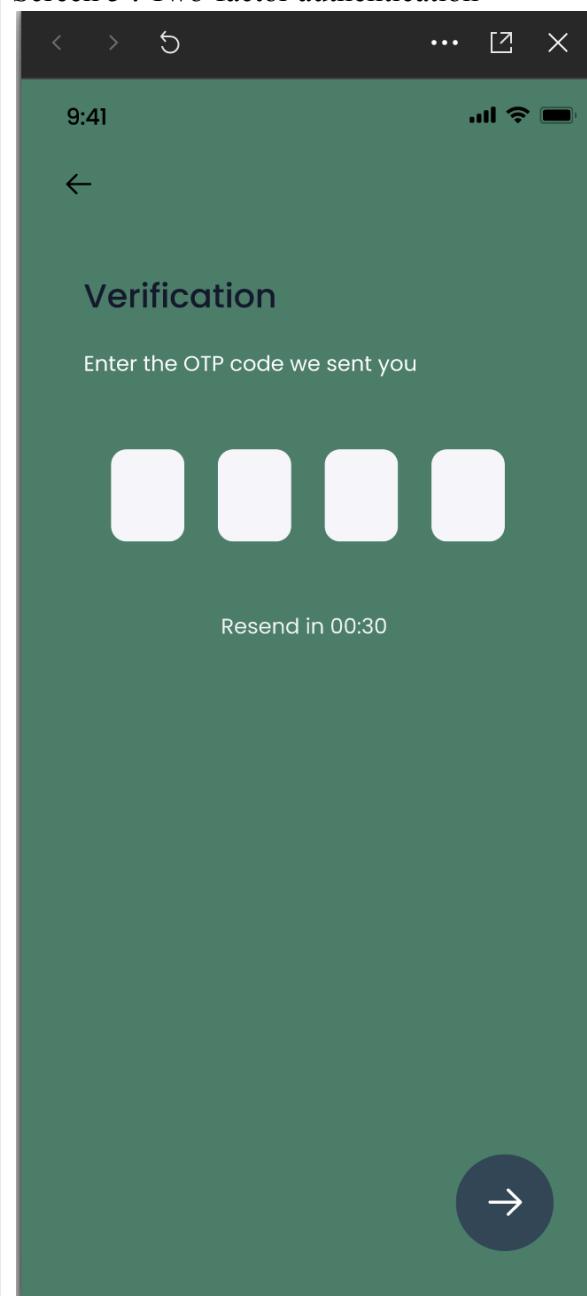
GREEN VIBE CAFE MOBILE APPLICATION PROTOTYPES

Below are the design screenshots taken from the figma. We have developed 26 screens from the application startup page to rating screen for the mobile application.



<p>Screen 3: Registration</p>  <p>The registration screen features a dark teal header with standard navigation icons. Below it, the text "Sign up" is displayed in white. A sub-instruction "Create an account here" is shown in a smaller font. The form consists of four input fields: "Full Name" (with a person icon), "Mobile Number" (with a phone icon), "Email address" (with an envelope icon), and "Password" (with a lock icon). A "Terms of Use" link is located at the bottom left, and a large circular "Next" button with a right-pointing arrow is at the bottom right.</p>	<p>Screen 4: Forgot Password</p>  <p>The forgot password screen has a dark teal header with standard navigation icons. It displays the text "Forgot Password?" in white. An instruction "Enter your email address" is present above a single input field labeled "Email address" (with an envelope icon).</p>

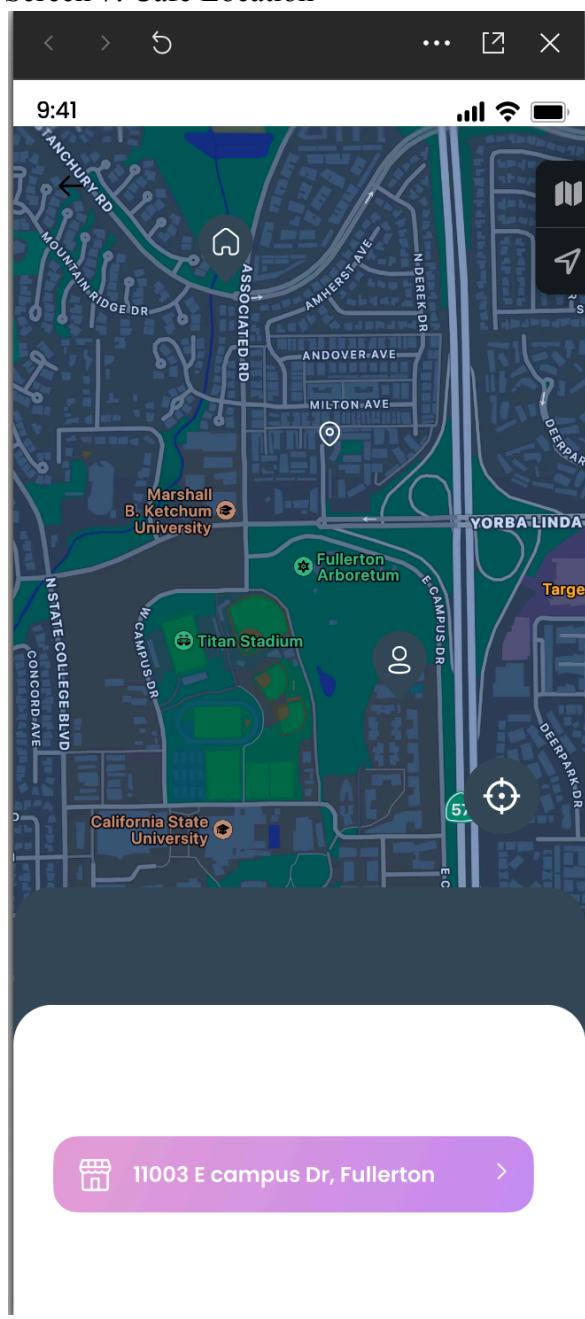
Screen 5 : Two-factor authentication



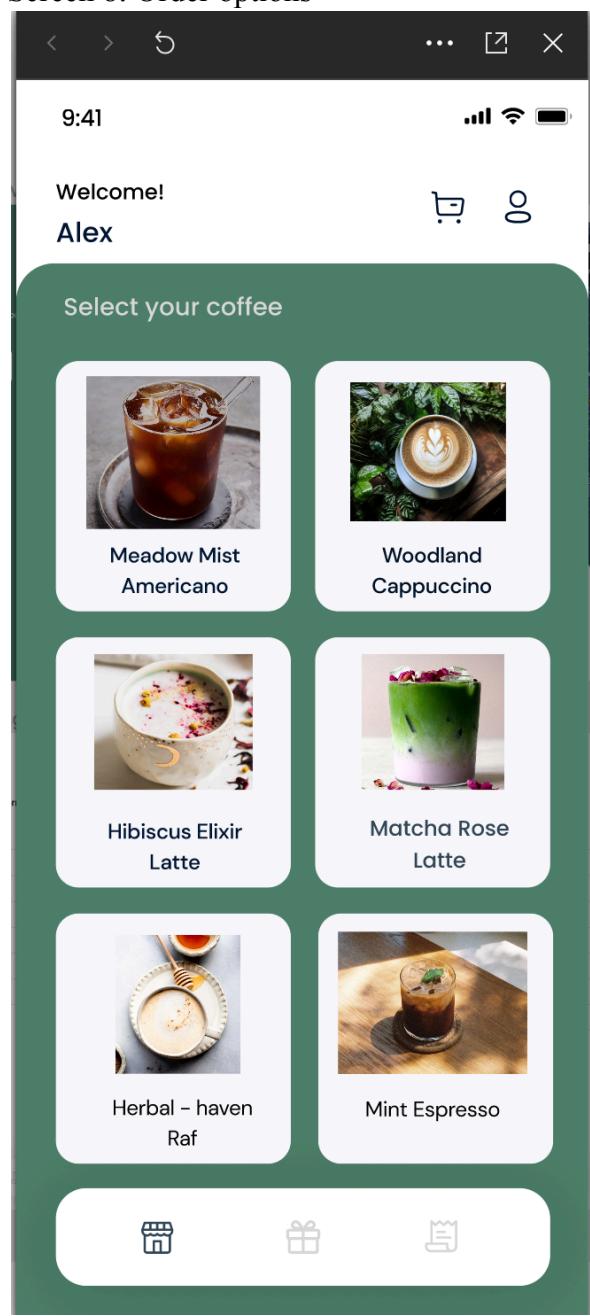
Screen 6 : Startup screen



Screen 7: Cafe Location



Screen 8: Order options



Screen 9 : Order Options

9:41 Order

Woodland Cappuccino - 1 +

Ristretto One Two

Onsite / Takeaway ☕️ 🍷

Volume, ml 250 350 450

Prepare by a certain time today? 10 : 10

Make your coffee >

Total Amount USD 3.00

Next

Screen 10: Make your coffee

9:41 Make your coffee

Select a barista >

Coffee type >

Coffee sort >

Roasting 🔥 🔥🔥 🔥🔥🔥

Grinding ☕️ ☕️

Milk Select

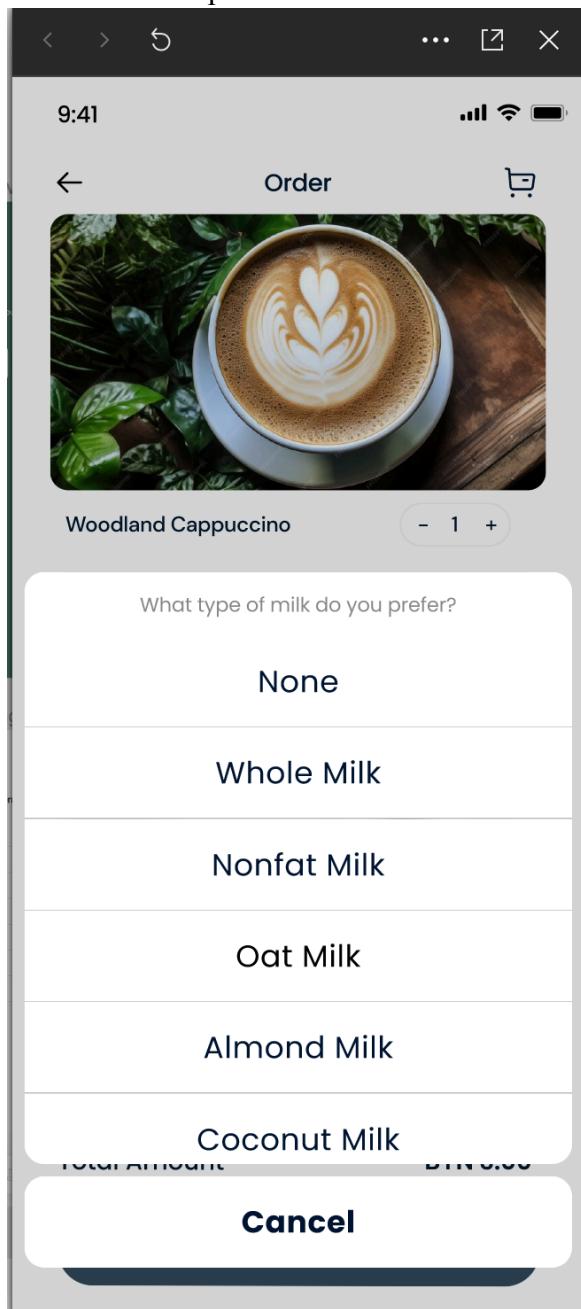
Syrup Select

Additives >

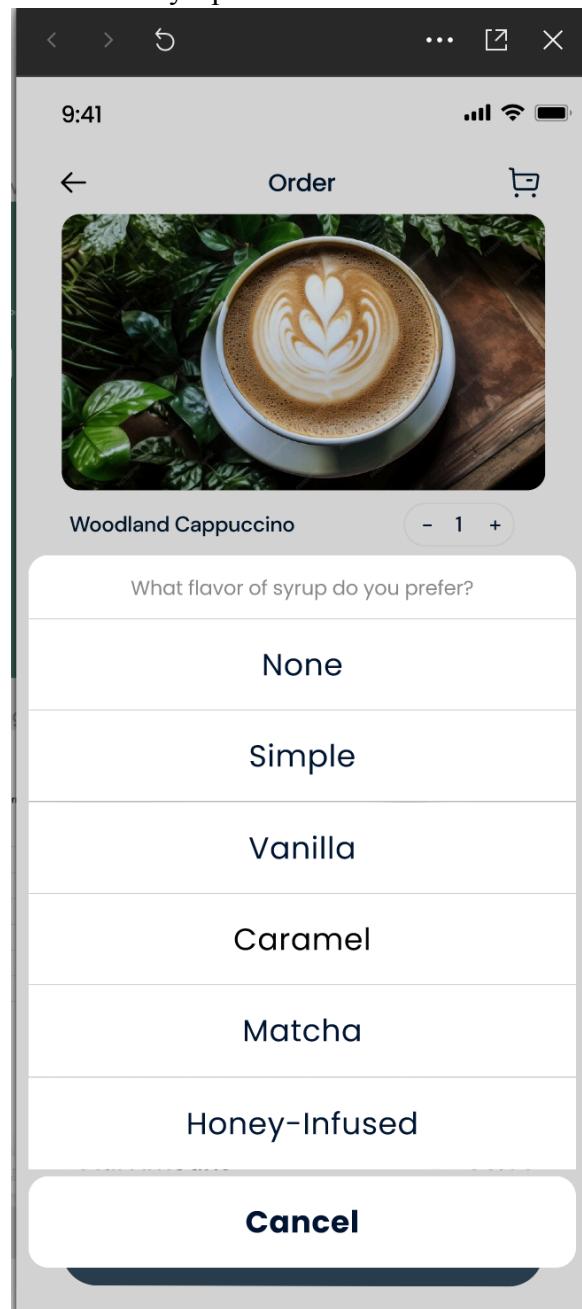
Ice □ □□ □□□

Next

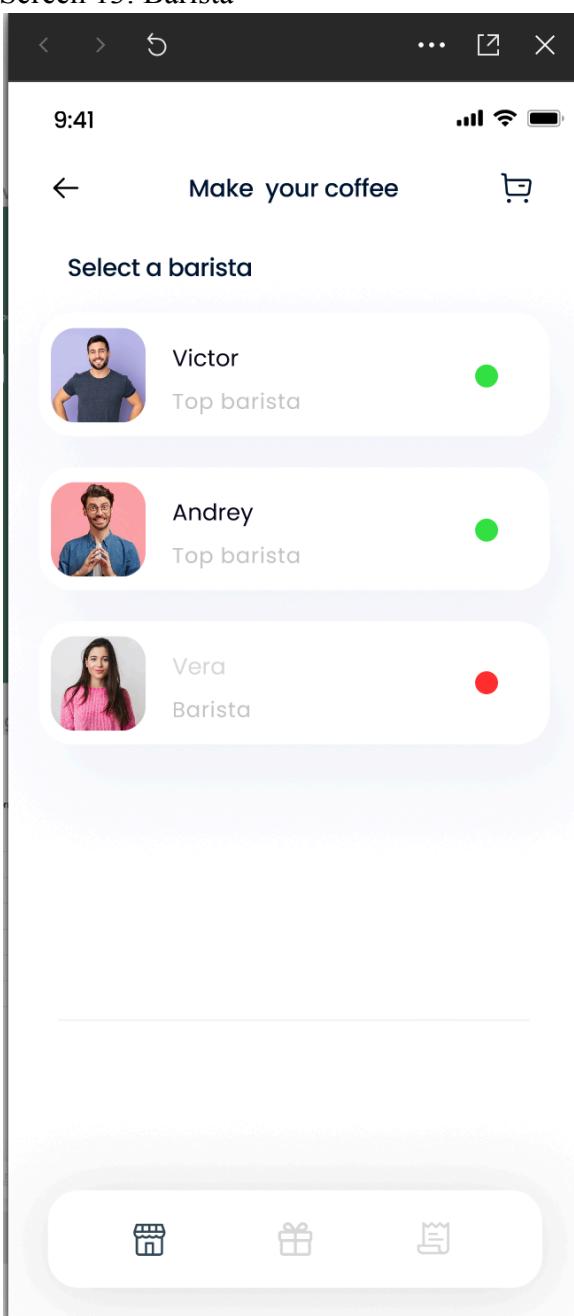
Screen 11:Milk preference



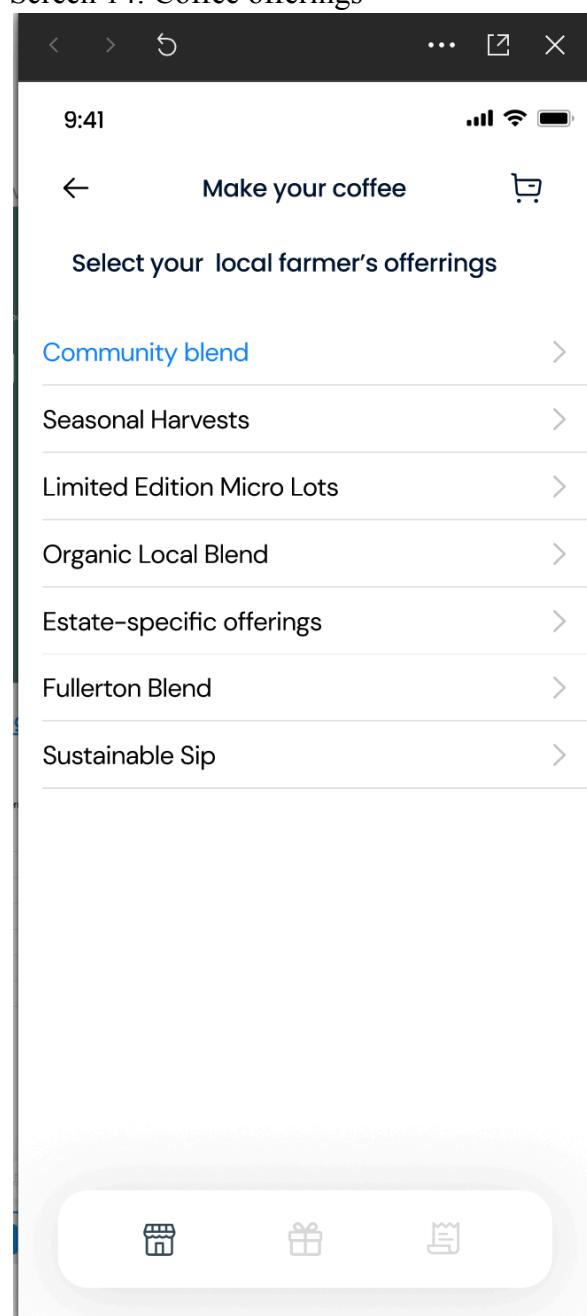
Screen 12: Syrup Preference



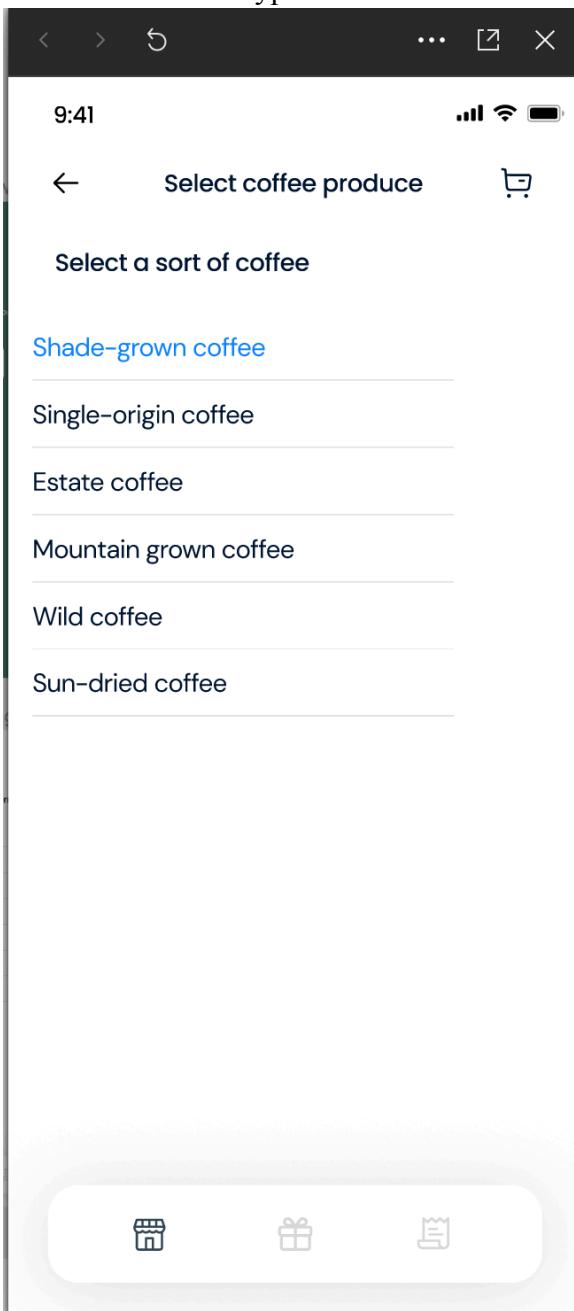
Screen 13: Barista



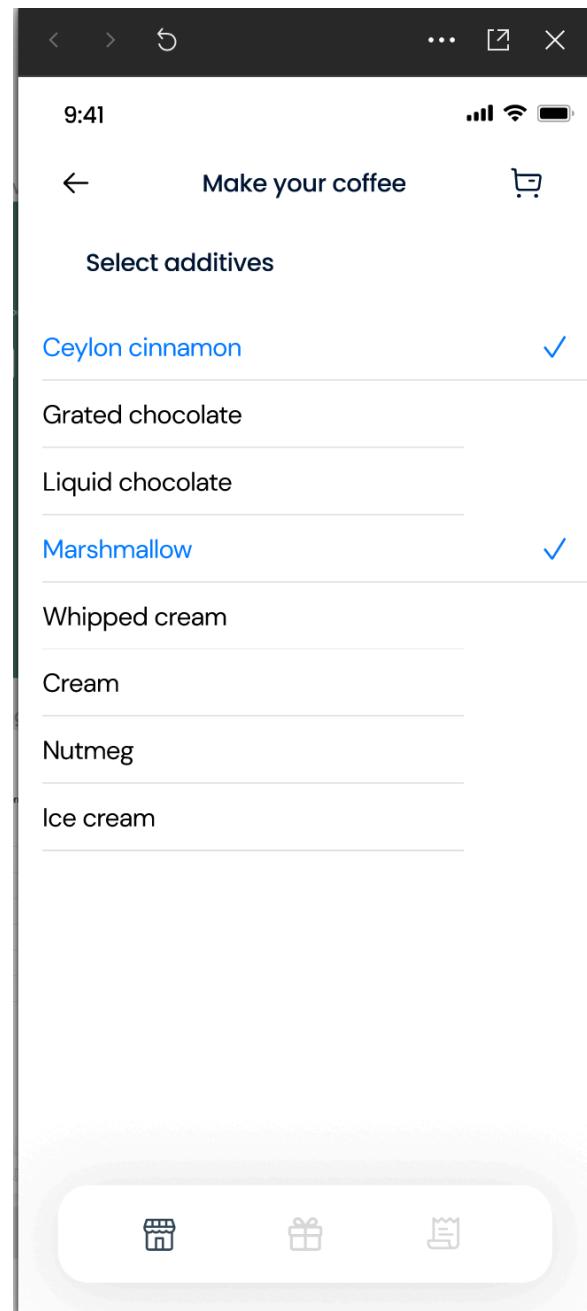
Screen 14: Coffee offerings



Screen 15: Coffee Types



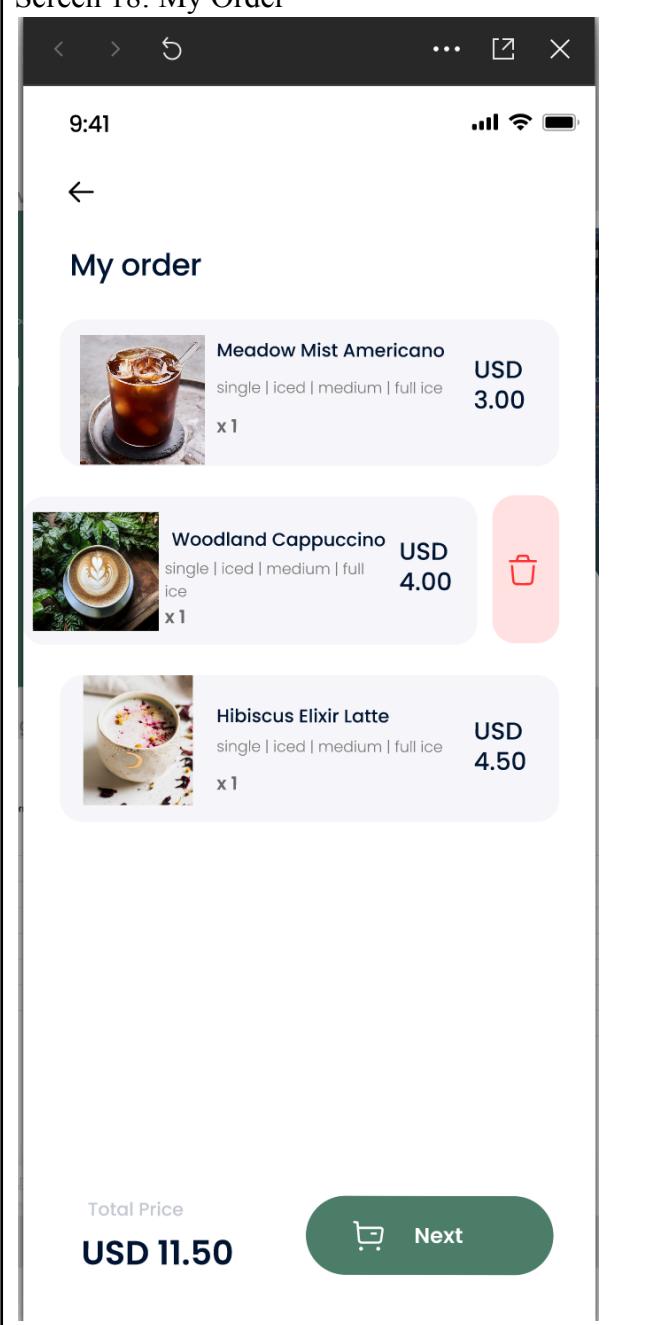
Screen 16: Additives



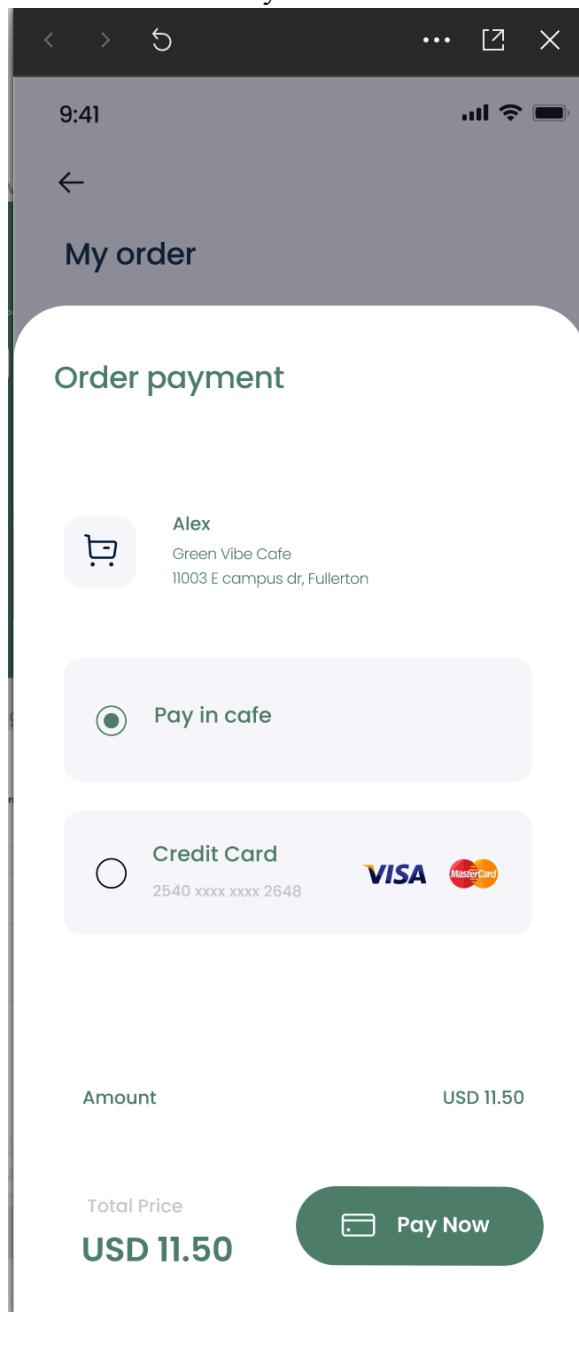
Screen 17: Recommendation



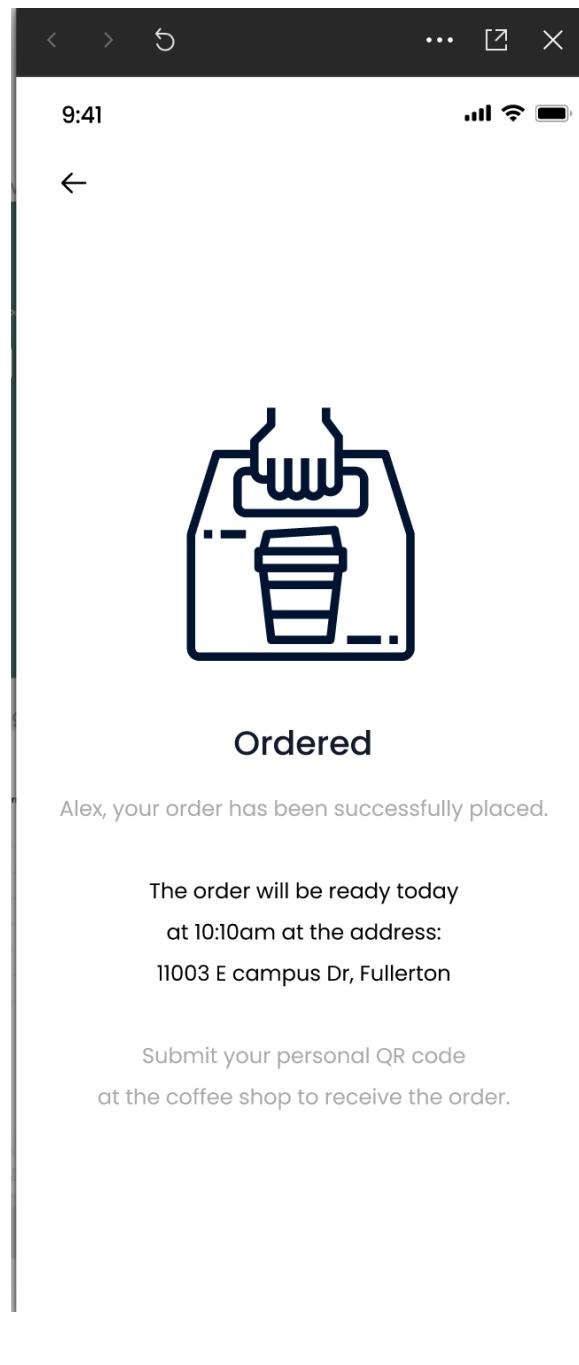
Screen 18: My Order



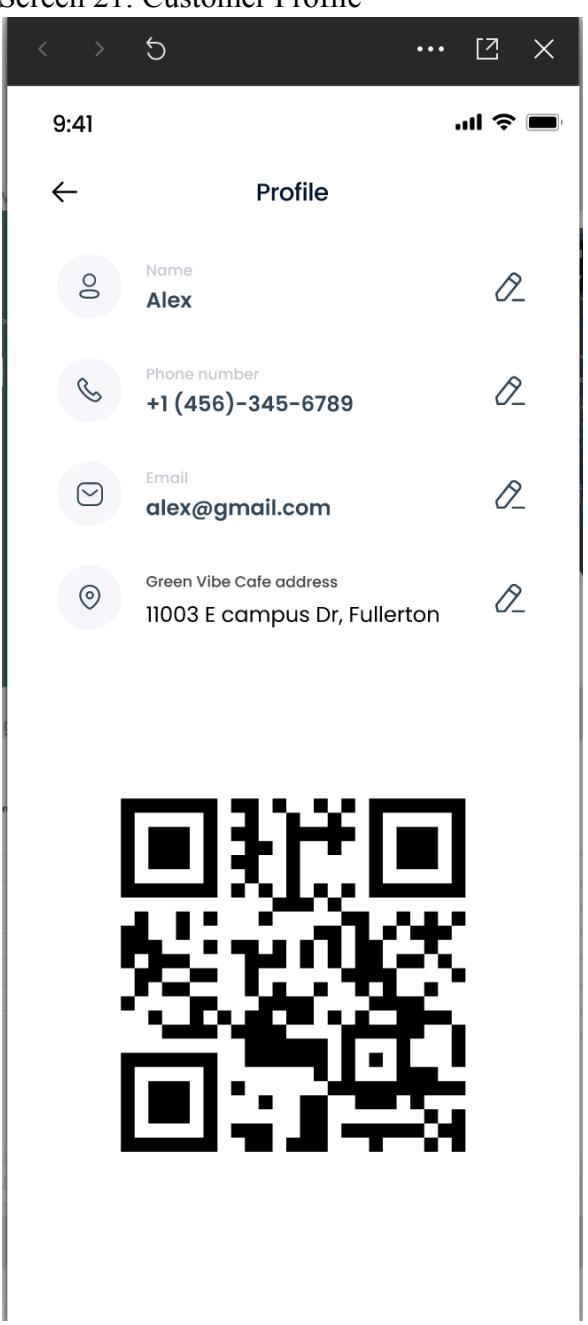
Screen 19: Order Payment



Screen 20 : Order Confirmation



Screen 21: Customer Profile



This screen shows a customer profile for 'Alex'. It includes fields for Name, Phone number, Email, and Green Vibe Cafe address, each with an edit icon. A large QR code is displayed at the bottom.

9:41

Profile

Name
Alex

Phone number
+1 (456)-345-6789

Email
alex@gmail.com

Green Vibe Cafe address
11003 E campus Dr, Fullerton

9:41

Rewards

Loyalty card 4 / 8

My Points:
2750

Redeem drinks

History Rewards

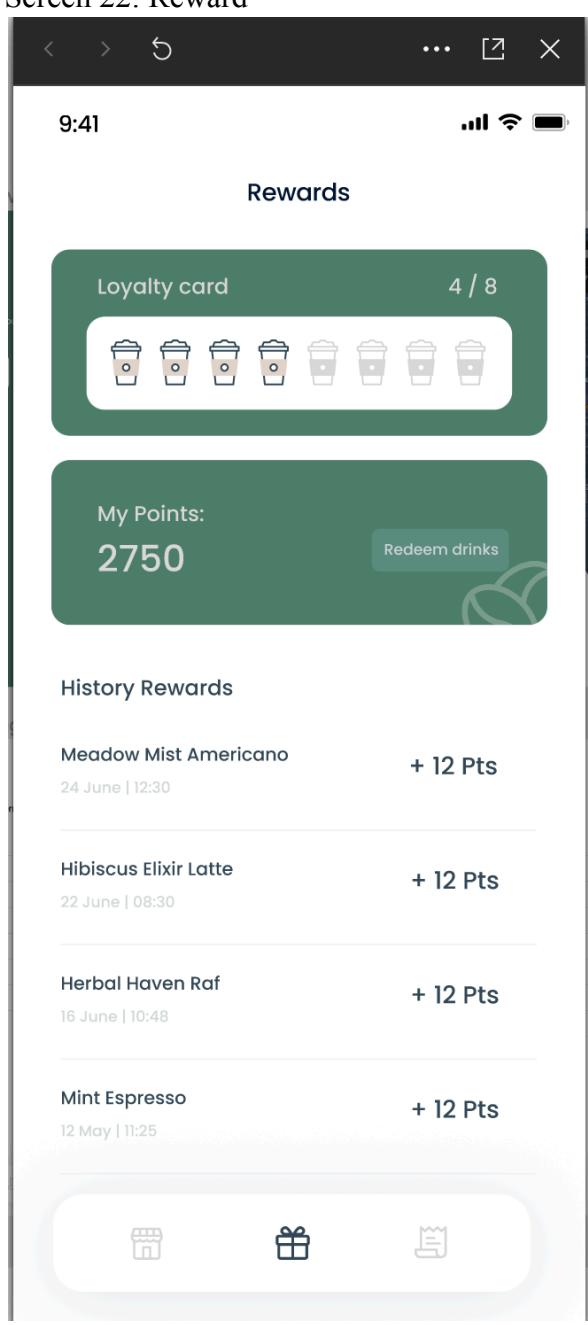
Meadow Mist Americano + 12 Pts
24 June | 12:30

Hibiscus Elixir Latte + 12 Pts
22 June | 08:30

Herbal Haven Raf + 12 Pts
16 June | 10:48

Mint Espresso + 12 Pts
12 May | 11:25

Screen 22: Reward



This screen displays the customer's loyalty card progress and their current points balance. It also lists a history of rewards earned from previous purchases.

9:41

Rewards

Loyalty card 4 / 8

My Points:
2750

Redeem drinks

History Rewards

Meadow Mist Americano + 12 Pts
24 June | 12:30

Hibiscus Elixir Latte + 12 Pts
22 June | 08:30

Herbal Haven Raf + 12 Pts
16 June | 10:48

Mint Espresso + 12 Pts
12 May | 11:25

Screen 23: Redeem

9:41

Redeem

Offer	Valid Until	Points
Meadow Mist Americano	04.07.24	1340 pts
Hibiscus Elixir Latte	04.07.24	1340 pts
Woodland Cappuccino	04.07.24	1340 pts

Screen 24: Current Order

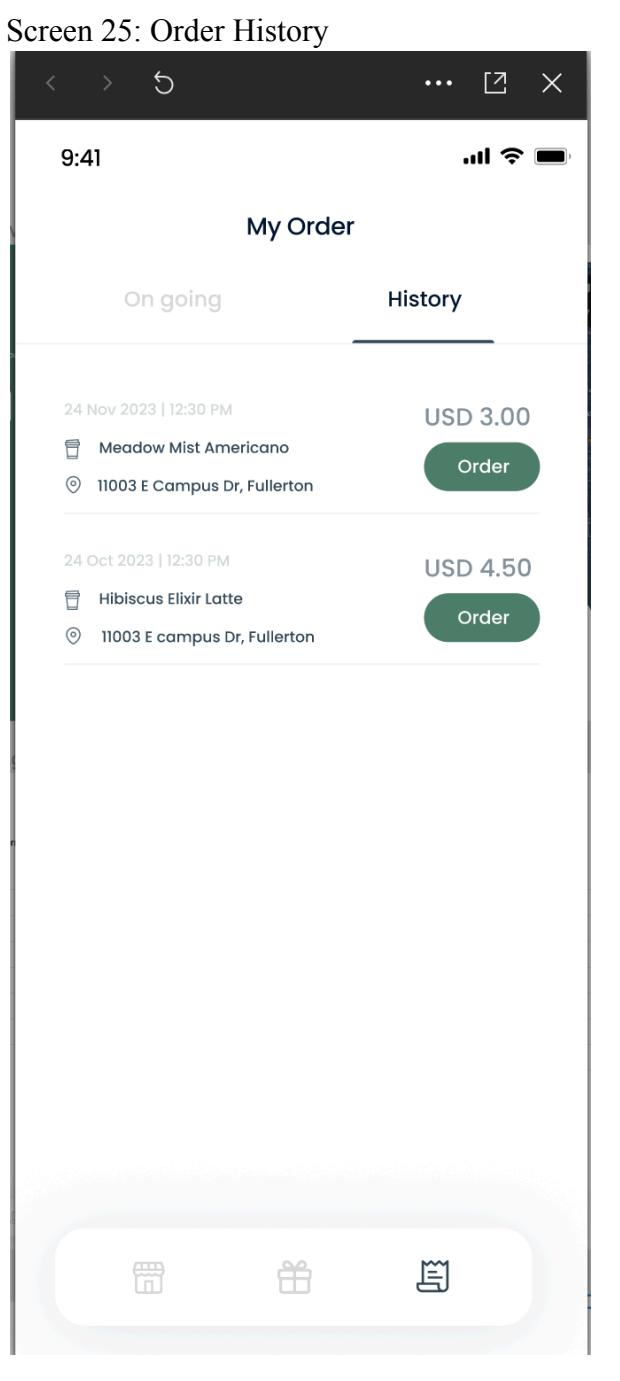
9:41

My Order

On going History

Date	Item	Location	Total
24 June 12:30 by 18:10	Meadow Mist Americano	11003 E Campus Dr, Fullerton	USD 3.00
24 June 12:30 by 18:10	Hibiscus Elixir Latte	11003 E Campus Dr, Fullerton	USD 4.50
24 June 12:30 by 18:10	Woodland Cappuccino	11003 E Campus Dr, fullertom	USD 4.00

Screen 25: Order History

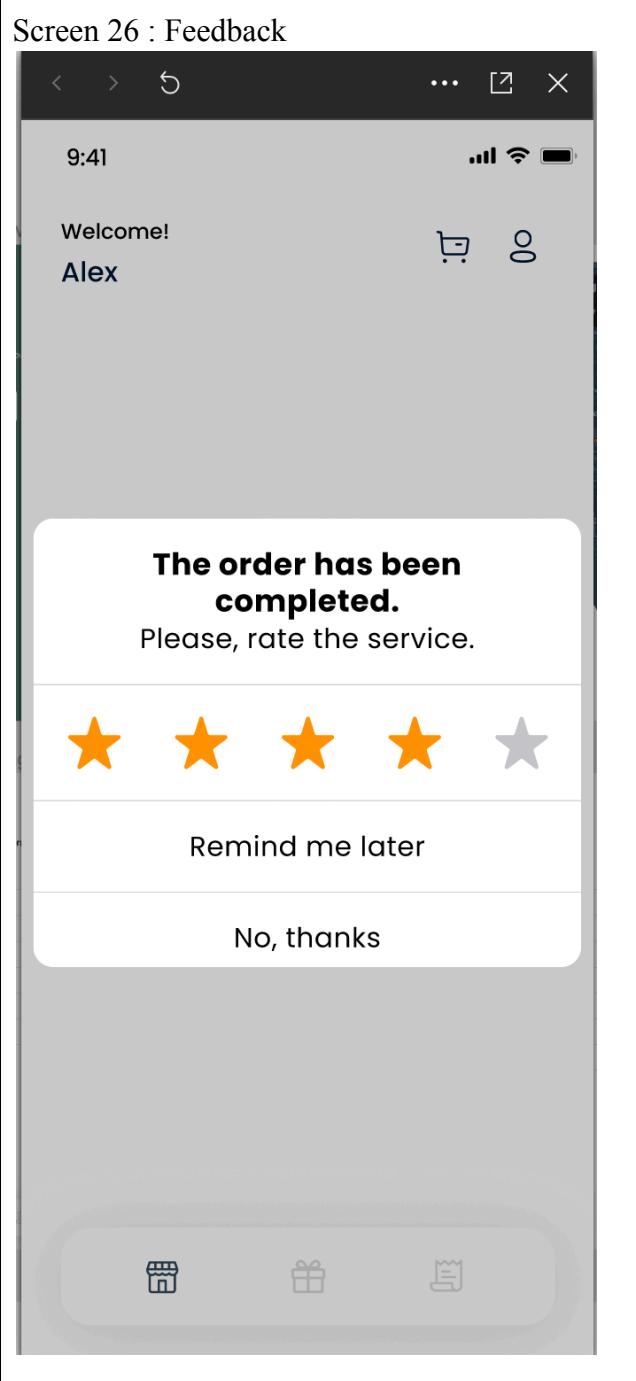


This screen shows the user's order history. At the top, it says "My Order" with tabs for "On going" and "History". Below that, two recent orders are listed:

- 24 Nov 2023 | 12:30 PM: Meadow Mist Americano (USD 3.00) - Order button
- 24 Oct 2023 | 12:30 PM: Hibiscus Elixir Latte (USD 4.50) - Order button

At the bottom, there are three icons: a storefront, a gift box, and a calendar.

Screen 26 : Feedback



Welcome! Alex

The order has been completed.
Please, rate the service.

5 star rating: ★★★★☆

Remind me later

No, thanks

GREEN VIBE CAFE MENU

Menu is one of the key features of our cafe with affordable prices and locally grown ingredients. Cafe will offer smoothies, coffee, pastries, breakfast and lunch items. Prices for coffee range from \$4 - \$7, breakfast and lunch food items \$8 - \$14, pastries range from \$3 - \$5. Smoothies \$4- \$8. Depending on the season, we will also offer any special food items to highlight the fruit or vegetable of the season. By offering a wide array of food and drink items, we cater to our target market's needs during the day as they study away in our cafe as well as fight any food boredom. Below we have attached our food and drink menu that we will offer in our cafe.

MENU**GREEN VIBE CAFE**

11003 E Campus Dr, Fullerton

**COFFEE**

Meadow Mist Americano	\$ 3.00
Woodland Cappuccino	\$ 4.00
Hibiscus Elixir Latte	\$ 4.50
Matcha Rose Latte	\$ 5.00
Herbal - haven Raf	\$ 4.50
Mint Espresso	\$5.00
Cappuccino	\$4.00

**NON-COFFEE****TEA**

Hot Chocolate	\$ 5.00
Strawberry Soda	\$7.50
Lemon Lime Soda	\$6.00
Mojito	\$7.50
Pineapple drink	\$7.50

Green Tea Latte	\$5.50
Chai Tea Latte	\$7.50
Pearl Grey Tea Latte	\$ 7.00
Green Tea	\$ 10.00
Mint Tea	\$ 10.00

Menu

B R E A K F A S T

Spanish Omelette	\$13
Egg omelette with onions, Fire roasted pasilla peppers, house salsa, cilantro, cotija cheese, avocado. Add Egg Whites (\$1.00)	
Avocado Toast	\$12
On sprouted bread toasted and topped with ripe avocado, almond cheese, cilantro, olive oil, heirloom tomatoes. Add poached egg (\$1.50)	
Yogurt Parfait	\$10
Organic Greek yogurt topped with fresh seasonal berries, homemade granola, drizzle of honey and cinnamon	
Brioche French Toast	\$12
Cream cheese, cinnamon, powder sugar, berries	
Frittata	\$12
Eggs, pancetta, sundried tomatoes, chives, parmesan cheese, pickled veggies, arugula, baby tomatoes	

L U N C H

Sundried Tomato BLT	\$12
Applewood Bacon, arugula, tomato, avocado mash, sundried tomato aioli on whole grain bread	
Chimichuri Steak & Bacon Sandwich	\$14
Roasted steak, applewood bacon topped with marinated bell peppers, caramelized onion, chimichuri, herb aioli on ciabatta	
Avocado & Quinoa Salad	\$13
Romaine, kale, quinoa, roasted corn, black beans, jicama, cilantro, cotija cheese, grape tomatoes, avocado, chipotle vinaigrette with Chicken	
Italian-style Milanese Sandwich	\$13
Breaded chicken, mozzarella, basil, heirloom tomatoes with side of tartar sauce	
Soup of the Day	\$12
Chosen daily based on harvest	

B R I C K O V E N

P I Z Z A

\$14

Classic Pepperoni Pepperoni, cheese	Prosciutto + Honey Prosciutto with a drizzle of honey	Salame + Ricotta Salame with chunks of ricotta
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Gluten Free Crust (additional \$2)

S M O O T H I E S

Green Goddess (spinach, banana, mango, ginger, pineapple, cucumber, celery)	\$7
Protein Smoothie (almond milk, spinach, banana, cacao powder, almond butter, cayenne pepper)	\$8

S M O O T H I E S

Ginger Zinger (carrot, lemon, ginger)	\$7
Berries (apple juice, banana, berries, greek yogurt)	\$8
Smoothie of the month (based on seasonal harvest)	\$7

GREEN VIBE CAFE

GREEN VIBE CAFE

PASTRIES AND DESSERTS

Muffins \$4

Apple Cinnamon, Banana Nut, Chocolate Chip,
Blueberry



Cheesecake \$6

Original, Strawberry, Key Lime by the Slice

Croissants \$4

Chocolate, Almond, Plain



Fudge Brownies \$4

Fudgey Brownies, M&M Brownies, White Swirl
Brownies

Macaron \$4

Strawberry, Chocolate, Pistachio, Vanilla, Red Velvet

Cookies \$4

Chocolate Chip, Snickerdoodle, White Chunk
Macadamia Nut, Birthday Cake, Cookies n Creme



Apple Pie \$5

with ice cream by the slice

CHALLENGES FACED BY THE TEAM

1. Coordination and Communication

Managing a diverse team with varying schedules and priorities led to communication gaps and coordination issues. This challenge hindered the seamless flow of information and progress tracking.

Mitigation Strategy: The team implemented regular meetings, leveraging online collaboration tools like Zoom and Google Cloud for real-time communication. The use of these tools allowed for synchronous discussions, task updates, and ensured everyone remained informed about project developments.

2. Resource Allocation

Balancing individual responsibilities and tasks within the team while ensuring equitable resource allocation posed a challenge. Conflicting schedules and workloads led to potential bottlenecks and delays in project deliverables.

Mitigation Strategy: Employing the Agile Scrum methodology facilitated better resource management. Through the designated roles of the product owner, scrum master, and development team, tasks were prioritized, and the workload was distributed more effectively.

3. Technical Challenges

Developing the application prototype using Figma and managing IT systems posed technical hurdles. Issues with software compatibility, design iterations, and technical complexities slowed down progress.

Mitigation Strategy: The team held training sessions together and taught each other to enhance familiarity with the tools and software being used. This approach helped in overcoming technical hurdles by improving the team's proficiency and ensuring a smoother workflow.

4. Conflict Resolution

Differing opinions, conflicting ideas, and decision-making hurdles emerged, impacting the pace of progress and team morale.

Mitigation Strategy: The team established a democratic decision-making process during meetings, providing every member an equal opportunity to voice opinions and vote on critical decisions. Encouraging open dialogue and constructive feedback helped resolve conflicts efficiently, fostering a collaborative environment and ensuring consensus on pivotal project aspects.

Overall, the team successfully navigated these challenges by fostering open communication, leveraging agile methodologies, enhancing technical proficiency, promoting a collaborative environment, and adapting swiftly to changes. These strategies enabled the team to mitigate challenges effectively, ensuring the successful completion of the university project.

TEAM'S LEARNING EXPERIENCE

The team's overall learning experience in an IT Project Management course could have encompassed various key aspects:

1. Project Planning and Execution:

Understanding Project Lifecycle: Learning about the stages of project management, from initiation to closure, and applying these concepts in real-world scenarios.

Scope Management: Grasping the importance of defining and controlling project scope to avoid scope creep and ensure project objectives are met.

2. Risk Management and Problem-Solving:

Risk Assessment: Identifying, analyzing, and managing potential risks associated with IT projects, along with implementing risk mitigation strategies.

Problem-solving: Developing problem-solving skills to address unexpected challenges that arise during project execution.

3. Project Tools and Techniques:

Project Management Software: Acquiring hands-on experience with project management tools like Gantt charts, or software like Google Cloud for planning and tracking project progress.

Agile Methodologies: Understanding Agile principles and methodologies like Scrum for iterative and adaptive project management in IT. We have implemented Scrum frame work in our project.

4. Communication and Stakeholder Engagement:

Stakeholder Management: Learning to identify stakeholders, understand their needs, and effectively engage and communicate with them throughout the project lifecycle.

Effective Communication: Developing communication plans, understanding different communication styles, and ensuring effective communication among team members and stakeholders.

5. Real-world Application:

Practical Projects: Engaging in practical project in developing prototypes for mobile application helps to apply project management principles in IT contexts.

The team likely gained valuable insights into managing IT projects efficiently, fostering teamwork, and handling challenges through a structured course curriculum, practical exercises, and real-world applications. Reflection on experiences and applying learned principles in future endeavors could solidify these learnings in their project management journey.

TAKEAWAYS FOR EACH TEAM MEMBER

1. Arundhathi Roy: Understanding the importance of detailed project planning, defining clear objectives, and creating robust project plans to guide teams effectively in future. By using Figma for developing the prototypes it has helped to know the importance of user-centered design usability, and creating products or solutions tailored to meet users' needs. This project has also encouraged creative thinking, innovation, and the ability to explore unconventional solutions to challenges.
2. Rewa Garg: The team's immersive experience in the IT Project Management course has been a rich tapestry of learning, collaboration, and practical application. From mastering the intricacies of project planning and execution, understanding team dynamics and leadership, to navigating risk management and problem-solving, each member has emerged with a comprehensive skill set. The adoption of project tools and techniques, such as Figma for prototype development and the implementation of Agile methodologies, has not only enriched technical proficiency but also cultivated a culture of adaptability and innovation. The emphasis on effective communication and stakeholder engagement has further fortified the ability to connect with various project stakeholders. Ultimately, the real-world application of these principles in developing prototypes for mobile applications solidifies the team's understanding and readiness for managing IT projects efficiently.
3. Annie Xu: The hands-on experience and the practical exposure gained in this IT project management course has provided an in-depth understanding of theoretical concepts and the nuances involved in real-world scenarios. By actively using project management tools such as the Gantt Chart and Earned Value Chart, it bolsters proficiency in these tools and also helps streamline project planning and execution efficiently.
4. Srija Vellanki: Through the IT Project Management course, the team mastered project planning, execution, team dynamics, leadership, risk management, and problem-solving, acquiring a well-rounded skill set. Adoption of project tools like Figma and Agile methodologies not only enhanced technical skills but also cultivated adaptability and innovation within the team. Overall, this experience has been a comprehensive learning journey, combining technical proficiency, innovation, and effective project management skills to prepare the team for future challenges in IT project management.