Proof of Concept Document

Way2Food

Manimegalai Vaiyapuri

17 May 2022

CS100W—02

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1. Business Requirements

1.1. Background

As a result of the coronavirus pandemic, many people lost their jobs and the prices of essential goods increased. In an article published by the University of Minnesota's Center for Infectious Disease Research and Policy (CIDRAP), it was stated that the US lost 20.6 million jobs between mid-March to the end of April (Soucheray, 2020). The US unemployment rate had increased from 3.5% of the population in February to 14.7% of the population by April (Soucheray, 2020). According to an article by USA Today, grocery prices increased by 4.5% from February 2020 to June 2020 (Stebbins & Suneson, 2020). The economic impact of the pandemic has increased food insecurity rates across the United States and all over the world.

According to an article published by Google's Find Food Support, close to 1 in 4 households in the US experienced food insecurity during the height of the pandemic (Find Food Support). Food insecurity rates have seen a slight improvement since the pandemic's height (now about 1 in 10 US households are experiencing food insecurity), but it will take a long time to return to pre-pandemic rates (Find Food Support).

In Alameda County, the Bay Area County in which I reside, the food insecurity rate has increased from about 10% of the population to about 15% of the population due to the pandemic (Find Food Support). Other Bay Area counties (Contra Costa County, Marin County, Napa County, San Francisco County, San Mateo County, Santa Clara County, Solano County, and Sonoma County) saw similar increases as well.

Increases in food insecurity rates are alarming because, according to an article published by Feeding America, people who are food insecure are disproportionately affected by diet-sensitive diseases such as diabetes, high blood pressure, heart disease, and obesity (Feeding America). Food insecure individuals are also more likely to struggle with psychological and behavioral health issues (Feeding America). It is critical that we address the issue of food insecurity in order to keep our communities healthy both physically and mentally.

Fortunately, there are many local organizations (food banks, soup kitchens, restaurants, etc.) that provide free food to those in need. There are also many programs that distribute free food to those who are eligible.

In this proof of concept, we are focused on connecting those who are food insecure with resources near them that they may not have known about. Way2Food is a mobile application that will create a way to make food accessible to everyone by connecting people who are food insecure with the resources they need.

1.2. Business Opportunity

Many people facing food insecurity are unaware of the resources available to them. Although there are other food finding apps that show users free food locations near them, the key feature that sets Way2Food apart from its competitors is its user authentication feature.

By having users create profiles and saving various information about users (such as their age, the number of people in their household, whether or not a child is present in their household, and whether or not a senior is present in their household), Way2Food is able to provide users with a tailored list of recommended food programs for which they may qualify. In doing so, Way2Food removes the complexity

users feel around finding free food distribution events and food programs for which they qualify. By simplifying this process, it will help those who are food insecure to utilize the resources that are available to them.

Table 1.2.a. Comparing the Procedures in Food Finding Apps

Procedures	Way2Food	FoodFinder	Find Food Support
User creates account and logs in	✔		
User is presented with free food locations near them	✔	✔	✔
User can use integrated maps to find routes to locations	✔	✔	✔
User is presented with food programs that they may be eligible for	✔		

Source: Author (Manimegalai Vaiyapuri), FoodFinder, Find Food Support

1.3. Business Objectives and Success Criteria

Way2Food's primary success criteria revolves around the users. We will be measuring the number of users and how users are interacting with the content (food locations and programs) that we recommend to gauge how many people we are helping with this app. Gaining sponsorships and partnerships with companies with similar values as us will also help Way2Food become successful.

Table 1.3.a. Comparing Success Criteria in Food Finding Apps

Success Criteria	Way2Food	FoodFinder	Find Food Support
Number of users	✔	✔	✔
Number of users matched with resources	✔		✔
Amount of money donated to organizations through the app	✔	✔	
Number of sponsors/partners	✔	✔	

Source: Author (Manimegalai Vaiyapuri), FoodFinder, Find Food Support

1.4. Customer or Market Needs

Way2Food will provide users with a more tailored food finding experience which is absent in other food finding applications. Way2Food will achieve this by having users create profiles and saving various information about users (such as their age, the number of people in their household, whether or not a child is present in their household, and whether or not a senior is present in their household). Way2Food will use this information to match users with programs for which they may be eligible. In the future, Way2Food will also use filters such as food type (hot meal, dry/canned food, produce/fresh food, etc.).

For the initial release of Way2Food, users must have an Android OS device that is version 10 or newer.

Listed below are user interface and performance requirements.

1.4.1. Users will be presented with a list of food programs that they may qualify for, but it is the users' responsibility to verify that they are eligible and apply for these programs.
1.4.2. Users will be presented with a list of food locations serving free food, but it is the users' responsibility to arrange transportation to get there (unless they are eligible for a food delivery program).
1.4.3. Users will be responsible for giving honest responses to questions regarding their age, number of people in their household, whether or not a child is present in the household, and whether or not a senior is present in their household (or they can opt out answering any of these questions). The users' honesty in answering these questions is critical to helping match them with food programs for which they they may be eligible.

1.5. Business Risks

The following chart summarizes potential high risk hazards for Way2Food.

Table 1.5.a. Risk Analysis Chart for Way2Food (High Risk Rating)

Hazards	Is the hazard present? Y/N	What is the risk?	Controls (When all controls are in place risk will be reduced).	Is this control in place?	Action/to do list/outstanding controls *Risk rating applies to outstanding controls outlined in this column	Person responsible
Lack of users / user acceptance	Y	The purpose of the product would be unfulfilled; it would not be helping its target audience. Furthermore, it would not generate any income or feedback to keep the project going.	- Product advertisements - User satisfaction (in-app) surveys	N	Form a marketing team that creates and runs advertisements for the app. Post ads for the app in community newsletters and on social media. Collect feedback from existing users to help improve the app and generate more interest.	Marketing Manager and Product Development Team

Security Risks / Exploits	Y	User information could get leaked; the company could get sued for a data breach.	- 2FA for app accounts - Database / API encryption - App should only have certain permissions - Prevention for DDoS attacks	N	Hire programmers with cybersecurity backgrounds to implement the aforementioned controls, create and run routine tests on the app to check its security, and develop strong patches that can fix any holes.	Cybersecurity Programmers
Lack of financial resources	Y	Employees cannot get paid; the company would lose workers and would be unable to continue the project.	- Ad revenue - Get more investors - Use budgeting tools (Budget Maestro, Quickbooks)	N	Use budgeting tools to measure the value provided to the business (gain and loss) and forecast future trends. Run ads on the app to generate more revenue.	Project Manager and Marketing Manager

Source: Author (Manimegalai Vaiyapuri)

The following chart summarizes potential medium risk hazards for Way2Food.

Table 1.5.b. Risk Analysis Chart for Way2Food (Medium Risk Rating)

Hazards	Is the hazard present? Y/N	What is the risk?	Controls (When all controls are in place risk will be reduced).	Is this control in place?	Action/to do list/outstanding controls *Risk rating applies to outstanding controls outlined in this column	Person responsible
Lack of Talented Programmers	Y	There would be less people to distribute the workload among; employees would be overworked / tasks would not be completed (on time).	- Use job posting sites (LinkedIn, Handshake, Google for Jobs, Indeed) - Thorough interview process in place	N	Find new talent through the aforementioned sites / career fairs. Post job openings on the aforementioned sites. Have a thorough interview process (with an emphasis on technical skills).	Project Manager

Outpaced by competition	Y	Users would prefer (and use) the competitors' products over Way2Food.	- Perform examinations of the competitors' products	N	Hire product researchers to perform aforementioned examinations and analyze market trends. Utilize (non-copyrighted) aspects of the competitors' successful products. Identify and develop features that could make Way2Food stand out from other similar products.	Product Development Team

Source: Author (Manimegalai Vaiyapuri)

The following chart summarizes potential low risk hazards for Way2Food.

Table 1.5.c. Risk Analysis Chart for Way2Food (Low Risk Rating)

Hazards	Is the hazard present? Y/N	What is the risk?	Controls (When all controls are in place risk will be reduced).	Is this control in place?	Action/to do list/outstanding controls *Risk rating applies to outstanding controls outlined in this column	Person responsible
Employee Health Complications (due to the COVID-19 pandemic)	Y	Team members cannot work if they are ill; deadlines would not be met.	- Health insurance policy - Vaccine policy - Masks in the workplace - Supply of soap and hand sanitizer - COVID symptoms check in place - COVID tests available	N	Provide health insurance to employees (let them get the treatment they need). Verify that employees are vaccinated or have an appropriate exemption. Have employees declare whether they are experiencing any COVID symptoms. Have masks, soap, and hand sanitizers available to prevent the spread of the virus.	Project Manager (establishes and enforces these policies) and all employees (adhere to the policies)
Team Communication, Collaboration, and Conflict	Y	Time could be lost if team conflicts are not resolved quickly / communication stalls; deadlines would not be met.	- Use agile methodologies (Scrum - Daily stand-ups, Sprint planning, Sprint retrospectives) - Use appropriate enterprise solutions (Jira for sprint planning, Slack for general communication between team members)	N	Have sprint planning meetings to determine product backlog items that will be worked on during each sprint (use Jira to facilitate this). Have daily stand-ups to check the progress of each team member and learn about their tasks. Have sprint retrospectives to reflect on previous sprints and discuss what can be improved in the future.	Project Manager (as well as all product development team members)

Source: Author (Manimegalai Vaiyapuri)

2. Vision of the Solution

2.1. Vision Statement

Way2Food will create a way to make food accessible to everyone by connecting people who are food insecure with the resources they need.

When Way2Food is fully implemented, food insecure individuals will be able to get recommendations of places giving out free food and food programs they qualify for, removing the complexity around finding free food distribution events and food programs for which they qualify. By simplifying this process, it is our hope that it will help and encourage those who are food insecure to utilize the resources that are available to them.

Furthermore, when Way2Food is fully implemented, the user base will not only include low income households who are seeking food resources, but also include middle and upper income individuals who are interested in making donations to organizations or are administrators or workers at organizations who would like to post and/or update food availabilities at their organizations. By supporting these three different types of users, Way2Food will be able to help organizations bring in more resources and help connect food insecure individuals with these resources.

Even after Way2Food is fully implemented, food insecurity will likely persist in our communities. Undocumented immigrants, for example, may not qualify for many government programs and may rely almost solely on local organizations. Way2Food is dependent on information that can be scraped from the web as well as local organizations posting their food availabilities and users submitting any corrections on the app. With this information, Way2Food can provide accurate information to those seeking free food.

2.2. Major Features

As mentioned before in Section 1.2, the key feature that sets Way2Food apart from its competitors is its user authentication feature. By having users create profiles and saving various information about users (such as their age, the number of people in their household, whether or not a child is present in their household, and whether or not a senior is present in their household), Way2Food is able to provide users with a tailored list of recommended food programs for which they may qualify. By doing so, Way2Food removes the complexity users feel around finding free food distribution events and food programs for which they qualify. By simplifying this process, it will help those who are food insecure to utilize the resources that are available to them.

Listed below are the major features of the initial release of Way2Food. In the initial release of Way2Food, we will be focusing on creating the user experience for users who are using the app to find free food near them and programs for which they may qualify.

2.2.1. User Authentication: Users will be able to create an account and log in using their email address and password. User data will be encrypted before being sent to servers.
2.2.2. List of Nearby Places Providing Free Food: Locations serving free food near the user's current location will be displayed. These locations will be scraped off of the web, but we will eventually support users adding locations through the app as well.
2.2.3. Search Bar: Users will be able to use various keywords to search for a food organization that fits their needs.
2.2.4. Maps Integration: Google Maps will be integrated in Way2Food in order to show users potential routes they can take to reach various food locations.

2.2.5. List of Recommended Food Programs: Users will be presented with a list of recommended food programs based on the information they provided upon sign up.

Table 2.2.a. Comparing Major Features in Food Finding Apps

Major Features	Way2Food	FoodFinder	Find Food Support
User Authentication	✔		
List of Nearby Places Providing Free Food	✔	✔	✔
Search Bar	✔	✔	✔
Maps Integration	✔	✔	✔
List of Recommended Food Programs	✔		

Source: Author (Manimegalai Vaiyapuri), FoodFinder, Find Food Support

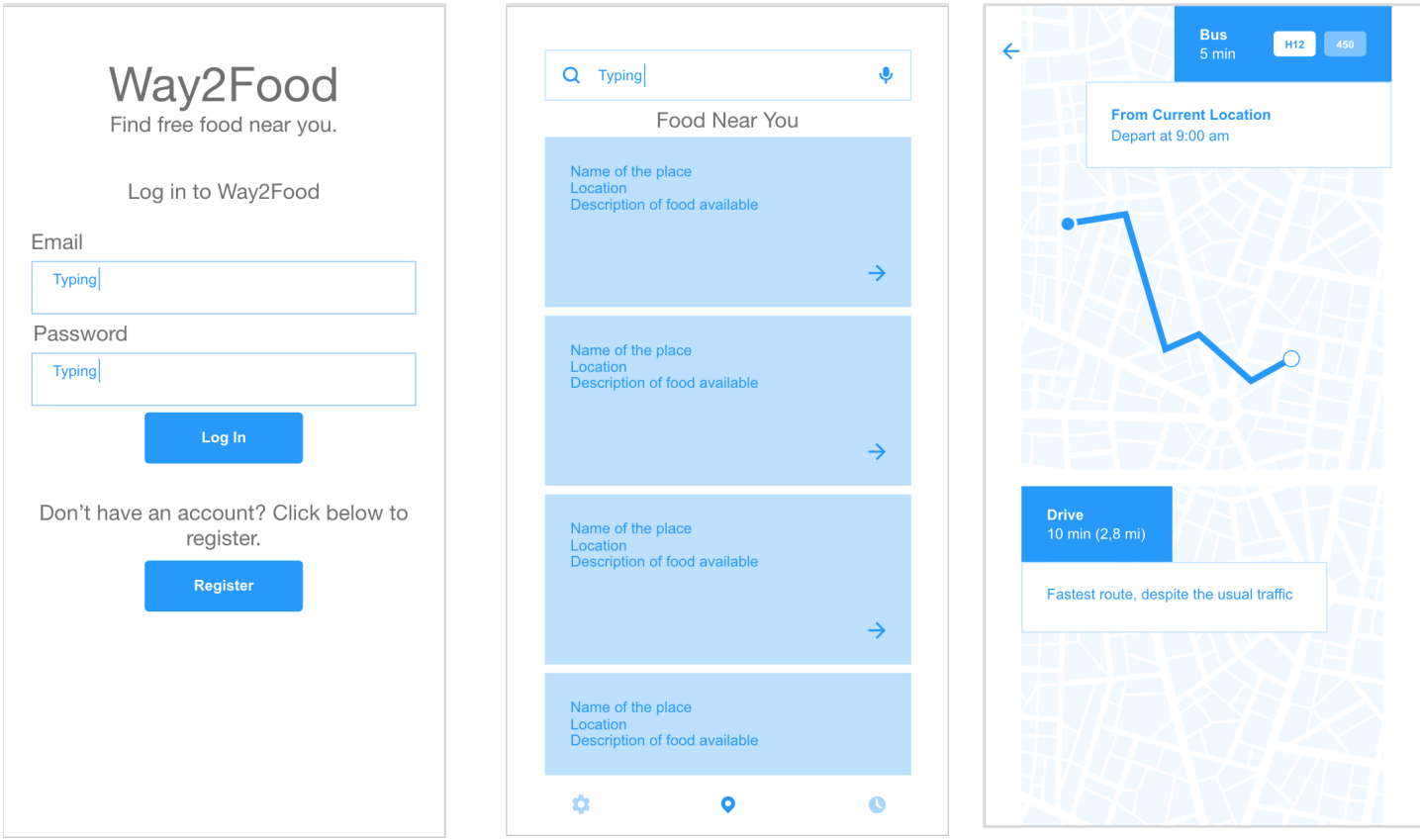


Figure 2.2.1. Wireframes for Log-in Page, Food Locations & Food Programs, and Maps
Author (Manimegalai Vaiyapuri), made with Wires Wireframe Kit from Behance using Adobe XD

2.3. Assumptions and Dependencies

Two key assumptions that were made when conceiving Way2Food are 1) that people are unaware of the full range of resources that are available to them and are near them and 2) that there lacks a centralized, common place to find information (and post information) about these resources.

The first assumption is illustrated by Figure 2.3.1 shown below. Of the 17 people who were surveyed, nearly half of the participants (8 participants) responded that they do not know or are not sure about food resources/organizations in their community.

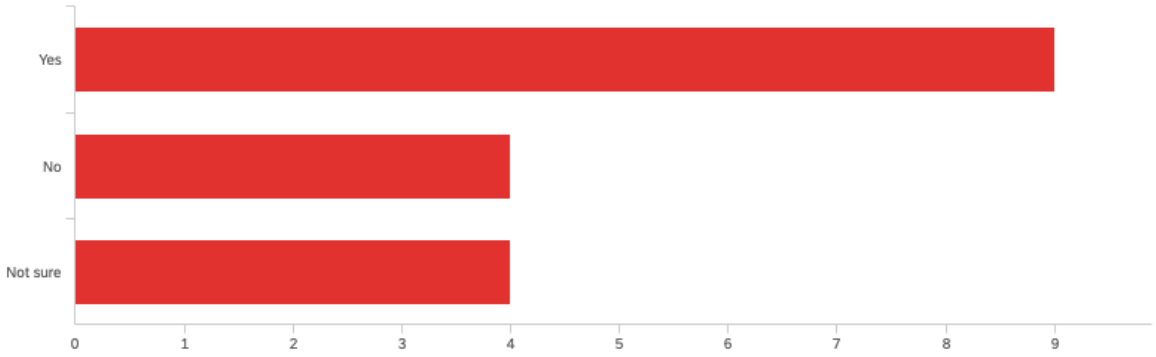


Figure 2.3.1. "Do you know about food resources/organizations in your community?" Question from Way2Food Qualtrics User Survey
Source: Author (Manimegalai Vaiyapuri), made with Qualtrics

The second assumption is illustrated by Figure 2.3.2 shown below. The 9 participants who answered yes to the previous question then shared how they heard about the food resources/organizations in their community. Their answers were quite varied, indicating that there lacks a common place to easily get access to information of this nature.

Table 2.3.a. "If you answered yes to the previous question, how did you hear about them?" Question from Way2Food Qualtrics User Survey

At university fairs, outreach events by food resources
I have volunteered with my community organazations to help feed people that are food insecure
a teacher
Maps, Ubereat
Word of mouth

Source: Author (Manimegalai Vaiyapuri), made with Qualtrics

Table 2.3.b. "If you answered yes to the previous question, how did you hear about them?" Question from Way2Food Qualtrics User Survey

Through website advertisements
School, google
From other students
word of mouth

Source: Author (Manimegalai Vaiyapuri), made with Qualtrics

Listed below are the major dependencies that Way2Food relies on in order to be successful.

2.3.1. Way2Food's initial release will only be available on the Google Play Store, so users must be able to access the Google Play Store on an Android OS device (version 10 or higher).
2.3.2. Way2Food must secure an investment of $50,000 to get started.

3. Scope and Limitation

3.1. Scope of Initial Release

As mentioned before in Section 2.2, for the initial release of Way2Food, we will be focusing on creating the user experience for users who are using the app to find free food near them and programs for which they may qualify.

3.1.1. User Authentication
3.1.2. List of Places Providing Food
3.1.3. Search Bar
3.1.4. Maps Integration
3.1.5. List of Recommended Food Programs

3.2. Scope of Subsequent Releases

Listed below are major features that will be deferred to later releases.

3.2.1. Recently Visited Places
3.2.2. Favorite Places
3.2.3. Preferences Menu
3.2.4. Profiles for Donors
3.2.5. Profiles for Administrators/Workers at Food Organizations

Table 3.2.a. Anticipated Timeline of Subsequent Releases for Way2Food

Subsequent Releases	Features Included in Release	Anticipated Dates
Subsequent Release 1	- Recently Visited Places - Favorite Places	08/15/22 - 09/16/22
Subsequent Release 2	- Preferences Menu - Profiles for Donors - Profiles for Administrators and Workers at Food Organizations	09/19/22 - 12/09/22

Source: Author (Manimegalai Vaiyapuri)

3.3. Limitations and Exclusions

Way2Food will not include a forum or chat feature. This is because Way2Food would like to maintain the privacy and safety of its users. If the users have any questions or edits that they would like to make to the app, they will be able to submit questions and edits to the Way2Food team, where they will be reviewed and the appropriate action response will be taken.

Way2Food will also link to external sites when a user selects a program that they would like to further explore. Although Way2Food will provide a brief description of the program as well as some contact information in the app, linking to an external site would allow users to be able to view more detailed and updated information. The program websites would also be able to provide users with the ability to actually apply to the programs, so it is important that Way2Food should be able to redirect users to these resources when needed.

4. Business Context

4.1. Stakeholder Profiles

4.1.1. End Users
   a. Low Income Households (free food seekers)
   b. Middle and Upper Income Individuals (donors)
   c. Administrators and Workers at Food Organizations
4.1.2. Partners
   a. Food Banks and Other Food Organizations
4.1.3. Investors
   a. Shareholders
   b. Lenders
4.1.4. Team Members
   a. Project Manager
   b. Marketing Manager
   c. Full-Stack Developers
   d. Product Researchers/Analysts
   e. UI/UX Designers

4.2. Project Priorities

Table 4.2.a Project Priorities

Feature	Priority	Key Drivers
List of Places Providing Food	1	End Users
Maps Integration	2	Developers
List of Food Programs	3	End Users
User Authentication	4	Developers

Source: Author (Manimegalai Vaiyapuri)

4.3. Operating Environment

In the initial release of Way2Food, users will be limited to residents of the Bay Area (residents of Alameda County, Contra Costa County, Marin County, Napa County, San Francisco County, San Mateo County, Santa Clara County, Solano County, and Sonoma County). Therefore, users will be located relatively close to each other and will be in the same time zone. Since the first release is limited to users who are

using the app to find food and resources near them, we can assume that users will need to access the system around meal times (times for breakfast, lunch, and dinner).

Appendices

Appendix A: Proof of Concept Wireframes

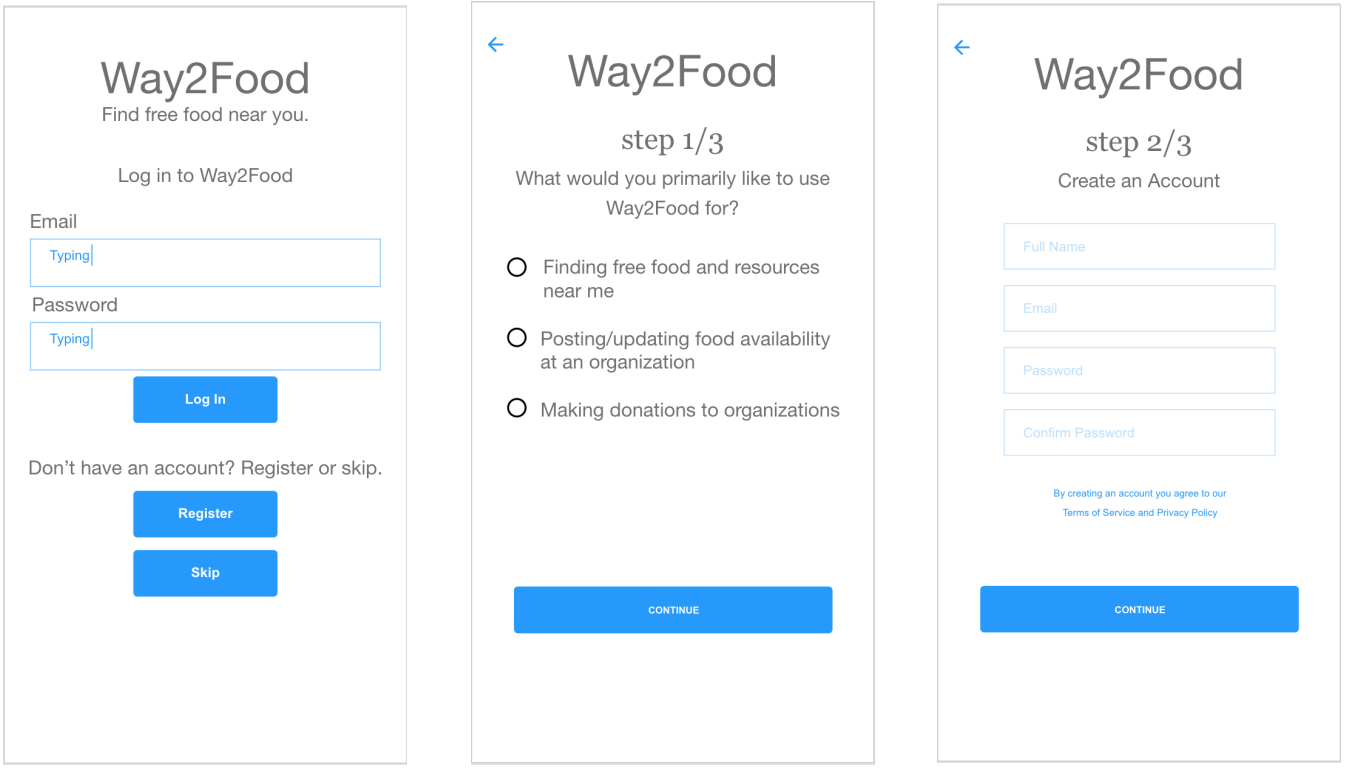
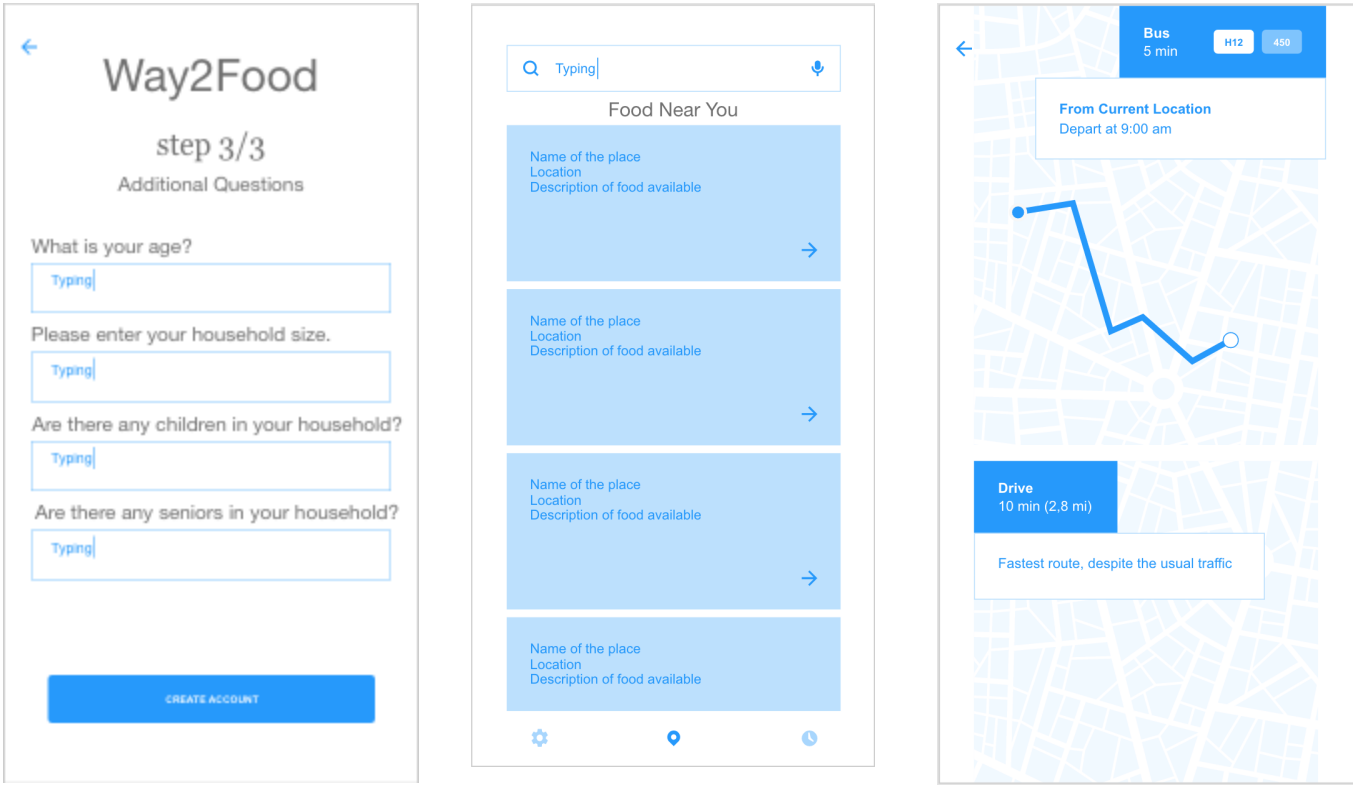


Figure A.1. Proof of Concept Wireframes, Source: Author (Manimegalai Vaiyapuri), Created Using Wires Wireframe Kit from Behance Using Adobe XD



Appendix B: Works Cited

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Appendix C: Resume

Manimegalai (Mega) Vaiyapuri
(925) 621-9548 mega.vaiyapuri@gmail.com

Objective
To obtain an internship in Product/Program Management/Software Engineering/IT.

Education
B.S. Computer Science, San José State University GPA: 3.687, Degree Expected: May 2023

Related Coursework
Object-Oriented Design, Programming in C, Introduction to Data Structures, Data Structures and Algorithms, Introduction to Computer Systems, Introduction to Database Management Systems, Programming Paradigms

Skills
- Java, C, Python, IBM DB2, SQLite, MIPS, and Linux
- Ability to visualize business workflows using the ArchiMate modeling language

Relevant Experience
IT Enterprise Architecture and Integration Intern, Stanford Health Care (Summer 2021)
- Constructed basic Business Process Modeling Notation (BPMN) diagrams using the ArchiMate modeling language.
- Provided feedback on the BPMN training in place for business analysts and the Architecture Review Board (ARB) process.
- Revised the Risk and Compliance Review (RACeR) Security Questionnaire for project intake in order for it to be converted from a document to an HTML form.

Course Catalog Parser (Fall 2021)
- Used ANTLR and Python to parse a 'Course Catalog' text file and store the parsed information in a SQLite database. Created a command line tool that displays course information based on user input.

ASCII Text Image Generator (Spring 2021)
- Created an ASCII text image generator using C. Used a bitmap library to load the bitmap from the input file, convert the bitmap to grayscale, and access pixel information. Printed the ASCII character corresponding to each pixel's intensity.

Simple Social Network (Spring 2020)
- Created a simple social network using Java. Used HashMap to keep track of user profiles and provided editing and search capabilities. Developed the user interface by using JFrame, JPanel, and MouseListener.

Leadership Experience
AVHS "Girls Who Code" Club Instructor (Spring 2018 - Fall 2018)
- Taught the basics of Python to fellow club members at our high school.

AVHS Spring Science Extravaganza Co-President (Fall 2018 - Spring 2019)
- Organized a science outreach event at our high school for elementary school students. Prepared experiments for stations at the event, assisted station workers, and oversaw the event.

Open Heart Kitchen Lead Volunteer at Ridgeview Commons Senior Center (2015 - 2019)
- Carried out tasks in the kitchen and dining hall, delegated tasks to other volunteers, and oversaw dinner preparation and service.

Extracurricular Activities
- Member of SJSU Spartan Stellas Acapella team & SJSU Dancesport (ballroom dancing).

Appendix D: SMART Goals Worksheet

Today's Date: 03/23/22

Date by which you plan to achieve your goal: 05/17/22

What is your goal in one sentence? (What's the bottom line?)

My goal is to create a Proof of Concept and prototype for my app idea, "Way2Food".

The benefits of achieving this goal will be…

Having project goals that are more clear and focused, thus allowing the project to run more smoothly and making people more likely to invest in my project/join my team. When the app has been developed and released, it will have the potential to better connect people who are food insecure with more resources. The app would also make it easier for people/organizations to donate and to distribute the donations.

Specific: What exactly will you accomplish?

I will do research in order to create a Proof of Concept that addresses the project's business requirements & context, vision, scope, and limitations. I will also create an app prototype using Adobe XD that shows how different users (people looking for food resources, administrators of organizations that have the resources, and workers/administrators of organizations that want to donate) would interact with the app. After the PoC and prototype are completed (and I've assembled a team of developers), I would like to use primarily Java to create an Android app for "Way2Food".

Measurable: How will you (and others) know when you have reached your goal?

I will know when the Proof of Concept and prototype goal is reached when the project is fully outlined (all items are completed). When the app is completed, I think that measuring the amount of money secured in donations and number of people connected to resources would help us measure the app's success. Also, looking at the total number of users could be a success metric.

Attainable: Is attaining this goal realistic with effort and commitment? Do you have the resources to achieve this goal? If not, how will you get them?

I think attaining this goal is realistic with effort and commitment. I believe I have the resources online to complete my prototype and PoC (I think that collecting data using Qualtrics surveys would also help me complete the PoC). To help me develop my app, I will bring in a small team of developers (from SJSU). I will also get in touch with food organizations in my county that would help beta test the app.

Relevant: Why is this goal important to you? Hone in on why it matters.

This goal is important to me because, as mentioned before, it will help me outline my project and help others understand the project's goals. Creating this app is important to me because about 15% of people in my county are food insecure and I believe that having an easier way to connect people who are seeking food resources, organizations that distribute food, and people who are willing to donate would help those who are in need.

Time-bound: When will you achieve this goal?

I will achieve this goal by 05/17/22. After I achieve this goal, my next goal will be to develop the app, which I aim will be fully implemented by the fall/winter of 2022 (tentatively 12/09/22).

Table D.1. ACTION PLAN (Please refer to Appendix F for more detailed task list)

Task / to-do item	Expected completion date	Date actually completed
Polish project pitch	03/27/22	04/02/22
Polish resume	03/27/22	03/27/22
Gather research for PoC	04/02/22	04/11/22
Complete PoC and prototype	05/13/22	05/17/22

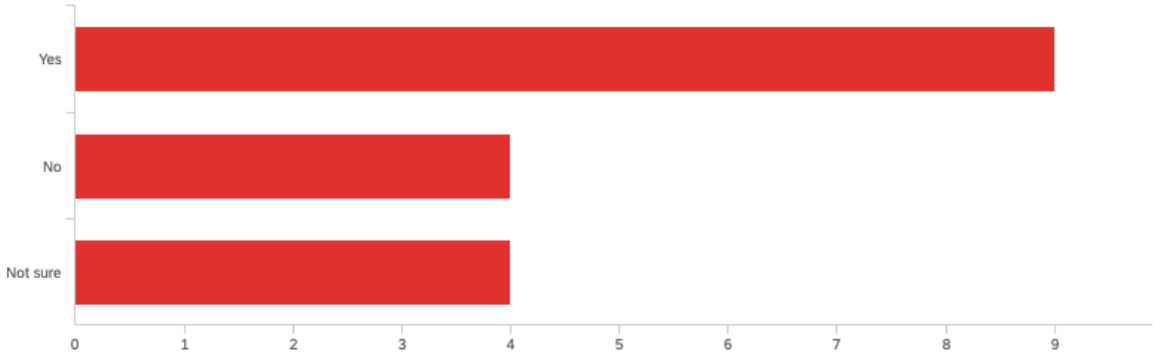
Table D.2. OBSTACLES / CHALLENGES

Obstacle	How will you address the challenges if/when they arise?
Challenges designing prototype	I will watch/read Adobe XD tutorials
Challenges creating PoC document	I will follow the instructions specified in the template and ask questions when doubts arise.
Time management challenges	I will use Google Calendar to set aside times to work on different sections of the PoC.

	and use templates when needed.

Appendix E: Qualtrics Survey (Raw Data)

1) Do you know about food resources/organizations in your community?



2) If yes, how did you hear about them?

At university fairs, outreach events by food resources
I have volunteered with my community organazations to help feed people that are food insecure
a teacher
Maps, Ubereat
Word of mouth
Through website advertisements
School, google
From other students
word of mouth

3) What did you like about the app and why? How do you think the app could be improved?

It is a good idea, and I think you can develop and public to the market
I like that it gets you clarify what you are here fo at the very start to get started quickly
Nice color palette, simple UX should make the app intuitive for everyone.
It was pretty straightforward.
I like that the app has map navigation. The UI button graphics for the "Food Near You" page could be improved upon.

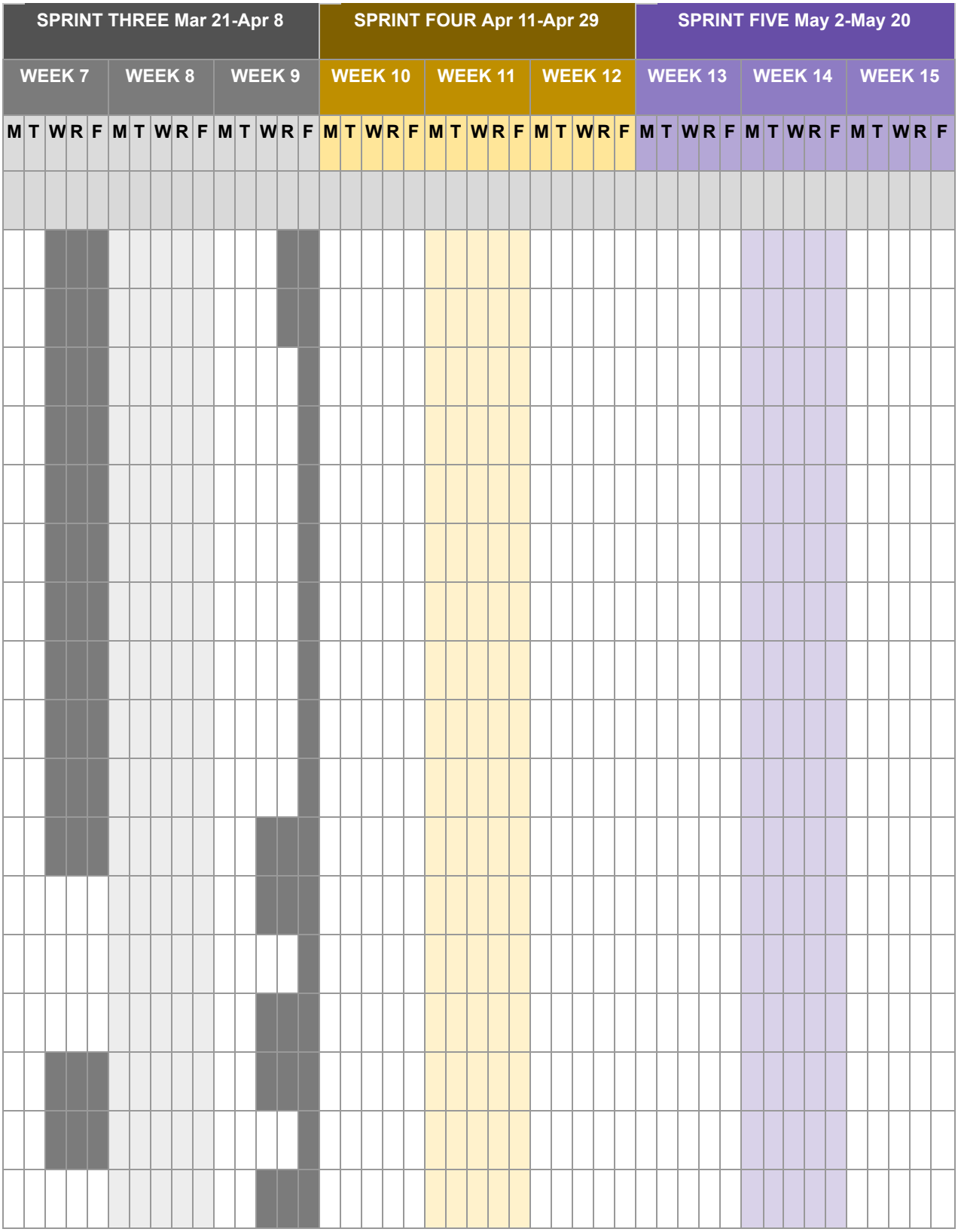
Figure E.1 Data from Qualtrics Surveys, Source: Author (Manimegalai Vaiyapuri), created using Qualtrics

Appendix F: Gantt Chart

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE	WEEK 1					WEEK 2					WEEK 3					WEEK 4					WEEK 5					WEEK 6				
							M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F	M	T	W	R	F
1	Business Requirements	Vaiyapuri	January 31	May16	106	100%																														
1.1	Background	Vaiyapuri	January 31	April 10	70	100%																														
1.2	Business Opportunity	Vaiyapuri	January 31	April 10	70	100%																														
1.3	Business Objectives and Success Criteria	Vaiyapuri	January 31	April 24	84	100%																														
1.4	Customer or Market Needs	Vaiyapuri	January 31	April 13	73	100%																														
1.5	Business Risks	Vaiyapuri	January 31	April 14	74	100%																														
2	Vision of the Solution	Vaiyapuri	January 31	May16	106	100%																														

2.1	Vision Statement	Vaiyapuri	January 31	April 10	70	100%	
2.2	Major Features	Vaiyapuri	January 31	April 28	88	100%	
2.3	Assumptions and Dependencies	Vaiyapuri	January 31	May1	91	100%	
3	Scope and Limitations	Vaiyapuri	January 31	May16	106	100%	
3.1	Scope of Initial Release	Vaiyapuri	January 31	April22	82	100%	
3.2	Scope of Subsequent Releases	Vaiyapuri	January 31	May 5	95	100%	
3.3	Limitations and Exclusions	Vaiyapuri	January 31	May1	91	100%	
4	Business Context	Vaiyapuri	January 31	May16	106	100%	
4.1	Stakeholder Profiles	Vaiyapuri	January 31	April 16	76	100%	
4.2	Project Priorities	Vaiyapuri	Januar	May 10	100	100%	

			y 31			
4.3	Operating Environment	Vaiyapuri	January 31	April 16	76	100%
AA	Proof of Concept Wireframes	Vaiyapuri	January 31	April 11	71	100%
AB	Works Cited	Vaiyapuri	January 31	May 16	106	100%
AC	Resume	Vaiyapuri	January 31	February 22	22	100%
AD	SMART Goals Worksheet	Vaiyapuri	January 31	March 25	55	100%
AE	Qualtrics Survey (Raw Data)	Vaiyapuri	January 31	April 15	75	100%
AF	Gantt Chart	Vaiyapuri	January31	May 16	106	100%
AG	Full Backlog	Vaiyapuri	May17	October 17	150	100%
PR	Complete Prototype	Vaiyapuri	January31	May 16	106	100%


SPRINT THREE Mar 21-Apr 8
SPRINT FOUR Apr 11-Apr 29
SPRINT FIVE May 2-May 20
WEEK 7
WEEK 8
WEEK 9
WEEK 10
WEEK 11
WEEK 12
WEEK 13
WEEK 14
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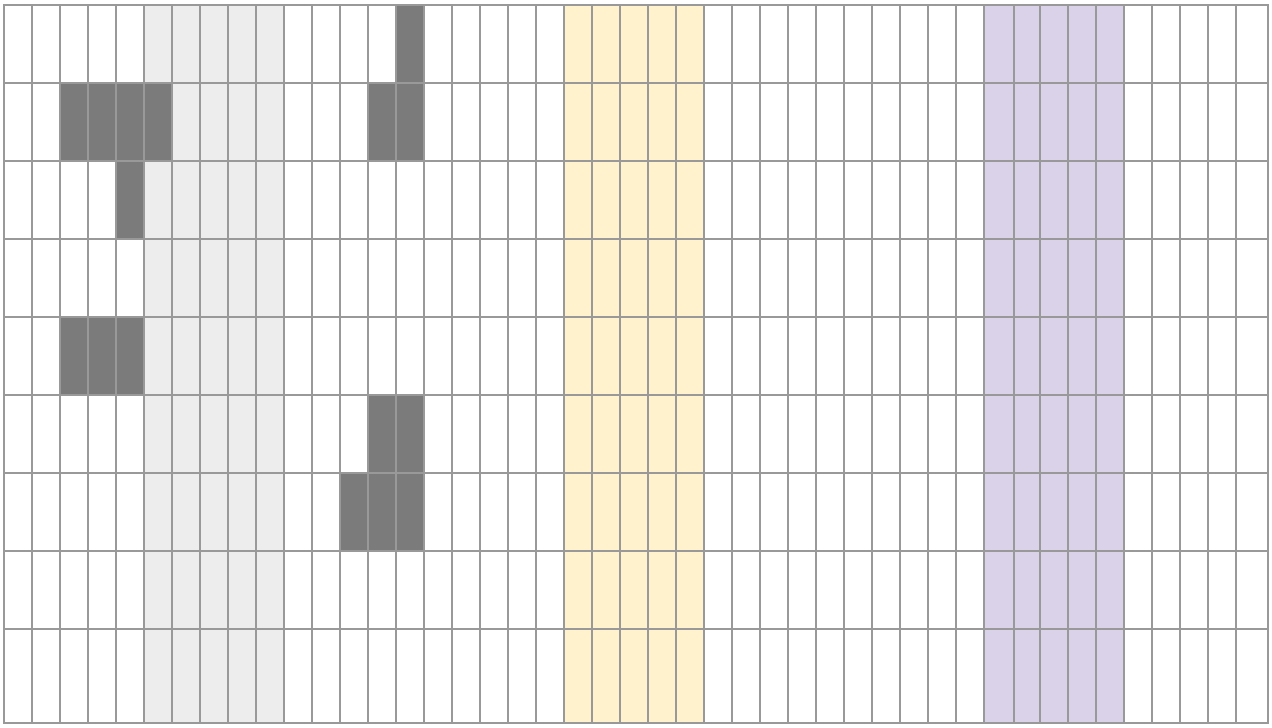

Figure F.1. Gantt Chart, Source: Author (Manimegalai Vaiyapuri)

Appendix G: Full Backlog

ID	Description	Expected Effort
	Design and implement database schema (Sprint 1)	
1	Design and implement user schema	13
2	Design and implement food organization schema	13
	Implement user registration (Sprint 2)	
3	Implement user authentication	8
4	Upon sign-up, prompt user for their name, email, location, preferred range, preferred food type	3
5	Save user's name, location, and additional information	5
6	Encrypt user data before sending it to server	13
	Implement food search (Sprints 3 & 4)	
7	Collect data about available food from local organizations	5
8	Store food data in database	5
9	Filter food locations based on user information	5
10	Determine which food locations best match the user's circumstances	8
11	Display food location matches	3
12	Display details of a food location	3
13	Implement search bar	8
14	Implement food search for non-registered users	8
	Subsequent Releases (Sprint 5 -)	

Figure G.1. Full Backlog, Source: Author (Manimegalai Vaiyapuri)