

Project Plan: Eden Fresh

Provided by Team Web Crawlers

Alexander Dung

Devarsh Patel

Justin Calma (Team Leader)

Kayla Chu

Sze Man Tang

Submission Date: December 15, 2021

1.Introduction

The project plan is a work breakdown structure with schedules related to Eden Fresh. The project plan is planning the process of defining project objectives, scope, goals, timing, milestones, deliverables, assigning tasks and resources for each step to get the work done for building Eden Fresh. For each task, details of the process will be provided, including schedule-timeline, specific dates, or explicit dates. A Gantt chart will be used to make the project plan clear and easy for all project holders to follow. It is a bar chart that provides a visual view of our project's tasks over time.

2. Scope

The project plan will be focusing on the project structure which will give team members opportunities to work on the project as the project plan has scheduled the timeline from start to end.

3.Objectives

To provide an online platform for urban growers and buyers to connect with each other, which allows growers to sell their products and receive profit, while giving convenience for buyers to purchase homegrown ingredients around their neighborhood.

4. Basic Requirements per Feature

Total Time durations: 01/ 31/ 2022 - 04/ 23/ 2022

Total Team Effort Estimate:

4.1 Account Creation:

Total Time durations: 01/ 24/ 2022 - 01/ 29/ 2022

Total Team Effort Estimate: 30 H

Development:

Time duration: 01/ 24/ 2022 - 01/ 28/ 2022

Effort Estimate: 24 H

- Signup (create account) UI/UX design page
- Signup framework structure takes valid characters. (coding)
- Signup database storage

Testing:

Time duration: 01/ 26/ 2022 - 01/ 29/ 2022

Effort Estimate: 6 H

Descriptions of testing:

- Success Cases
- Failure Cases

4.2 Account Deletion:

Total Time durations: 01/ 24/ 2022 - 01/ 29/ 2022

Total Team Effort Estimate: 20 H

Development:

Time duration: 01/ 24/ 2022 - 01/ 28/ 2022

Effort Estimate: 16 H

- Deletion UI/UX page
- Deletion function framework (coding)
- Deletion from database storage (vanish all data)

Testing:

Time duration: 01/ 26/ 2022 - 01/ 29/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Logging out successfully
- Logging out unsuccessfully which does not reroute to the login page
- Logging out unsuccessfully which doesn't save the users changes

4.3 User Management:

Total Time durations: 02/ 31/ 2022 - 02/ 05/ 2022

Total Team Effort Estimate: 20 H

Development:

Time duration: 01/ 31/ 2022 - 02/ 05/ 2022

Effort Estimate: 16 H

- User management design
- User management framework (coding)
- User management database

Testing:

Time duration: 02/ 02/ 2022 - 02/ 05/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Users can create account
- Users can make any change in information or preference settings.
- Users can delete account

4.4 Authentication:

Total Time durations: 01/ 31/ 2022 - 02/ 05/ 2022

Total Team Effort Estimate: 30 H

Development:

Time duration: 01/ 31/ 2022 - 02/ 04/ 2022

Effort Estimate: 26 H

- Authentication UI/UX page
- Authentication framework function (coding)

Testing:

Time duration: 02/ 02/ 2022 - 02/ 05/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Signing Up
- Logging In

4.5 Logout:

Total Time durations: 02/ 07/ 2022 - 02/ 12/ 2022

Total Team Effort Estimate: 20 H

Development:

Time duration: 02/ 07/ 2022 - 02/ 11/ 2022

Effort Estimate: 16 H

- Logout UI/UX page
- Logout function framework to take an action (coding)

Testing:

Time duration: 02/ 09/ 2022 - 02/ 12/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Logging out successfully.
- Logging out successfully which doesn't reroute to the login.
- Logging out successfully which doesn't save the users changes.

4.6 Authorization:

Total Time durations: 02/ 07/ 2022 - 02/ 12/ 2022

Total Team Effort Estimate: 30 H

Development:

Time duration: 02/ 07/ 2022 - 02/ 11/ 2022

Effort Estimate: 24 H

- UI/UX Protected info page (which show access or denied page)
- Authorization framework functions (coding)

Testing:

Time duration: 02/ 09/ 2022 - 02/ 12/ 2022

Effort Estimate: 6 H

Descriptions of testing:

- User 1 account checking
 - User 1 has limited feature access
- User 2 account checking
 - User 2 will have little more access compare to user 1
- User 3 account checking
 - User 3 will have little more access compare to user 2
- User 4 account checking
 - User 4 will have access to all features

4.7 Logging:

Total Time durations: 02/ 14/ 2022 - 02/ 19/ 2022

Total Team Effort Estimate: 25H

Development:

- Log UI/UX design page
- Log framework structure (coding)

Time duration: 02/ 14/ 2022 - 02/ 19/ 2022

Effort Estimate: 21 H

Testing:

Time duration: 02/ 16/ 2022- 02/ 19/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Checking user log status & timing (15 s)
- Checking if input match or rejected

4.8 Archiving:

Total Time durations: 02/ 14/ 2022 - 02/ 19/ 2022

Total Team Effort Estimate: 25 H

Development:

Time duration: 02/ 14/ 2022 - 02/ 18/ 2022

Effort Estimate: 20 H

- Giving access to external storage

Testing:

Time duration: 02/ 16/ 2022 - 02/ 19/ 2022

Effort Estimate: 5 H

Descriptions of testing:

- Checking user log status & timing
- Checking log entries older than 30 days
- Making sure that log entries are less than 30 days

4.9 Usage Analysis Dashboard:

Total Time durations: 04/ 18/ 2022 - 04/ 23/ 2022

Total Team Effort Estimate: 25 H

Development:

Time duration: 04/ 18/ 2022 - 04/ 23/ 2022

Effort Estimate: 21 H

- Charts needed for the KPI data
- Fetching data from persistent data store

Testing:

Time duration: 04/ 20/ 2022 - 02/ 23/ 2022

Effort Estimate: 4 H

Descriptions of testing:

- Checking if KPI data is automatically refreshed in intervals of 60 seconds
- The view must load within 15 seconds upon navigation

4.10 Set-up shop:

Total Time durations: 2/21/2022 - 2/26/2022

Total Team Effort Estimate: 29 H

Development:

Time duration: 2/21/2022 - 2/26/2022

Effort Estimate: 18 Hours

- Sellers are able to post their current products for sale and their preferred meetup location on their profiles
- Sellers are able to set the necessary information for each product, such as the current number of stock, price per pound or piece, images of the product, and a description of the product

Testing:

Time duration: 2/22/2022 - 2/26/2022

Effort Estimate: 11 Hours

Descriptions of testing:

- Post Current Products For Sale With All Product Information
- Delete a posted product
- Post preferred meet up location testing.

4.11 Reservation and Transaction:

Total Time durations: 2/28/2022 - 3/05/2022

Total Team Effort Estimate: 36 H

Development:

Time duration: 2/28/2022 - 3/05/2022

Effort Estimate: 22 Hours

- Buyers are able to reserve their desired product from a seller by selecting an amount from the current unreserved stock and sending a request to the seller.
- Buyers can also cancel a reservation at any time.
- Buyers can send a request to the seller to change the reserved amount to another non-zero amount within the unreserved stock count.

Testing:

Time duration: 2/29/2022 - 3/05/2022

Effort Estimate: 14 Hours

Descriptions of testing:

- Request a product reservation
- Accept or deny a product reservation request
- Cancel a product reservation
- Changed reserved amount
- view current state of transaction.

4.12 Request Fulfillment:

Total Time durations: 3/07/2022 - 3/12/2022

Total Team Effort Estimate: 33 H

Development:

Time duration: 3/07/2022 - 3/12/2022

Effort Estimate: 22 Hours

- Buyers are able to post a request for a specific amount of produce that is visible to all sellers.
- Sellers can leave a post on the buyer's request, with a price offer to fulfill their request.

Testing:

Time duration: 3/08/2022 - 3/12/2022

Effort Estimate: 11 Hours

Descriptions of testing:

- Post a product request fulfillment bid
- Reply to product request fulfillment bid
- Accept product request fulfillment bid
- View current state of transaction.

4.13 Miles Radius Search:

Total Time durations: 3/14/2022 - 3/19/2022

Total Team Effort Estimate: 18 H

Development:

Time duration: 3/14/ 2022 - 3/19/ 2022

Effort Estimate: 14 Hours

- Buyers will be able to search for ingredient listings within a specified distance of their choosing from a location they have set.

Testing:

Time duration: 3/15/ 2022 - 3/19/ 2022

Effort Estimate: 4 Hours

Descriptions of testing:

- Input search location
- Select miles radius search constraint

4.14 Cuisine filter:

Total Time durations: 3/14/ 2022 - 3/19/ 2022

Total Team Effort Estimate: 19 H

Development:

Time duration: 3/14/ 2022 - 3/19/ 2022

Effort Estimate: 14 Hours

- Users will be able to filter their search results using the predefined list of cuisines and further use on radius search for products.

Testing:

Time duration: 3/15/ 2022 - 3/19/ 2022

Effort Estimate: 5 Hours

Descriptions of testing:

- Select and apply predefined cuisine to filter results

4.15 Real-Time Notifications:

Total Time durations: 3/21/ 2022 - 3/26/ 2022

Total Team Effort Estimate: 36 H

Development:

Time duration: 3/21/ 2022 - 3/26/ 2022

Effort Estimate: 24 Hours

- Users can opt in or out to receive notifications of the updates of the product reservation or requests, direct messages, or any updates from the people they followed.
- Users can delete one or multiple notifications or set an auto clean-up every 6 months.

Testing:

Time duration: 3/22/ 2022 - 3/26/ 2022

Effort Estimate: 12 Hours

Descriptions of testing:

- Receive Notifications testing
- View Notifications testing
- Opt-in to receive notifications testing
- Opt to not receive notifications
- Deleting notifications

4.16 Transactions View:

Total Time durations: 3/21/ 2022 - 3/26/ 2022

Total Team Effort Estimate: 28 H

Development:

Time duration: 3/21/ 2022 - 3/26/ 2022

Effort Estimate: 20 Hours

- Users will be able to see a list of all accepted reservations and request fulfillment bids involving them, sorted chronologically, latest-first.
- Cancelled and completed transactions are also visible but can be removed by the user.

Testing:

Time duration: 3/22/ 2022 - 3/26/ 2022

Effort Estimate: 8 Hours

Descriptions of testing:

- View all product reservations and request fulfillment bids testing
- Edit product reservations and request fulfillment bids testing
- Open direct chat to other party

4.17 Meeting Point Directions:

Total Time durations: 3/28/2022 - 4/02/2022

Total Team Effort Estimate: 21 H

Development:

Time duration: 3/28/2022 - 4/02/2022

Effort Estimate: 16 Hours

- Once a buyer's reservation or request fulfillment bid is ready, they will have access to a map showing street directions from a location of their choosing to the seller's meetup location.
- Once the respective transaction either expires or is marked complete by the seller, the buyer will no longer have access to the seller's location or directions there.

Testing:

Time duration: 3/29/2022 - 4/02/2022

Effort Estimate: 5 Hours

Descriptions of testing:

- View street directions to the meeting point location testing
- Input origin location testing

4.18 Following Sellers:

Total Time durations: 4/03/2022 - 04/ 09/ 2022

Total Team Effort Estimate: 30 H

Development:

Time duration: 4/03/2022 - 04/ 09/ 2022

Effort Estimate: 24 Hours

- Users will be able to follow sellers, which adds them to a list of sellers they follow and lets them receive real-time notifications if the seller has restocked a product or posted a new product on their profile
- Users will be able to view their following list on their profile.

Testing:

Time duration: 4/04/2022 - 04/ 09/ 2022

Effort Estimate: 6 Hours

Descriptions of testing:

- Follow sellers testing
- Unfollow sellers testing
- View following list testing

4.19 Rating and Review:

Total Time durations: 4/11/2022 - 4/16/2022

Total Team Effort Estimate: 27 H

Development:

Time duration: 4/11/2022 - 4/16/2022

Effort Estimate: 20 Hours

- Buyers and sellers will be able to rate and review each other once a transaction between them has been completed or cancelled.

- Buyers and sellers are able to view all ratings and reviews that others have posted

Testing:

Time duration: 4/12/2022 - 4/16/2022

Effort Estimate: 7 Hours

Descriptions of testing:

- Review and rating from a 1-5 star scale testing
- View posted ratings and reviews

4.20 User Block Feature:

Total Time durations: 04/ 11/ 2022 - 04/ 16/ 2022

Total Team Effort Estimate: 26 H

Development:

Time duration: 04/ 11/ 2022 - 04/ 16/ 2022

Effort Estimate: 20 Hours

- All users can opt to block other users
- Users can view the list of users that they have blocked and they are able to unblock them

Testing:

Time duration: 04/ 12/ 2022 - 04/ 16/ 2022

Effort Estimate: 6 Hours

Descriptions of testing:

- Block Users testing
- Unblock users testing
- View block list testing

4.21 Chat Feature:

Total Time durations: 04/ 18/ 2022 - 04/ 23/ 2022

Total Team Effort Estimate: 24 H

Development:

Time duration: 04/ 18/ 2022 - 04/ 23/ 2022

Effort Estimate: 16 Hours

- All users can send a request to another user to open a chat between each other to ask questions that they may have regarding their stock and arrange a place to meet up.

Testing:

Time duration: 04/ 19/ 2022 - 04/ 23/ 2022

Effort Estimate: 9 Hours

Descriptions of testing:

- Send chat request testing
- Accept or decline a chat request testing
- Communicate with users using the chat testing

5.Risks and Risk Mitigation

1. Miss deadline: Work items or tasks that have been brought into the Sprint and have not been completed by the internal/external deadline.

- May delay the future Sprints.
- All work might be delayed, or even miss external deadlines at the end.

Risk level: High

Risk mitigation:

- Follow the Sprint planning of each task and always check the work.
- If a team member is blocked, ask for help or discuss with the team.

Mitigation threshold:

- Maximum 3 times per month per member - consider members might be blocked by different reasons

2. Insufficient skills or knowledge: Some tasks might require new skills or technologies to finish the work. Team members in charge might need to prepare for it.

- The project might be delayed due to members' lack of skills or knowledge.

Risk level: Medium

Risk mitigation:

- Plan to learn the skills or be skillful of the new technology before the planned sprint date starts, as it takes time for members to get better in the new tools or skills.

Mitigation threshold:

- 1 times per month - consider the team will prepare those tools before starting working on it.

3. Inefficient communication process: Team members have poor communication with other members or clients.

- Members who lose direction or don't know the project status may lead to misunderstanding and project delay.
- Lack of communication with clients may cause the project design doesn't meet the client's requirements.

Risk level: High

Risk mitigation:

- Members need to know the project's status and be involved in it by communicating with other team members and clients.
- Discuss with other members when it needs more information or guidance on the project.
- If there are any changes to the project, members need to inform and discuss with the whole team.
- Actively communicate with clients to get their expected requirements.

Mitigation threshold:

- 3 times per month - consider members might have different opinions.

4. Scope change: Changes are made to the project scope without any control procedure like change requests or authorization.

- It affects the project schedule, costs, resource allocation, or delays the Sprint planning.

Risk level: Medium

Risk mitigation:

- Actively engage with clients to get their expected requirements to make sure all features are included during planning status.
- Try to follow the initial plan during project execution status.

Mitigation threshold:

- 1 times per month - consider low possibility to have scope changes as we work based on sprint plan.

6.Role and Responsibilities

Alexander Dung(Scrum master):

- Ensure the team follows the processes that are agreed upon by the team.
- Ensuring all the necessary tech tools during web development.

Devarsh Patel(Member):

- Execute all assigned tasks

- Work in a team and follow all the sprint planning.

Justin Calma (Leader):

- Leading team members and monitoring progress towards goals.
- Making sure all the tasks are done for each Feature.

Kayla Chu(Member):

- Execute all assigned tasks
- Work in a team and follow all the sprint planning.

Sze Man Tang(Member):

- Execute all assigned tasks
- Work in a team and follow all the sprint planning.

7. Resources

Our team is planning to use free tools for developing the web application so it will be zero cost at this moment. For human resources, we're planning to break down each feature into smaller tasks and assign them to each member. Each member is responsible for the tasks that they were assigned. Details will be on the future sprint plan.

Tool	Cost
Visual Studio 2019 Community 16.11+	0
SQL Server Management Studio	0
FileZilla Client 3.55.1+	0
NuGet 5.11.0+	0
Google Chrome	0
Git 2.33.0+	0
GitHub	0
GitHub Desktop 2.9.4+	0
Typescript 4.4	0

C# 9.0	0
Angular 12.2.8, Vue.js 3.2.19, Vue.js 2.6.14, React 17.0.2	0
.NET 5.0.10	0
Konscious.Security.Cryptography.Argon2 1.2.1, BCrypt-Official 0.1.109, SimpleCrypto 0.3.30.26	0
SQL Server 2019 Express 15.0.2000.5	0
SignalR, WebSocket-Sharp 1.0.3-rc11, WebSocket.Client 4.3.38	0
Google Maps	0
Katalon Studio, Selenium, Watir, Cucumber, TestProject	0
Microsoft Azure(student: free for 12 months with \$100 credit)	0
Internet Information Services (IIS) 10.0	0
Total	0

8. Internal and External Deadlines

Total Time durations: 01/24/2022 - 05/ 07/ 2022

Total Team Effort Estimate: 428 Hours (Semester Estimate)

#	Functions	Features	Sprint	Start date	Test Due Date	End Date	Estimated Effort
1	User Management	Account creation	1	1/24/2022	1/28/2022	1/29/2022	30H
1	User	Account creation	1	1/26/2022	1/28/2022	1/29/2022	6H

	Management	Testing					
2	User Management	Account deletion	1	1/24/2022	1/28/2022	1/29/2022	20H
2	User Management	Account deletion Testing	1	1/26/2022	1/28/2022	1/29/2022	5H
3	User Management	User Management	2	1/31/2022	2/05/2022	2/05/2022	20H
3	User Management	User Management Testing	2	2/02/2022	2/05/2022	2/05/2022	5H
4	User Management	Authentication	2	1/31/2022	2/05/2022	2/05/2022	30H
4	User Management	Authentication Testing	2	2/02/2022	2/05/2022	2/05/2022	5H
5	User Management	Logout	3	2/7/2022	2/12/2022	2/12/2022	20H
5	User Management	Logout Testing	3	2/9/2022	2/12/2022	2/12/2022	5H
6	User Management	Authorization	3	2/07/2022	2/12/2022	2/12/2022	30H
6	User Management	Authorization Testing	3	2/09/2022	2/12/2022	2/12/2022	6H
7	System admin	Logging	4	2/14/2022	2/19/2022	2/19/2022	25H
7	System admin	Logging Testing	4	2/16/2022	2/19/2022	2/19/2022	5H
8	System admin	Archiving	4	2/14/2022	2/19/2022	2/19/2022	25H
8	System admin	Archiving Testing	4	2/16/2022	2/19/2022	2/19/2022	5H
9	Product Post	Set-up shop	5	2/21/2022	2/26/2022	2/26/2022	29H
9	Product Post	Set-up shop Testing	5	2/22/2022	2/26/2022	2/26/2022	11H
10	Product Post	Reservation and transaction	6	2/28/2022	3/05/2022	3/05/2022	36H
10	Product Post	Reservation and transaction testing	6	2/29/2022	3/05/2022	3/05/2022	14H
11	Product Post	Request fulfillment	7	3/07/2022	3/12/2022	3/12/2022	33H

11	Product Post	Request fulfilment Testing	7	3/08/2022	3/12/2022	3/12/2022	11H
12	Search	Miles radius search	8	3/14/2022	3/19/2022	3/19/2022	18H
12	Search	Miles radius search testing	8	3/15/2022	3/19/2022	3/19/2022	4H
13	Search	Cuisine filter	8	3/14/2022	3/19/2022	3/19/2022	19H
13	Search	Cuisine filter testing	8	3/15/2022	3/19/2022	3/19/2022	5H
14	Message	Real-Time Notifications	9	3/21/2022	3/26/2022	3/26/2022	36H
14	Message	Real-Time Notification	9	3/22/2022	3/26/2022	3/26/2022	12H
15	Transaction	Transaction view	9	3/21/2022	3/26/2022	3/26/2022	28H
15	Transaction	Transaction view Testing	9	3/22/2022	3/26/2022	3/26/2022	8H
16	Map	Meeting point directions	10	3/28/2022	4/02/2022	4/02/2022	21H
16	Map	Meeting point directions Testing	10	3/29/2022	4/02/2022	4/02/2022	5H
17	Profile	Following Sellers	11	4/03/2022	4/09/2022	4/09/2022	30H
17	Profile	Following Sellers Testing	11	4/04/2022	4/09/2022	4/09/2022	6H
18	Transaction	Rating and review	11	4/11/2022	4/16/2022	4/16/2022	25H
18	Transaction	Rating and review Testing	11	4/12/2022	4/16/2022	4/16/2022	7H
19	Settings	User block feature	12	4/11/2022	4/16/2022	4/16/2022	25H
19	Settings	User block feature Testing	12	4/12/2022	4/16/2022	4/16/2022	6H
20	Chat	Chat Feature	13	4/18/2022	4/23/2022	4/23/2022	25H
20	Chat	Chat Feature Testing	13	4/19/2022	4/23/2022	4/23/2022	9H
21	System admin	Usage analysis dashboard	13	4/18/2022	4/23/2022	4/23/2022	25H
22	Deployment	Web Application Deployment and Post-deploy debugging	14	4/25/2022	4/30/2022	4/30/2022	25H

9.Sprint Planning Dates Schedule

Sprint	Sprint Meeting Description	Sprint Meeting Date	Meeting Hours
0	General meeting	01/19/2022	1
1	Account creation and deletion	01/23/2022	1
2	User Management and Authentication	01/30/2022	1
3	Logout and Authorization	02/6/2022	1
4	Logging in and Archiving	02/13/2022	1
5	Set-up shop	02/20/2022	1
6	Reservation and Transaction	02/27/2022	1
7	Request fulfillment	03/06/2022	1
8	Miles radius search and Cuisine filter	03/13/2022	1
9	Real-Time Notification and Transaction View	03/20/2022	1
10	Meeting point direction	03/27/2022	1
11	Following Sellers	04/02/2022	1
12	Rating and Review and User block feature	04/10/2022	1
13	Chat Feature and Usage analysis dashboard	04/17/2022	1
14	Web Application Deployment	04/24/2022	1
14	Last Sprint Meeting	05/08/2022	1

EDEN FRESH: GANTT CHART

[illegible]

11. Roadmap

RoadMap						
2021						
AUG	SEP	OCT			NOV	DEC
Start Date		End Date	Start Date	End Date	Start Date	End Date
9/20/2021		10/6/2021	10/11/2021	10/27/2021	11/15/2021	12/1/2021
Phase1: Plan/Design			Phase2: Analysis/Design		Phase2: Design	
Task	Member	Task2	Member	Task3	Member	
BRD	Justin & Kayla	Project Plan	Devarsh & Sze	Low Level design	Not assign yet	
Technical Specifications	Alexander	Test Plan	Justin & Kayla	UM	Not assign yet	
High Level design	Devarsh	Network Diagram	Alexander	Logging	Not assign yet	
Sitemap	Sze					

Start Date:	1/24/2022					
End Date:	4/23/2022					
2022						
Jan	Feb					
Start Date	End Date	Start Date	End Date	Start Date		End Date
1/24/2022	1/29/2022	2/7/2022	2/12/2022	2/21/2022		3/12/2022
Phase1: Core requirement1		Phase2: Core requirement2		Phase3:Features1 (Produce Post)		
Task1	Task2	Task1	Task1	Task2	Task3	
Account creation		Logout		Set-up Shop		
	Account deletion				Reservation and Transaction	
						Request Fulfillment

MAR				APR			
Start Date		End Date	Start Date		End Date	Start Date	End Date
3/14/2022		3/26/2022	3/28/2022		4/16/2022	4/18/2022	4/23/2022
Phase4: Features2				Phase5: Features3		Phase6: Features4	
Task1	Task2	Task3	Task4	Task1	Task2	Task3	Task4
Miles Radius Search				Meeting Point Directions			Chat Feature
	Cuisine Filter				Following Sellers		
		Real-Time Notifications				Rating And Review	
			Transaction View			User Block Feature	