

# Software Requirements Specification

for

## Food Bank Distribution App

Version 1.0

Group No.: 15

| Student Name                          | Student ID |
|---------------------------------------|------------|
| Avinash Imanuel A/L Gana Raj Imanuel  | 1181103370 |
| Kishen Kumar A/L Sivalingam           | 1191101423 |
| Narvenesh A/L Gevaratnam              | 1181103203 |
| SHEIKH NAIMULLAH BIN SH MOHD AMINLLAH | 1201301338 |

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## Revisions

| Version | Primary Author(s) | Description of Version                    | Date Completed |
|---------|-------------------|---|----------------|
| 1.0     | All member        | Initial version of software requirements. | 17/09/2021     |

# 1 Project Introduction

## 1.1 Team Members

| Name                                  | Actor/Processes |
|---------------------------------------|-----------------|
| Avinash Imanuel A/L Gana Raj Imanuel  | Donor           |
| Kishen Kumar A/L Sivalingam           | Recipient       |
| Narvenesh A/L Gevaratnam              | Distributor     |
| Sheikh Naimullah Bin Sh Mohd Aminllah | Admin           |

## 1.2 Problem Statement

**1.2.1** As more financial difficulties arise, especially during the COVID-19 pandemic where many employers were forced to downsize their employees to keep their company afloat, which led to many people not having sufficient income to provide their family with even basic necessities, such as food. There have been many movements and campaigns in response to aid this problem, one of them is “Bendera Putih”, a campaign intended for those who are in need of help. People that are financially needy hang white flags in front of their houses, so those who pass by these houses can offer help, usually food. For better convenience, Food Banks are another form of aid for families who are unable to purchase food themselves by giving out mostly non-perishable food for free. Through community effort, more food banks were established to show support for the underprivileged members of the community. However, the increase in demand for foods has made most food banks become inefficient and difficult to manage.

The concerns related to inventory checking, locating nearest food banks, lack of volunteers etc paved the path to the development of MyFood, a Food Bank Distribution App that allows users to communicate instantly with those in need of help, updating them with urgent food requirements, looking out for volunteers and also sharing news of charity events.

## 1.3 Objectives

**1.3.1** To develop a Food Bank app that makes it seamless for those in need to receive food.

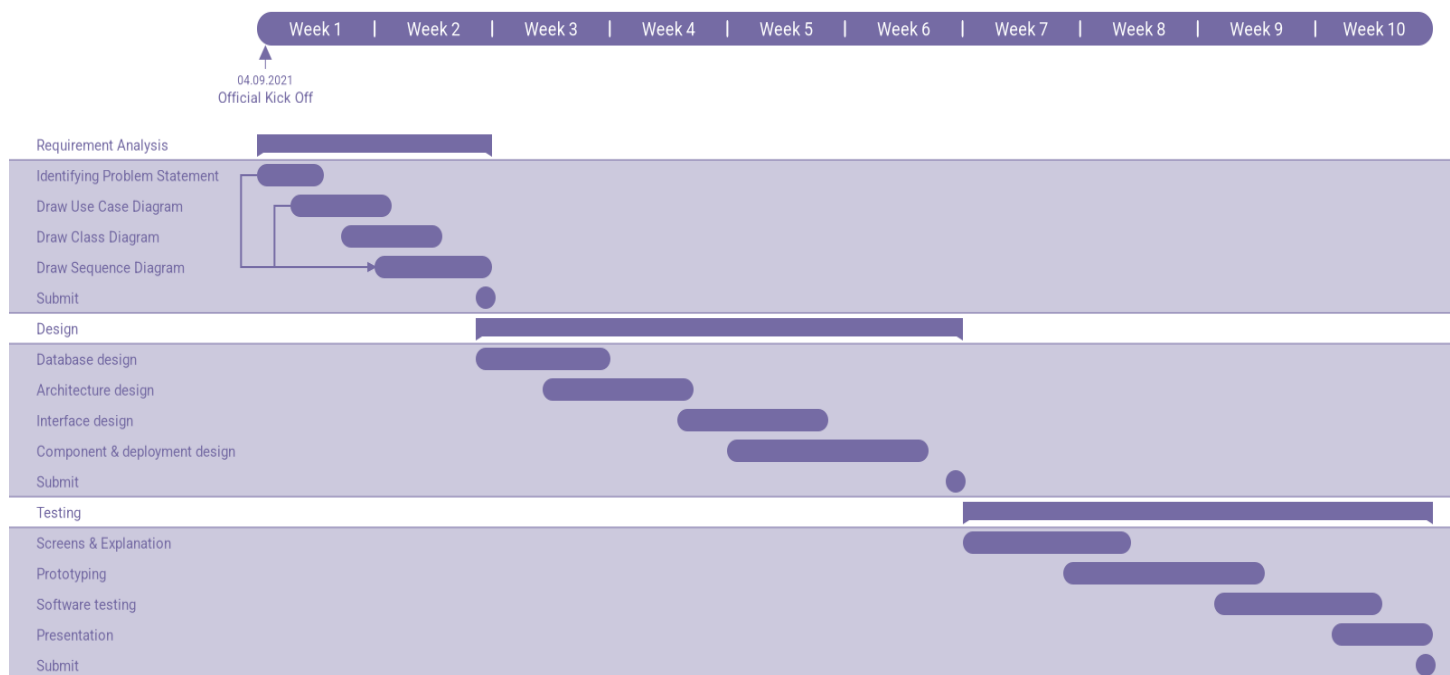
**1.3.2** To build a platform that encourages those who are willing to help others in need.

## 1.4 Project Plan

### 1.4.1 MyFood is a software application designed to improve the current inefficient food bank system.

We referred to the Waterfall model while developing this software as it emphasizes a logical progression of steps. The model helped ensure that a certain step was fulfilled before moving onto the next, which made everything much more easy and organized. The phases in this structure are communication, planning, modeling, construction, and deployment. Since this is a small scale project, implementing this structure made deliverables much easier to define from the start.

The software's main users are the Donor, Admin, Recipient and Distributor. The roles vary among users.



## 2 System Overview

### 2.1 Description

#### **Donor**

The system will allow the donor to login by keying in the donorID and password. If the login information matches, the donor is shown the home page and certain features which they can choose to access. If a profile is selected, the donor can check information related to the donor and choose to edit them. Moreover, by selecting the donate feature, the donor can donate food or money to the respective food bank directly from the home page. Also, if the donor decides to see the donations they made to the respective food bank they can choose the view history function. Furthermore, the donor can check for foods that are urgently needed through the view food low on stock feature. Find food bank location feature, allows donors to locate the nearest food bank.

#### **Admin**

Admin need to login with their AdminID and password in order to access the system with high privileges. Upon login, admin users are present into a main menu page to navigate said privileges. Privileges included in this system are adding, deleting, editing and finding the following data: Users (such as donor, recipients, and distributor), food bank database or reports (fields included are food category, distribution location, and amount), distribution location, and food categories. To control the above data is through their own respected pages with a simple user interface.

#### **Recipient**

The system will allow the recipient to login by entering the username and password. After login success, the recipient will have access to certain features which can be displayed in the home page of the app. One of them is viewing the profile in order to check his/her personal details which will be shown in a personal detail form. Then, the recipient also has the option to edit the profile if he/she desires to correct inaccurate profile details. Not only that, the recipient also can view all the foods and the information regarding it which are available at the specific period of time. After seeing all the food details, the recipient is able to reserve the food which he/she wants to eat. If the recipient does not want the food that he/she reserved, he/she can cancel the reservation. Furthermore, additional features were built up for the recipient such as 'community feed' function where the recipient will be notified regularly with the food waste, sharing tips and more and also the 'contact us' feature where the recipient is able to get help from the administration department of the app by receiving replies for the inquiry messages that the recipient sent.

#### **Distributor**

Distributors have to login with their riderID and password in order to access the application. If the login information matches, the distributor is shown the homepage and certain features which they can choose to access. When a profile is selected, the distributor can review and modify information about the distributor. Search for nearby food bank locations feature, allows the distributor to locate the nearest foodbank. After this process, the system will notify the distributor on the nearest food

bank location. The distributor can access the check status of reserved food feature to identify the availability, type and quantity of food they are assigned to deliver. The distributor can then proceed to accept the delivery by selecting the pick up food feature. During the delivery process, the distributor can check the status of their delivery by selecting the view delivery status option. After the food has been successfully delivered to the recipient, the distributor has to select the drop off food function to complete their delivery task.

|                               |
|-------------------------------|
| Check status of reserved food |
| Pick up food                  |
| View delivery status          |
| Drop-off food                 |

## 2.2 Actors

| Actor     | Use Cases                 |
|-----------|---------------------------|
| DONOR     | View profile              |
|           | Edit profile              |
|           | Donate food               |
|           | Donate money              |
|           | View history of donations |
|           | View foods low on stock   |
|           | Find food bank locations  |
|           | Sign Up / Log In          |
| RECIPIENT | Sign Up                   |
|           | Login                     |
|           | View Profile              |

|  |                            |
|--|----------------------------|
|  | Edit Profile               |
|  | View Food Menu             |
|  | Reserve food               |
|  | Cancel Reservation of Food |
|  | View Community Feed        |
|  | Acquire Assistance         |

|             |                                      |
|-------------|--------------------------------------|
| DISTRIBUTOR | Sign up as rider                     |
|             | Login                                |
|             | Edit profile                         |
|             | View profile                         |
|             | Search for nearby foodbank locations |
|             | Check status of reserved food        |
|             | Pick up food                         |
|             | View delivery status                 |
|             | Drop-off food                        |
| ADMIN       | Login                                |
|             | Add Users                            |
|             | Add Food bank report                 |
|             | Add Distribution locations           |
|             | Add Food Categories                  |
|             | Delete Users                         |
|             | Delete Food bank report              |
|             | Delete Distribution locations        |

|  |                             |
|--|-----------------------------|
|  | Delete Food Categories      |
|  | Edit Users                  |
|  | Edit Food bank report       |
|  | Edit Distribution locations |
|  | Edit Food Categories        |
|  | Find Users                  |
|  | Find Food bank report       |
|  | Find Distribution locations |
|  | Find Food Categories        |

## 2.3 Use Case Diagram

<TO DO: Place the use case diagram here.>

### 2.3.1 Donor Use Case Diagram



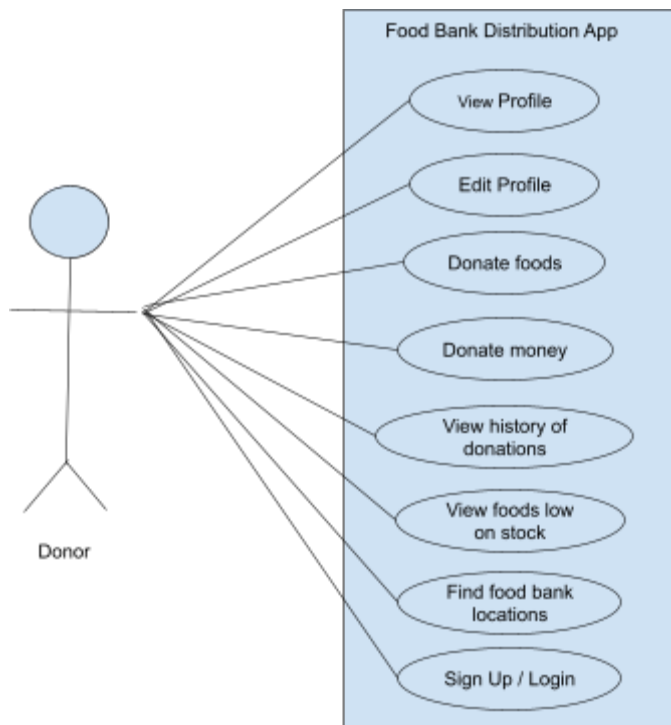


Figure 1.0 Donor Use Case Diagram

### 2.3.2 Admin Use Case Diagram

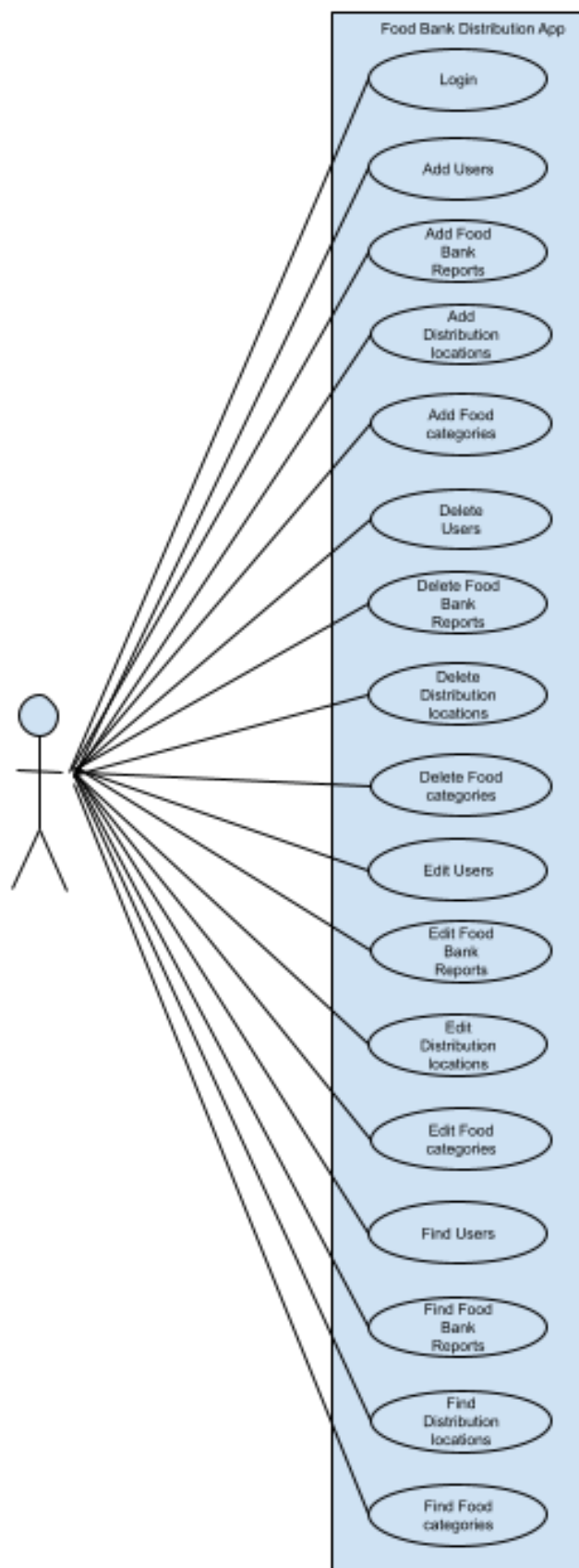


Figure 1.1 Admin Use Case Diagram

### 2.3.3 Recipient Use Case Diagram

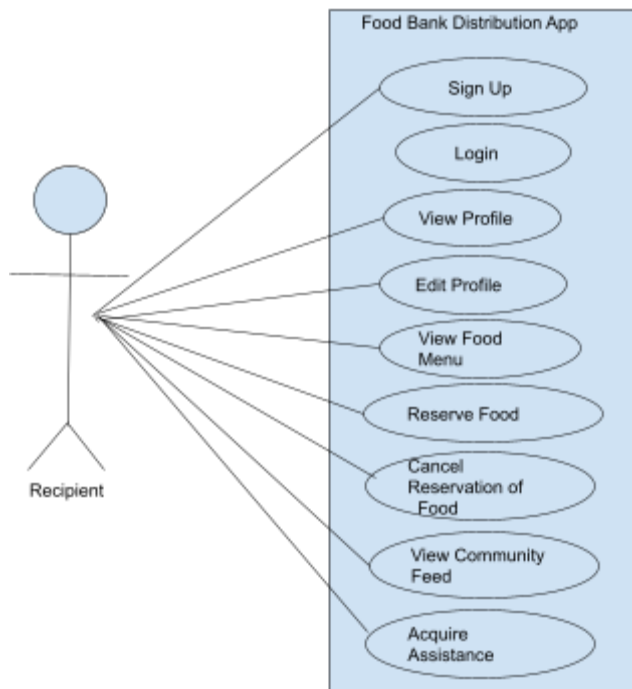


Figure 1.2 Recipient Use Case Diagram

### 2.3.4 Distributor Use Case Diagram

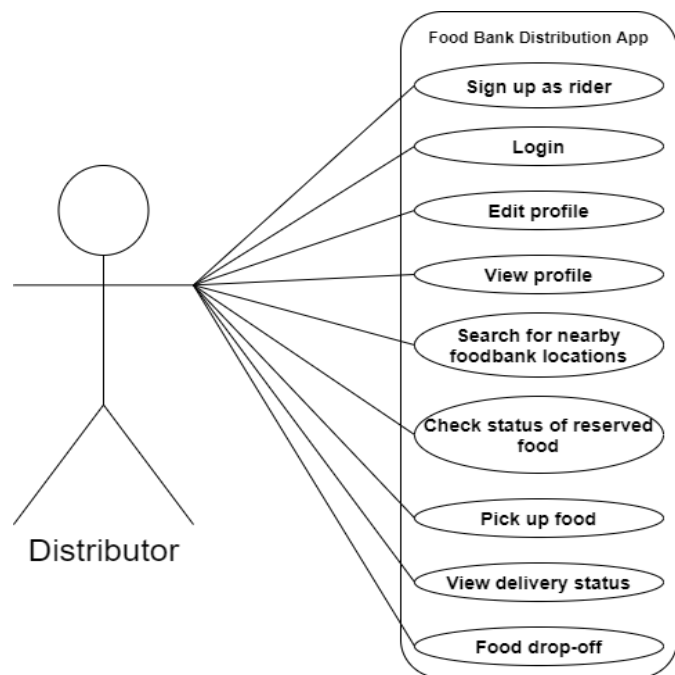


Figure 1.3 Distributor Use Case Diagram

## 3 Basic Requirements

### 3.1 Donor

#### 3.1.1 Sign Up / Login

This use case allows the donor to access the app, which they will be prompted with the Sign Up / Login screen where they are required to either register if they don't have an account or login if they do with their donorID and password. If the login credentials match, the system displays the home page by which the donor is able to access the relevant functions according to the donor's role.

#### 3.1.2 View profile

*This use case allows donors to view their profile. The data is retrieved from the database and displayed to the donor. The data consists of their unique donorID, Full name, Email, Password and Mobile number, Location.*

### **3.1.3 Edit profile**

*This use case allows donors to edit their profile. The data is retrieved from the database for viewing and will be updated if the donor decides to change any information listed on his profile. The information that can be edited are the unique donorID, Full name, Email, Password and Mobile number, Location.*

### **3.1.4 Donate foods**

*This use case allows donors to donate food to the Food Bank. The donor is prompted a screen to select between different types of non-perishable foods and their quantity that they wish to donate. The amount of foods donated will be updated in the Menu database.*

### **3.1.5 Donate money**

*This use case allows donors to donate money to the Food Bank's fund. The donor is prompted a screen to select between different presetted amounts or an amount of their preference to donate. The amount of donation will be updated in the Food Bank funds collection.*

### **3.1.6 View history of donations**

*This use case allows donors to view their history of donations made. The system retrieves the donations made by the donor from the database and displays all past donations made by the donor. This can help them keep track of how much donations they have made.*

### **3.1.7 View foods low on stock**

*This use case allows donors to view foods that are low on supply. The food supply data is retrieved from the database and displayed to the donor. This allows donors to see which items are urgently in need.*

### **3.1.8 Find food bank locations**

*This use case allows donors to find other Food Bank locations that may be in their area of reach by comparing between the donor's and food bank's state.*

## **3.2 Admin**

### **3.2.1 Login**

*Login use case allow the admin of the website to access the website's admin controls. Admin accounts are pre-registered through the database itself by authorized back-end users only. This makes sure that only the owner of the website or any other users who are given the permission to access these controls. Login credentials are the admins's ID and password. If input is matched, Admins are prompted into the webpage's basic main menu.*

### **3.2.2 Add Users**

*This use case allows the admins to add users such as donor, recipient and distributor. Despite these users being able to sign up or register through another page this add users use case might be needed if in some circumstances reported that their accounts are deleted, or forgot their password provided with verification that these circumstances happen.*

### **3.2.3 Add Food Bank report**

*This use case gives the admins the ability to add food bank reports manually if there is need to. Report contains food category, distribution location, and amount.*

### **3.2.4 Add Distribution Locations**

*This use case gives admins to add distribution location if there is a new established location for the food bank.*

### **3.2.5 Add Food Categories**

*This use case allows admins to add new categories of food into the database which the Food Bank needed to refer to.*

### **3.2.6 Delete Users**

*This use case allows the admins to delete any users due to specific reasons such as request for deletion, users that break apps policies and terms of service.*

### **3.2.7 Delete Food Bank report**

*This use case gives the admins the ability to delete food bank reports manually if there is an error.*

### **3.2.8 Delete Distribution Locations**

*This use case gives admins to delete distribution locations if needed.*

### **3.2.9 Delete Food Categories**

*This use case allows admins to delete a category of food into the database.*

### **3.2.10 Edit Users**

*This use case allows the admins to edit any users for correction purposes if there is need to.*

### **3.2.11 Edit Food Bank report**

*This use case gives the admins the ability to edit food bank reports manually if there is a need for correction.*

### **3.2.12 Edit Distribution Locations**

*This use case gives admins to edit distribution locations if needed.*

### **3.2.13 Edit Food Categories**

*This use case allows admins to edit a category of food into the database.*

### **3.2.14 Find Users**

*This use case allows the admins to find any users by using certain keywords such as ID or name to make it easier to search a specific user.*

### **3.2.15 Find Food Bank report**

*This use case gives the admins the ability to find food bank reports by using keywords from the database.*

### **3.2.16 Find Distribution Locations**

*This use case allows admins to find distribution locations by using keywords from the database.*

### **3.2.17 Find Food Categories**

*This use case allows admins to find a category of food into the database by using keywords from the database.*

## **3.3 Recipient**

### **5.3.1 Sign Up / Log In**

*For the Login Use Case, it starts when a recipient wishes to log into the Foodbank Distribution Application System. The system requests that the recipient enter his/her username and password. Then, the recipient enters his/her username and password. The system will retrieve data from the recipient database and compare the username and password. If the information provided is correct, The system will validate the entered username and password and log the recipient into the system.*

However, if the recipient enters an invalid username and/or password, the system displays an error message. The recipient can choose to either return to the login system or cancel the login, at which point this use case ends.

For the Sign Up Use Case, it starts when a recipient accesses the system feature that enables him/her to create an account by entering information that is maintained in the Recipient's account database. The Recipient enters the required Recipient Account information values and requests that the system saves the entered values. The system validates the entered Recipient Account information. The values for the Recipient Account information are stored in the Recipient's account database. The system notifies the Recipient that the account has been created. However, if during Sign Up Account, the system determines that the Recipient entered invalid Recipient Account information, The system describes which entered data was invalid and presents the Recipient with suggestions for entering valid data. The system prompts the recipient to re-enter the valid information. The recipient re-enters the information and the system re-validates it. If valid information is entered, the Recipient Account Information is stored into the recipient's database. If invalid information is entered, the Entered Information is Invalid and this process will be executed again. This continues until the recipient enters valid information.

### **5.3.2 View Profile**

This Use Case starts when the recipient selects the view profile function to view their personal details which consist of Username, First name, Last name, Birth Date, Gender, Nationality, Email, Password, Mobile number, and Home Address. System will retrieve data from the recipient database and display the data in the personal detail form.

### **5.3.3 Edit Profile**

This use case occurs when a recipient wishes to change his/her profile information. Recipient can enter new personal details and select the save button to update. System will prompt a confirmation message, and the recipient can either select yes or no. If yes ,then the system will check the entered details which cannot be an empty value or wrong input format. If no, then the system will go back to the edit state. After checking, if there is no input error, then the system will update the record in the recipient database.

### **5.3.4 View Food Menu**

This use case occurs when a recipient is able to view all the food that they offer and that is available for deliveries. This process also shows all of the food information related transactions such as the food name, foodbank location, Date, Range of time for the food delivery, Count of the food reservations and the remaining available for reservation.



### 5.3.5 Reserve food

*This use case describes that a recipient is able to reserve food from all the food that is available at the specific period of time. This can be done when a recipient selects one or more food items from the available food menu. Then, System displays Foodbank Location, Food Name, Quantity, Date and range of time for the food delivery. After viewing all the information regarding the food, the recipient is able to reserve the food. After that, System stores the reservation of food in the recipient's database and sends food item information to the specific Food Bank Inventory System. A confirmation regarding the reserved food details will be displayed. If the recipient enters a wrong reservation of food, he/she will have the go back to the food menu screen.*

### 5.3.6 Cancel Reservation of Food

*This use case allows the recipient to cancel back the reservation if the recipient does not want the food. A recipient firstly chooses the record that needs to be cancelled. Then, the recipient can click the cancel reservation button and a confirmation dialog box will be shown. If the recipient confirms to cancel the reservation, he/she can click the yes button. This makes the system to delete the food information that has been reserved in the database and the specific Food Bank Inventory System also will be updated regarding this matter and a confirmation message will be displayed. If the recipient does not want to make the changes, he/she can click the no button to cancel the process.*

### 5.3.7 View Community Feed

*This use case is mainly applied to the community of users in the app. There are two sections such as community and news. For the section of the community, it is the daily announcement about food waste, sharing tips and more. Then, we can get news and information about food from Section news.*

### 5.3.8 Acquire Assistance

*This use case is often the go-to for a new recipient on a mission. It's where they go when they have a question and truly want to speak to an individual at the organization. They exist to serve the recipient with the purpose of providing the recipient with information on how they can get in touch with him/her in order to answer his/her questions. The goal of this use case is to convert by clearly and effectively presenting the method(s) of getting in touch with the food bank organization as quickly as possible. This use case can be fulfilled when the recipient fills in the details such as subject and message and submit it. Contact details of the recipient that he/she provides during registration will be attached automatically when he/she submit the message so that the individual at the organization can contact the recipient through it. Confirmation message regarding the submission of the message will be displayed.*

## **3.4 Distributor**

### **3.4.1 Sign up as rider**

*This use case allows distributors to access the app as riders in which then they will be brought about with the Sign up screen where they are required to register if they don't have an account.*

### **3.4.2 Login**

*This use case allows the distributor to access the app which then will be led to the Login screen where they're required to login if they do have their riderID and password. If the login credentials are correct, the system displays the home page by which the distributor is able to access the relevant functions according to the distributor's role.*

### **3.4.3 Edit profile**

*This use case allows distributors to edit their profile. The data retrieved from the database for viewing and will be updated if the distributor decides to change any information listed on his/her profile. The information that can be edited are the unique riderID, Full name, Email, Password, Mobile number and Location.*

### **3.4.4 View profile**

*This use case allows distributors to view their profile. The data is retrieved from the database and displayed to the distributor. The data consists of their unique riderID, Full name, Email, Password, Mobile number and Location.*

### **3.4.5 Search for nearby foodbank locations**

*This use case allows distributors to search for nearby foodbank locations by comparing between the distributor's and foodbank's location. The system then will request the distributor to turn on their GPS function on their mobile device as this is required to locate the nearest foodbank. After the system has successfully located a foodbank, it will then give the distributor the option whether to accept or reject the delivery after the distributor has checked the status of the reserved food. During this option, There will be an estimated time of delivery where the system accepts the data received from the GPS locations of the distributor and recipient. Then, the system will calculate the estimated time to deliver the food to the recipient based on their locations.*

### **3.4.6 Check status of reserved food**

*This use case allows distributors to check the status of the reserved food that is available at the specific foodbank location and period of time. The system displays Foodbank Location, Recipient Location, Food Name, Quantity, and estimated time of food delivery.*

### 3.4.7 Pick up food

*This use case allows distributors to confirm to the system that they have picked up the food from the specified foodbank location and will proceed to the delivery.*

### 3.4.8 View delivery status

*This use case allows the distributor to view their delivery status. The system will track the distributor's and recipient's location and update the delivery status from time to time to revise the estimated delivery time.*

### 3.4.9 Food drop-off

*This use case allows the distributor to confirm to the system the completion of their delivery after they have successfully delivered their food to the recipient's location.*

## 4 Specific Requirements

### 4.1 Class Diagrams / ERD

*<TO DO: Describe the classes and place the class diagram.>*

#### **User class**

*User class is used for login of the users, verifying login of the users, signing up of the users, verifying sign up of the users, acquiring assistance from the administration of the app, viewing community feed, alert notifications, and viewing delivery status of foods.*

#### **Donor class**

*Donor class is able to display profile, update profile, get Transaction, add transaction, get food, add food, view food low on stock, find food bank and view donation*

#### **Food Bank class**

*Food bank class is able to get the name of the foodbank, add the donor's money donation and donor's food donation.*

#### **Admin class**

*Admin class is able to manipulate the database by adding, editing, deleting and finding data of the following database; Users, Distribution Location, Food Bank Reports and Food Categories.*

**Recipient class**

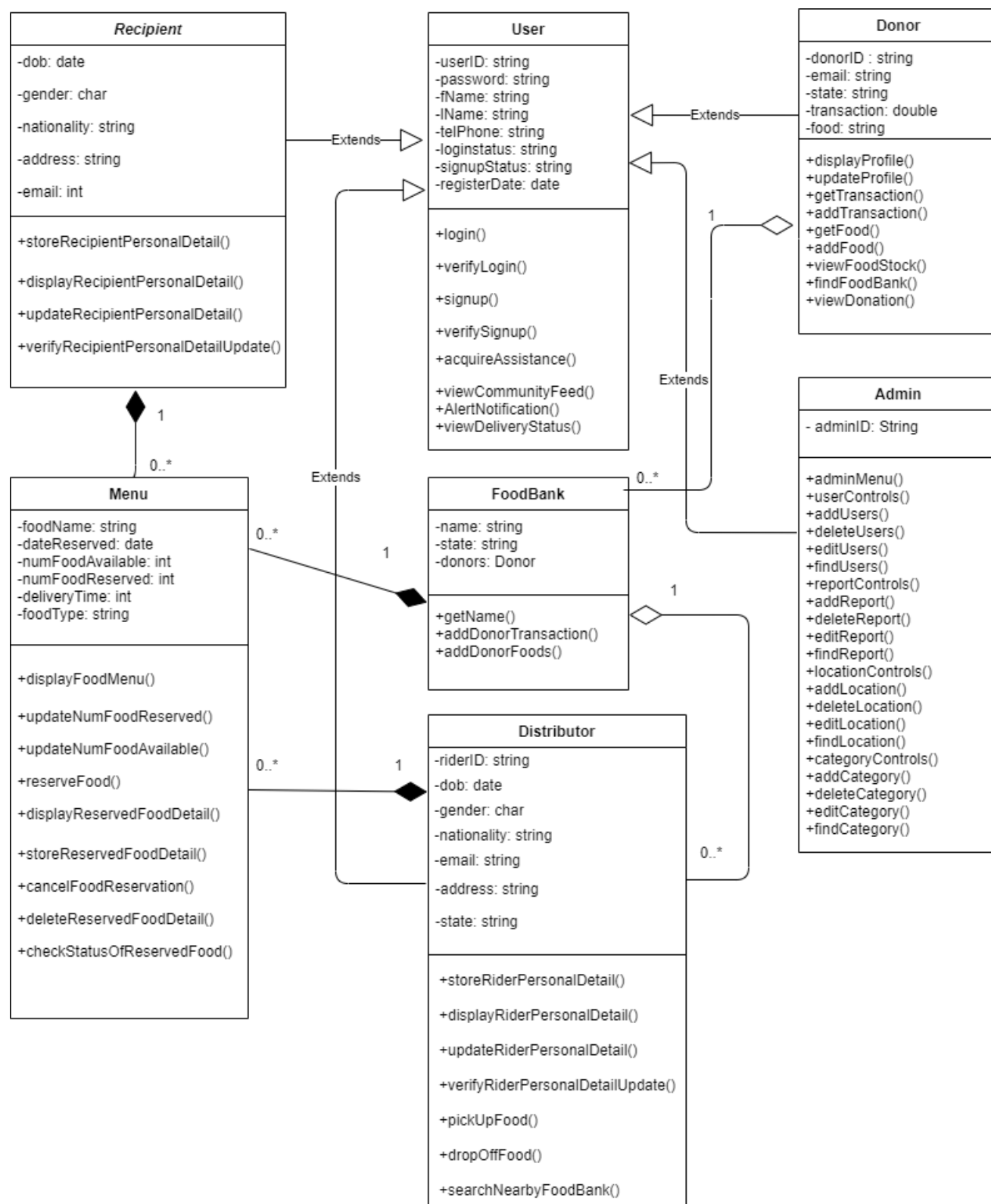
*Recipient class is used for storing, displaying, updating and verifying the recipient's personal information.*

**Food Menu class**

*Food Menu class is used for displaying the food menu, updating number of reserved and available foods, reserving foods, displaying, storing and deleting reserved foods' details, canceling the food reservation and checking the status of reserved foods.*

**Distributor class**

*Distributor class is able to search nearby foodbanks, pick up food, drop off food. Furthermore, it can also store, display and update the distributor's personal information hence verify the update.*



## **4.2 Sequence Diagrams**

### **4.2.1 Donor**

#### **4.2.1.1 Sign Up / Login**

- 1. The donor enters the required donor account information values and requests that the system saves the entered values.*
- 2. The system validates the entered donor account information.*
- 3. The values for the donor account information are stored in the Donor database.*
- 4. The system notifies the donor that the account has been created.*
- 5. If the system determines that the donor entered invalid donor account information, an error message will be displayed and the system will prompt the donor to re-enter the valid information.*
- 6. The system requests the donor to enter their donorID and password.*
- 7. The donor will enter their donorID and password into the system.*
- 8. The system will retrieve data from the donor database and compare the donorID and password.*
- 9. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.*

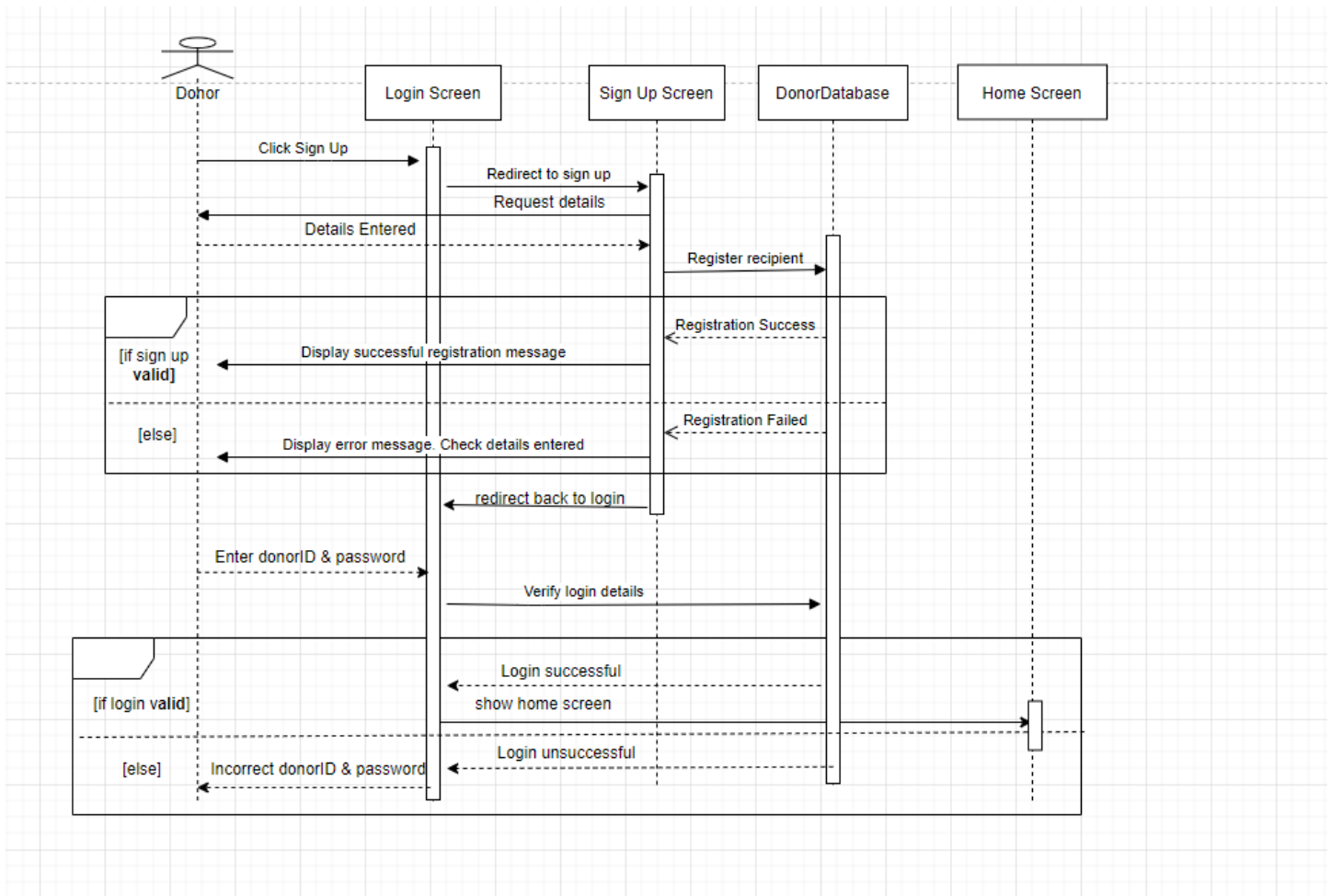


Figure 1.1a Donor's 'Sign Up / Login' sequence diagram

#### 4.2.1.2 View Profile

1. The system requests the donor to enter their donorID and password.
2. The donor will enter their donorID and password into the system.
3. The system will retrieve data from the donor database and compare the donorID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The donor selects the 'View Profile' page to view their personal details.
6. System will retrieve data from the donor database and display the data in the personal detail form.

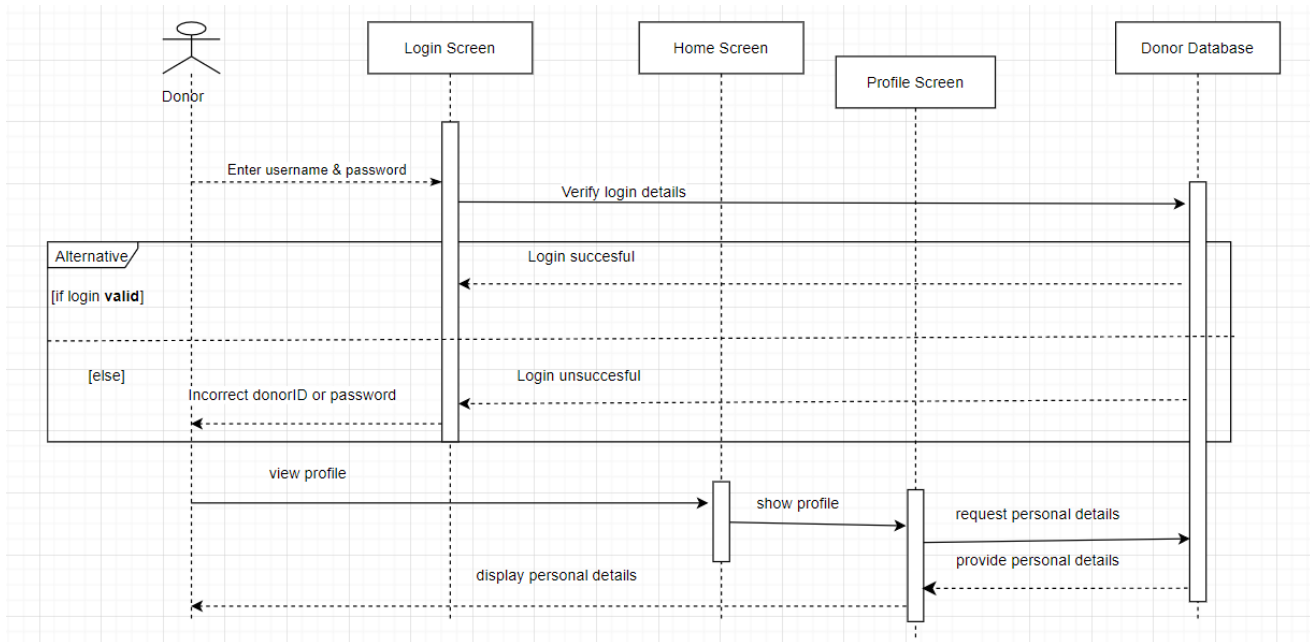


Figure 1.1b Donor's "View Profile" sequence diagram

#### 4.2.1.3 Edit Profile

1. The system requests the donor to enter their donorID and password.
2. The donor will enter their donorID and password into the system.
3. The system will retrieve data from the donor database and compare the donorID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The donor selects the "View Profile" page to view their personal details.
6. System will retrieve data from the donor database and display the data in the personal detail form.
7. The donor later selects the 'Edit Profile' feature to update their personal details.



8. The donor can edit their personal details and select the save button once they're done to update their information.

9. System will prompt a confirmation message, and the donor can either select yes or no.

10. If the donor chooses yes ,the system confirms and updates the information in the donor's database. If the donor chooses no, then the system will go back to the edit profile state.

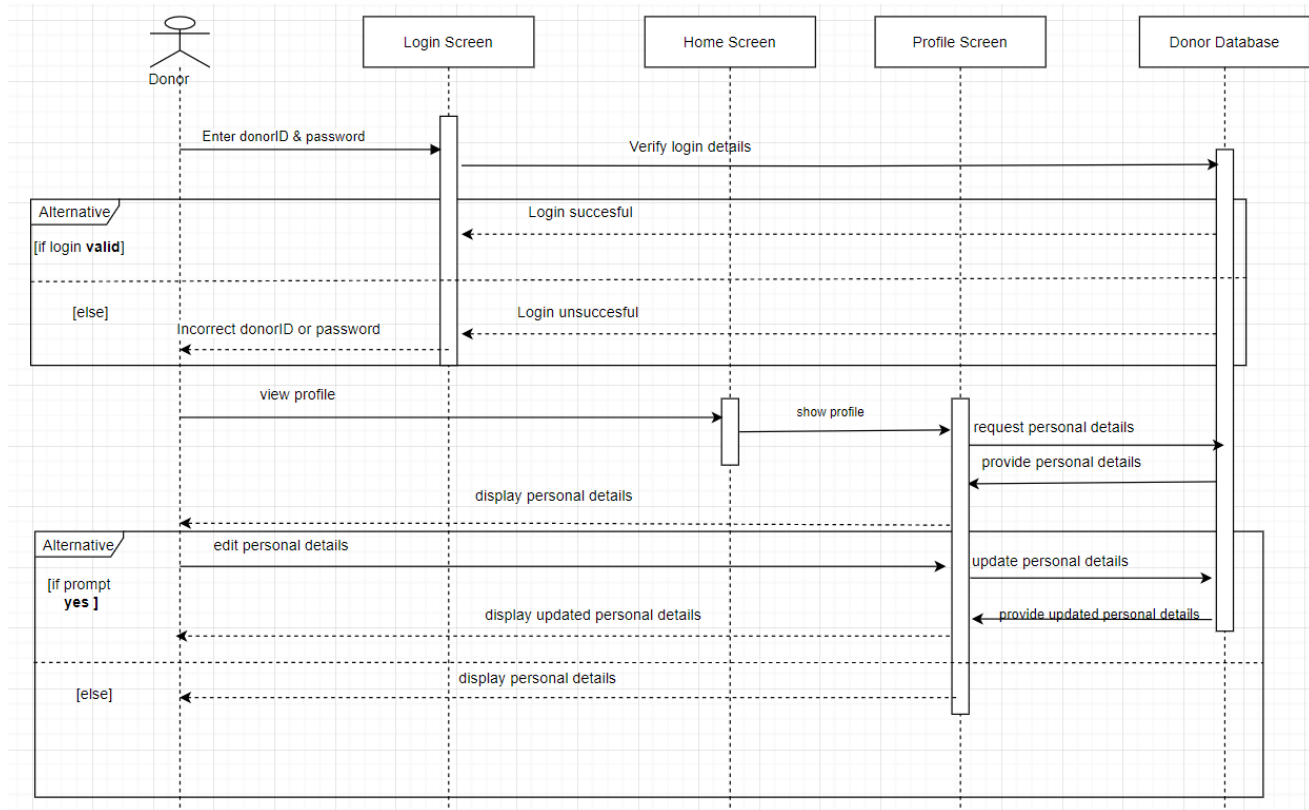


Figure 1.1c Donor's "Edit Profile" sequence diagram

#### 4.2.1.4 Donate Food

1. The system requests the donor to enter their donorID and password.

2. The donor will enter their donorID and password into the system.

3. The system will retrieve data from the donor database and compare the donorID and password.

4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.

5. The donor selects the "View Donation" page.

6. The donor selects the “Donate Food” feature to donate food to the food bank.
7. System will request food types from the Food Bank. The Food Bank sends the request to the Menu Database to retrieve the food types.
8. The Food Bank receives the food types and displays the types of food that are donatable.
9. The donor has an option to choose the type and amount of food they want to donate to the food bank.
10. System will prompt a confirmation message, and the donor can either select yes or no to proceed with the donation.
11. If the donor chooses yes, the system adds the food donated to the Food Bank as well as into the Menu Database and in return prompts a message saying “Donation Successful” while displaying the food donated. If the donor chooses no, then the system remains at the donation screen.

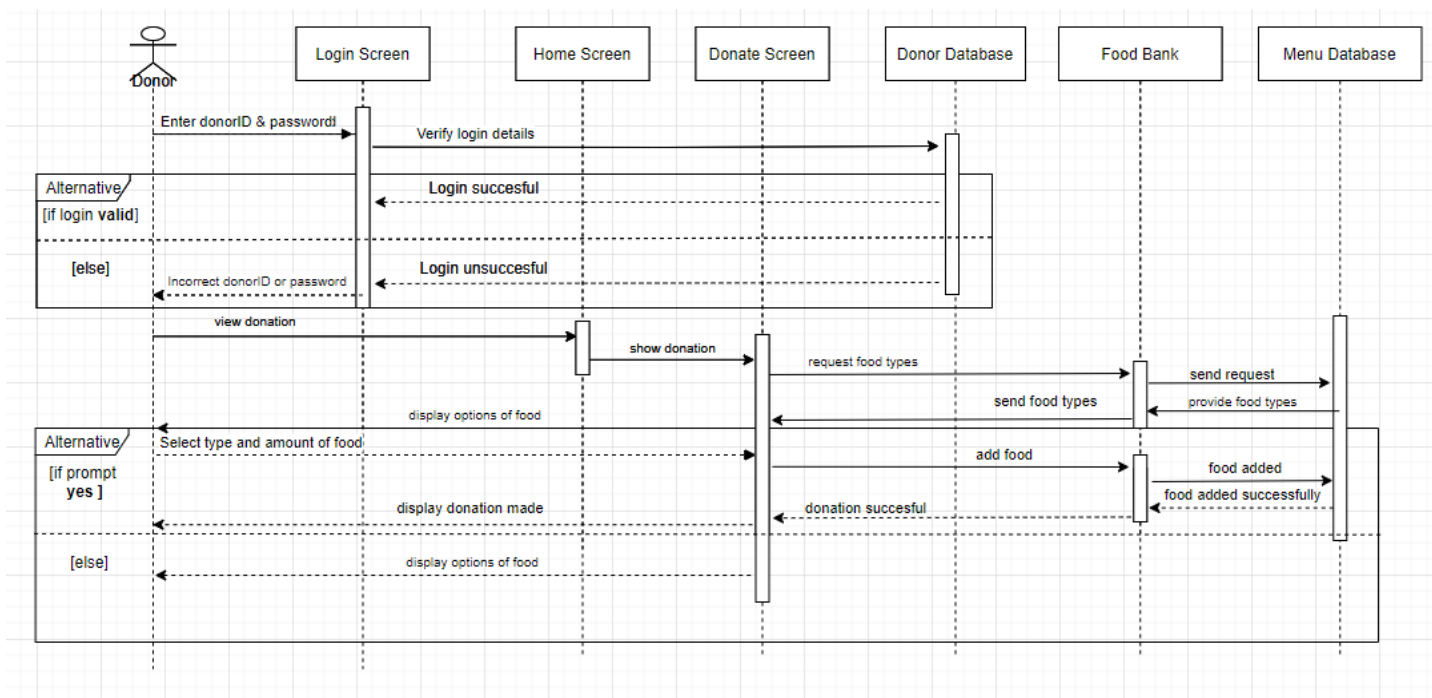


Figure 1.1d Donor's “Donate Food” sequence diagram

#### 4.2.1.5 Donate Money

1. The system requests the donor to enter their donorID and password.

- 2. The donor will enter their donorID and password into the system.*
- 3. The system will retrieve data from the donor database and compare the donorID and password.*
- 4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.*
- 5. The donor selects the “View Donation” page.*
- 6. The donor selects the “Donate Money” feature to donate money to the food bank.*
- 7. The donor has an option to choose from the preset amount displayed by the system or to pay an amount of their choice.*
- 8. Once the amount is selected, the system will prompt a confirmation message, and the donor can either select yes or no to proceed with the transaction.*
- 9. The entered amount is later added to the Food Bank’s funds collection.*
- 10. System will prompt a message saying “ Transaction successful” while displaying the amount of donation made.*

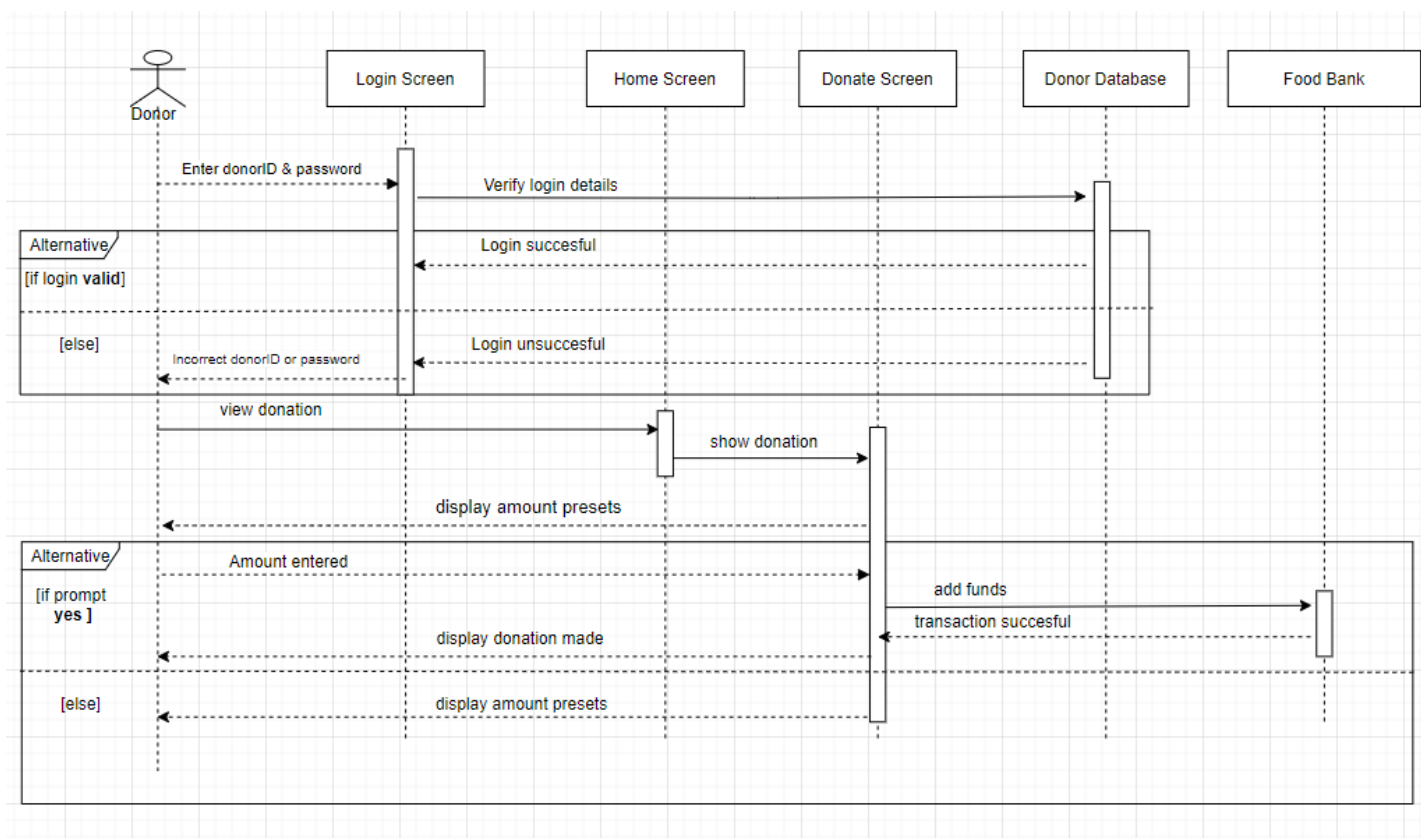


Figure 1.1e Donor's "Donate Money" sequence diagram

#### 4.2.1.6 View History of Donations

1. The system requests the donor to enter their donorID and password.
2. The donor will enter their donorID and password into the system.
3. The system will retrieve data from the donor database and compare the donorID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The donor selects the "View Donation" page.
6. System requests the history of donations made from the Food Bank.
7. Food Bank provides the information, and is displayed for the user in the Donate Screen.

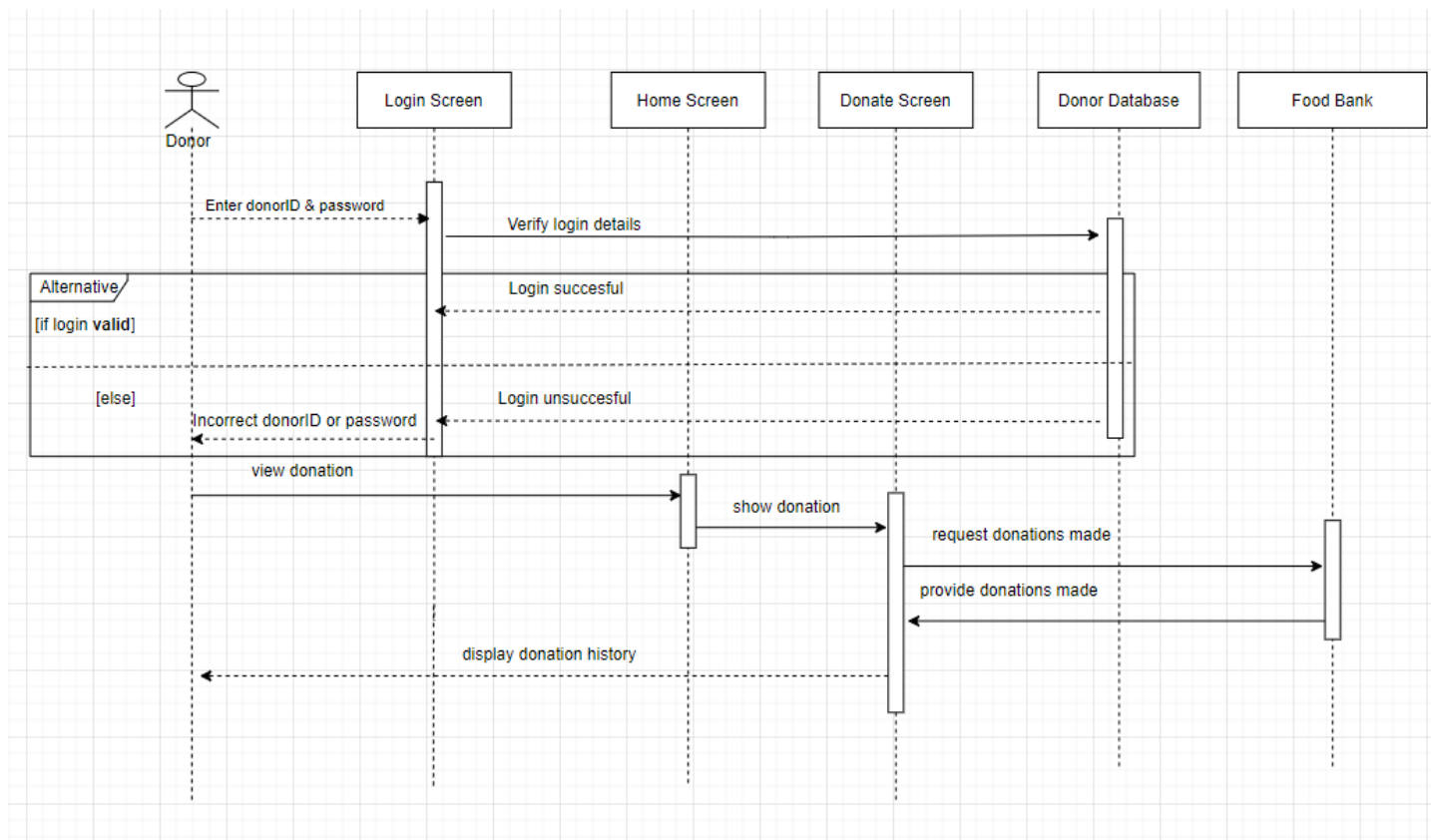


Figure 1.1f Donor's "View History of Donations" sequence diagram

#### 4.2.1.7 View Foods low on stock

1. The system requests the donor to enter their donorID and password.
2. The donor will enter their donorID and password into the system.
3. The system will retrieve data from the donor database and compare the donorID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The donor selects the "View Donation" page.
6. System requests the food quantity from the Food Bank. Later, the Food Bank sends the request to the Menu Database.
7. The Menu Database provides the food quantity data to the Food Bank. The Food Bank sends the information to the Donate Screen interface.
8. From the Donate Screen interface, the system displays the foods that are low on stock.

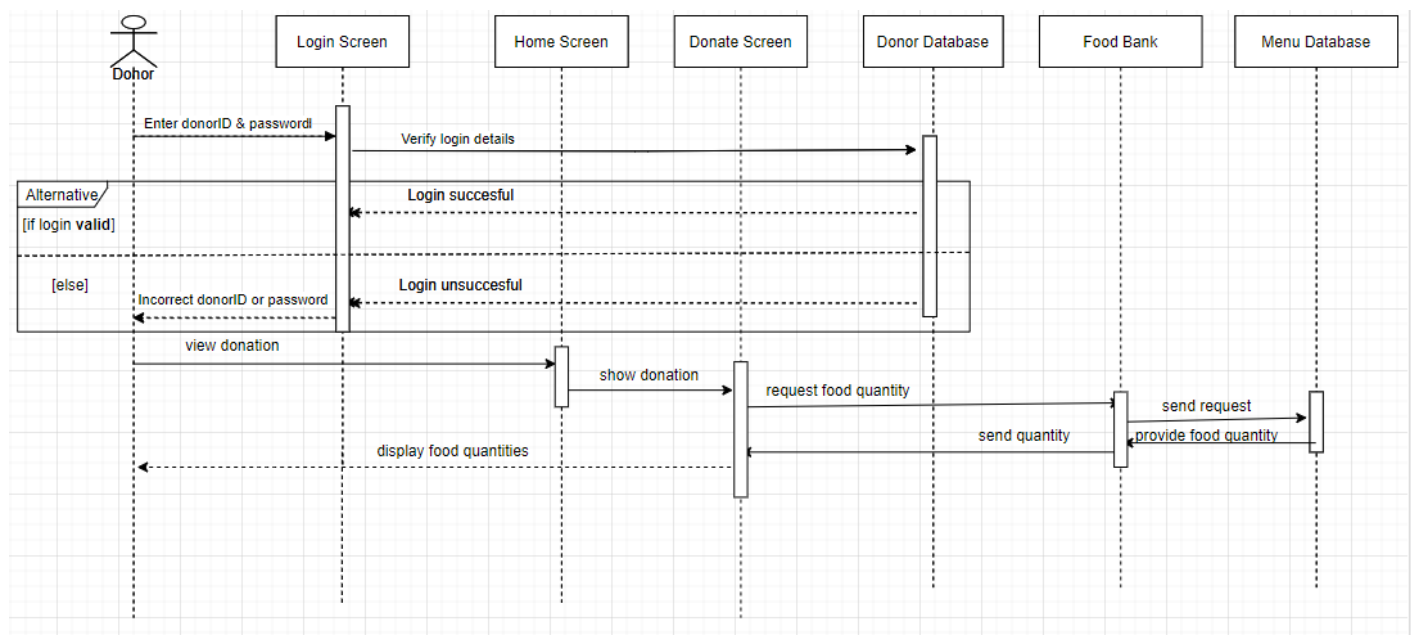


Figure 1.1g Donor's 'View Foods low on stock' sequence diagram

#### 4.2.1.8 Find food bank locations

1. The system requests the donor to enter their donorID and password.
2. The donor will enter their donorID and password into the system.
3. The system will retrieve data from the donor database and compare the donorID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The donor selects the "Find" page.
6. System requests the donor's state from the Donor Database and receives it.
7. System requests the Food Bank's state the Food Bank and receives it.
8. System compares the location of the donor and the food bank according to the state.
9. If the donor is in the same state as the food bank, the system displays the nearest food bank to the donor. If the donor is not in the same state as the food bank, the system displays all food banks.

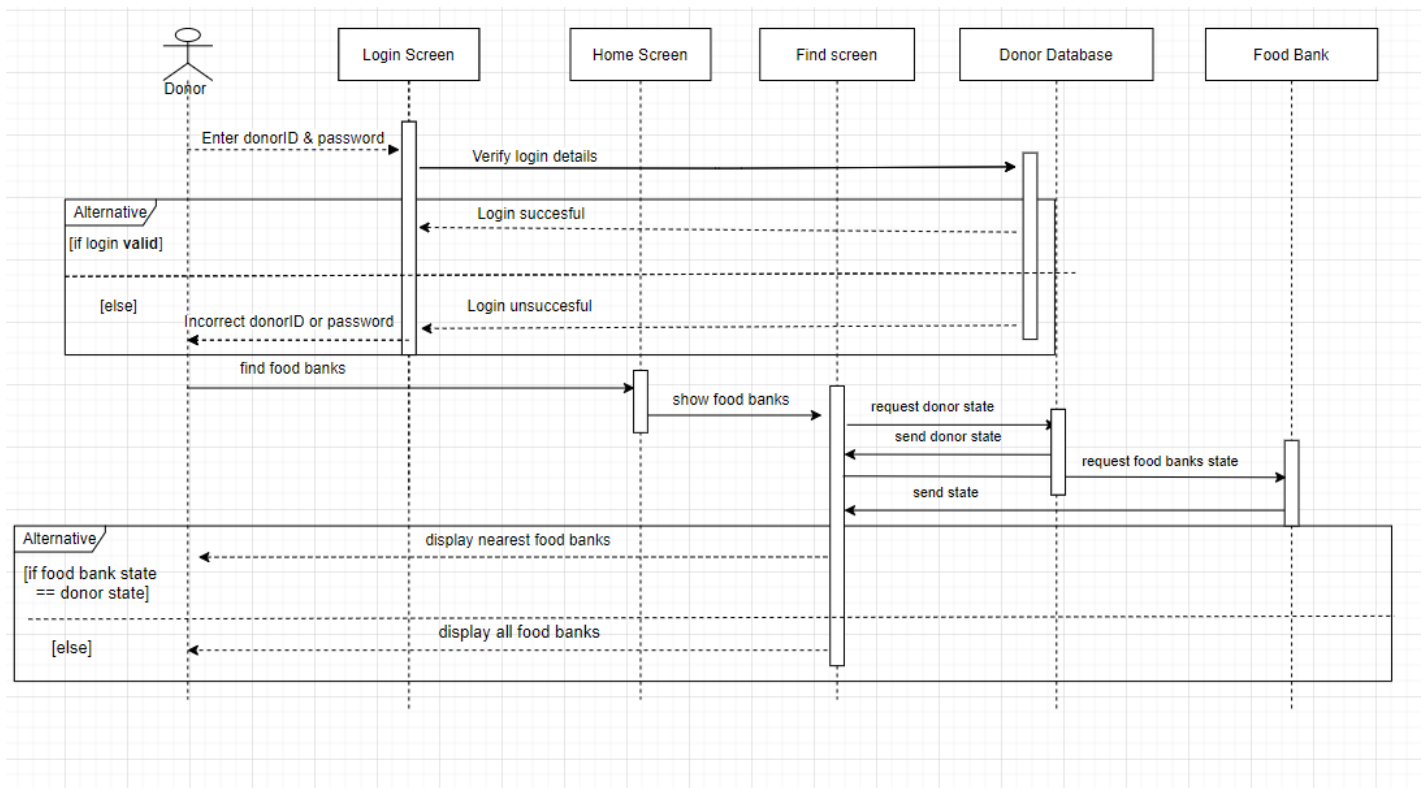


Figure 1.1h Donor's "Find food bank location" sequence diagram

## 4.2.2 Recipient

### 4.2.2.1 Sign Up

- 1) The Recipient enters the required Recipient Account information values and requests that the system saves the entered values.
- 2) The system validates the entered Recipient Account information.
- 3) The values for the Recipient Account information are stored in the Recipient's account database.
- 4) The system notifies the Recipient that the account has been created.
- 5) If the system determines that the Recipient entered invalid Recipient Account information, an error message will be displayed and the system will prompt the recipient to re-enter the valid information.

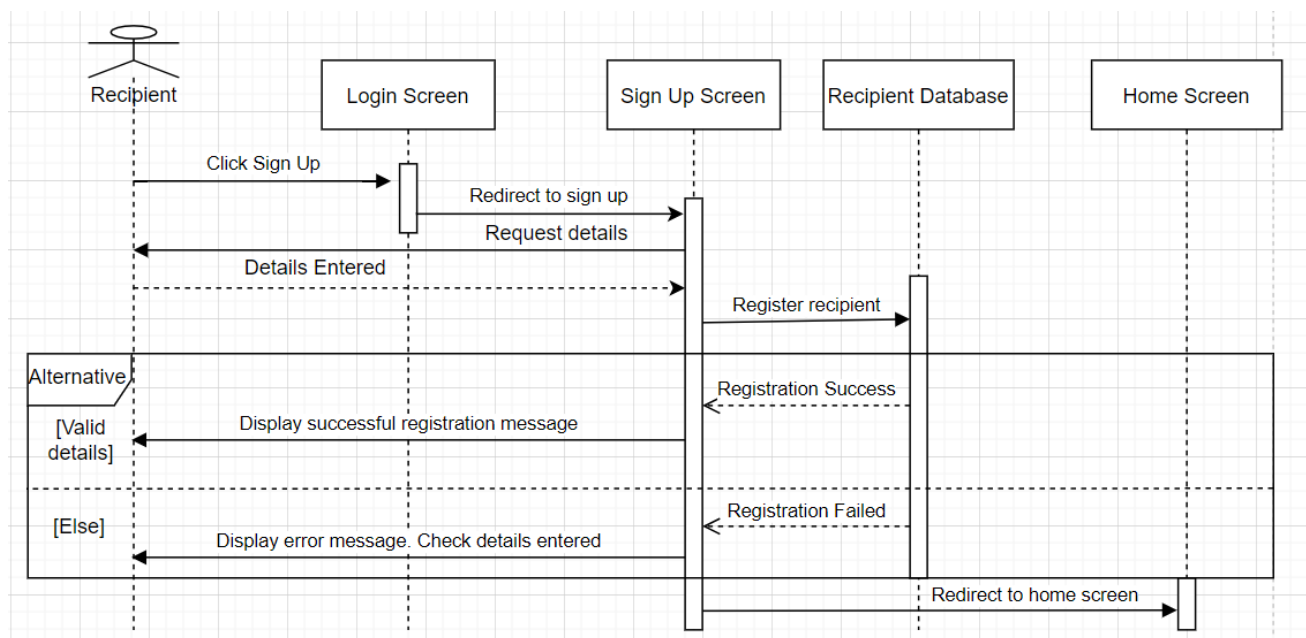


Figure 1.2a Recipient's 'Sign Up' sequence diagram

#### 4.2.2.2 Login

- 1) The system requests that the recipient enter his/her username and password.
- 2) Then, the recipient enters his/her username and password.
- 3) The system will retrieve data from the recipient database and compare the username and password.
- 4) If the information provided is correct, The system will validate the entered username and password and log the recipient into the system.
- 5) If the recipient enters an invalid username and/or password, the system displays an error message.



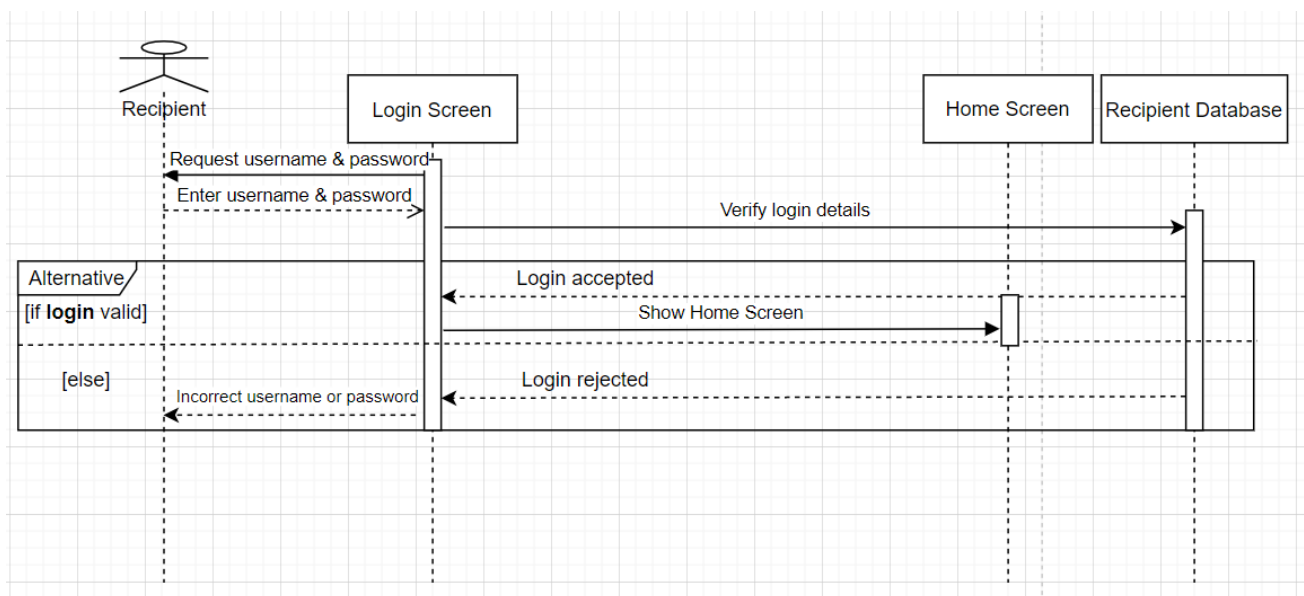


Figure 1.2b Recipient's 'Login' sequence diagram

#### 4.2.2.3 View Profile

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and Password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. The recipient selects the 'view profile' feature to view their personal details.
6. System will retrieve data from the recipient database and display the data in the personal detail form.

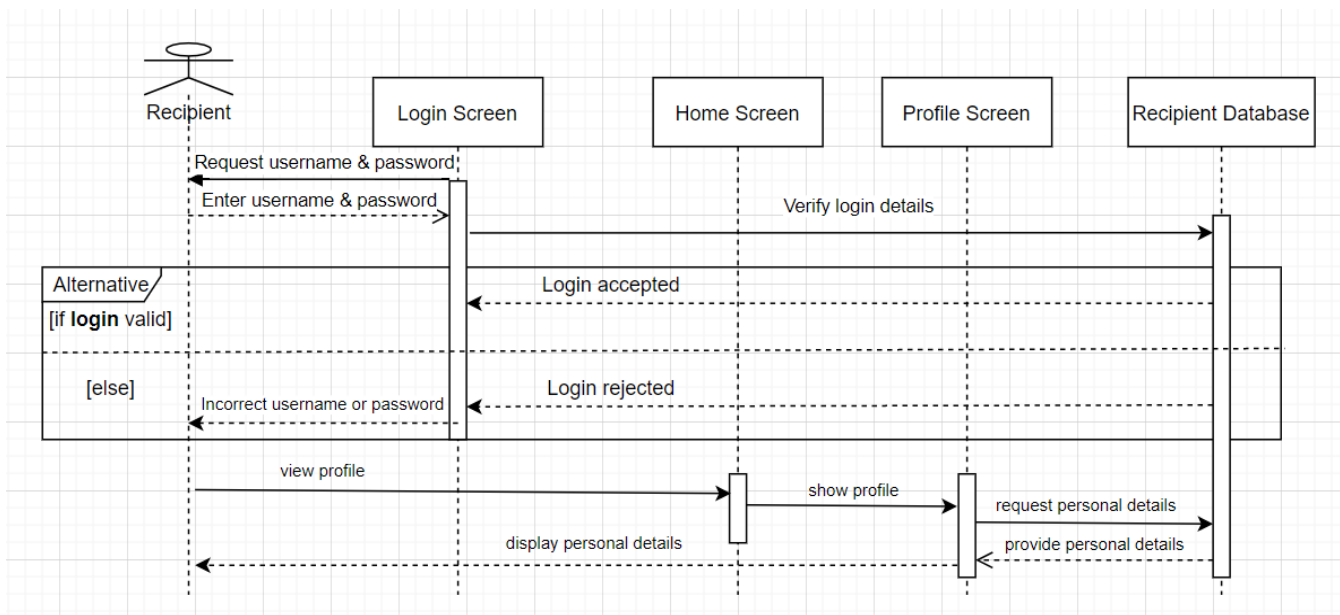


Figure 1.2c Recipient's 'view profile' sequence diagram

#### 4.2.2.4 Edit Profile

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. The recipient selects the view profile feature to view his/her personal details.
6. System will retrieve data from the recipient database and display the data in the personal detail form.
7. The recipient also can select the 'edit profile' feature to update his/her personal details.
8. The recipient can enter new personal details and select the save button to update.
9. System will prompt a confirmation message, and the recipient can either select yes or no.
10. If yes ,then the system will check the entered details which cannot be an empty value or wrong input format. If no, then the system will go back to the edit state.

11. After checking, if there is no input error, then the system will update the record in the recipient database.

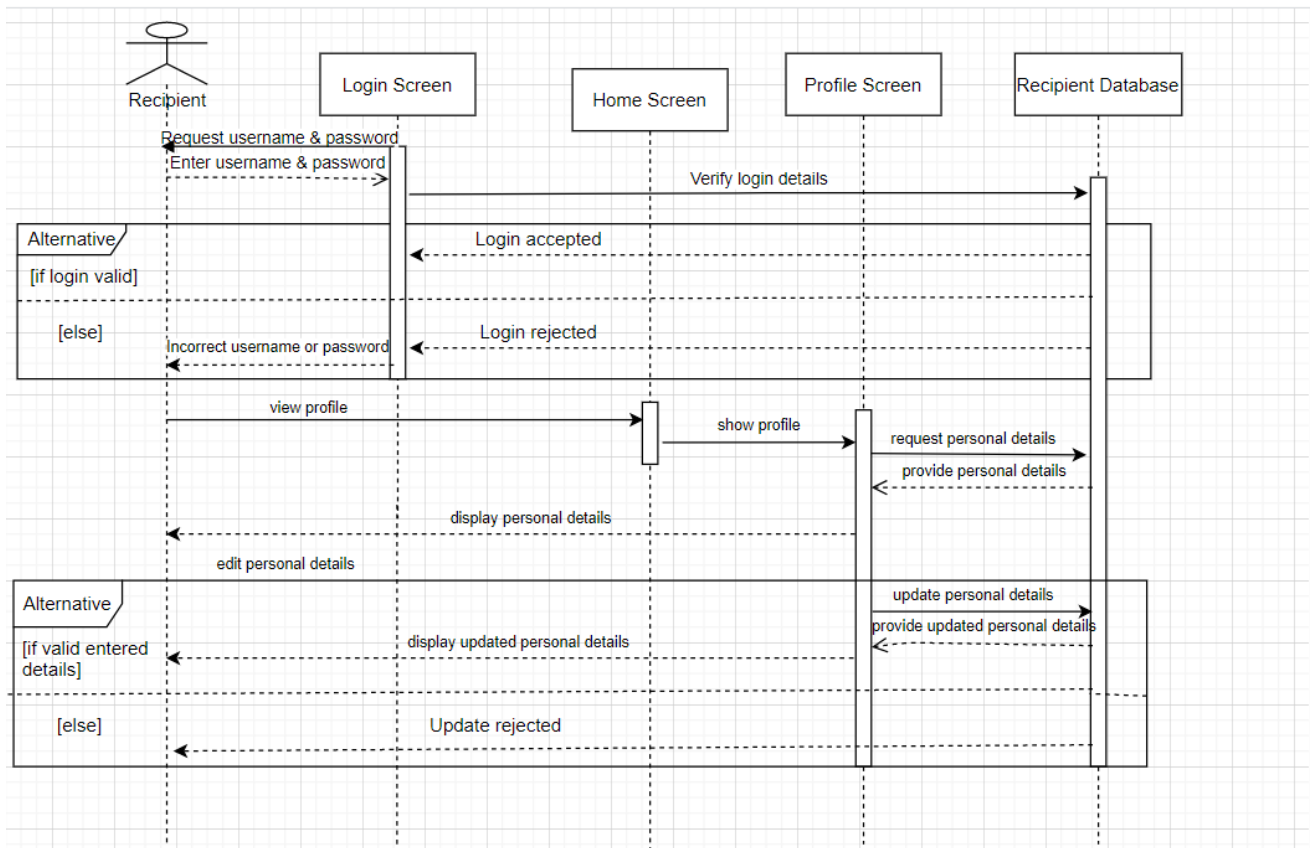


Figure 1.2d Recipient's 'edit profile' sequence diagram

#### 4.2.2.5 View food menu

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. The recipient can select 'View food menu' function to view all the food that they offer and that is available for deliveries
6. System will retrieve data from the menu database and display the food details in the menu page.

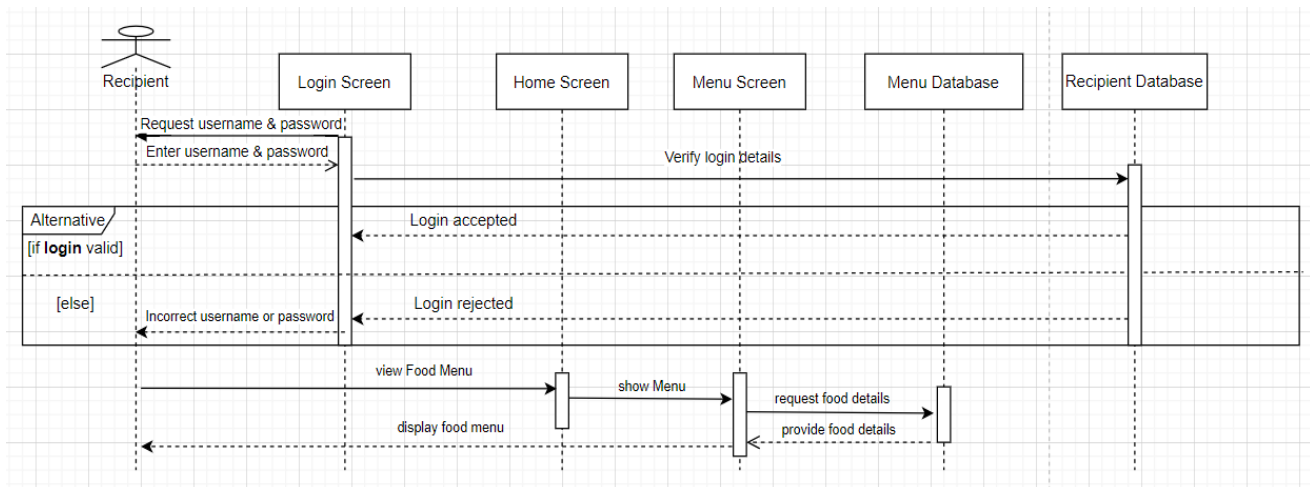


Figure 1.2e Recipient's 'view food menu' sequence diagram

#### 4.2.2.6 Reserve food

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. A recipient selects one or more food items from the available food menu.
6. Then, System displays details related to the chosen food.
7. After viewing all the information regarding the food, the recipient is able to reserve the food.
8. After that, System stores the reservation of food in the recipient's database and sends food item information to the specific Food Bank Inventory System.
9. Confirmation regarding the reserved food details will be displayed.
10. If the recipient enters a wrong reservation of food, he/she will have to go back to the food menu screen.

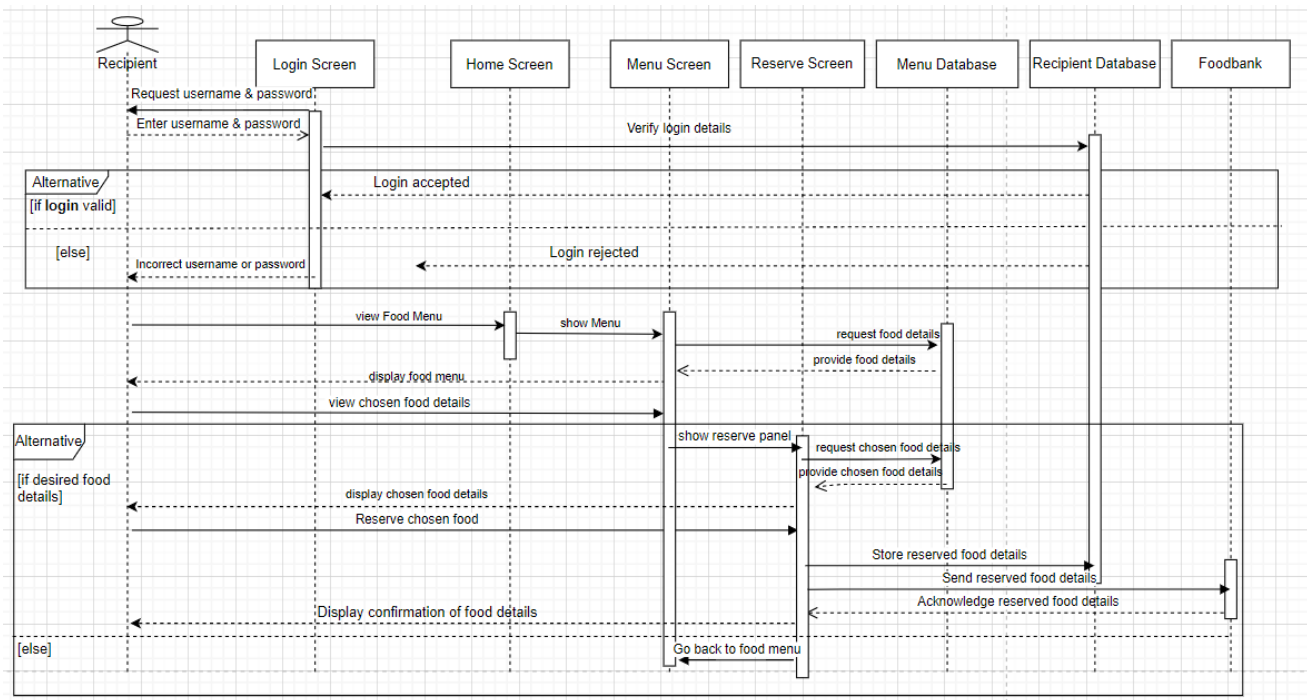


Figure 1.2f Recipient's 'Reserve Food' sequence diagram

#### 4.2.2.7 Cancel Reservation of Food

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. A recipient chooses the record that needs to be cancelled.
6. Then, the recipient can click the cancel reservation button and a confirmation dialog box will be shown.
7. If the recipient confirms to cancel the reservation, he/she can click the yes button.
8. This makes the system to delete the food information that has been reserved in the database
9. The specific Food Bank Inventory System also will be updated regarding this matter and a confirmation message will be displayed.

10.If the recipient does not want to make the changes, he/she can click the no button to cancel the process.

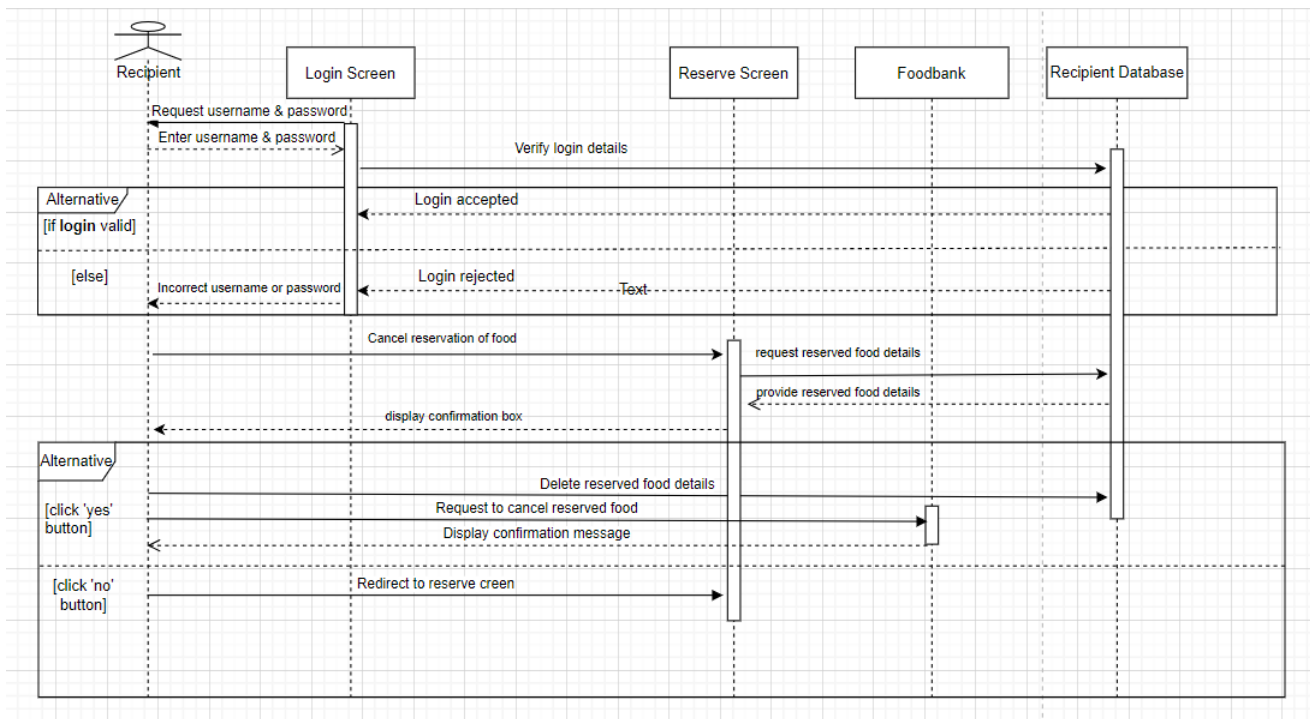


Figure 1.2g Recipient's 'Cancel Reservation of food' sequence diagram

#### 4.2.2.8 View Community Feed

- 1.The system requests that the recipient enter his/her username and password.
- 2.The recipient will enter his/her username and password into the system.
- 3.The system will retrieve data from the recipient database and compare the username and password.
- 4.If correct, then the system shows the home page; If incorrect, the system will go back to login.
- 5.Select the 'community' section in the home screen to view the daily announcement about food waste, sharing tips and more.
6. In the home screen also, Select the 'news' feature that provides news and information about food.

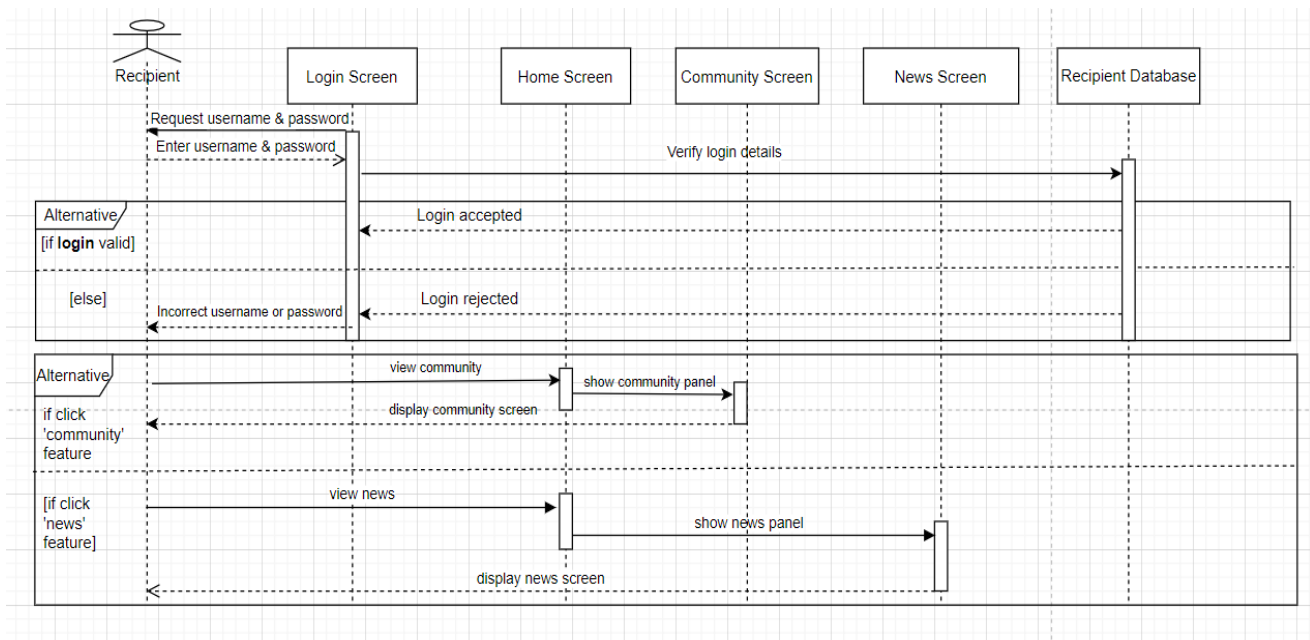


Figure 1.2h Recipient's 'View Community Feed' sequence diagram

#### 4.2.2.9 Acquire Assistance

1. The system requests that the recipient enter his/her username and password.
2. The recipient will enter his/her username and password into the system.
3. The system will retrieve data from the recipient database and compare the username and password.
4. If correct, then the system shows the home page; If incorrect, the system will go back to login.
5. The recipient fills in the details such as subject and message in the 'contact us' feature in the home screen.
6. Submit it. Some of the details of the recipient that he/she provides during registration will be attached automatically when he/she submit the message.
7. Confirmation message regarding the submission of the message will be displayed.

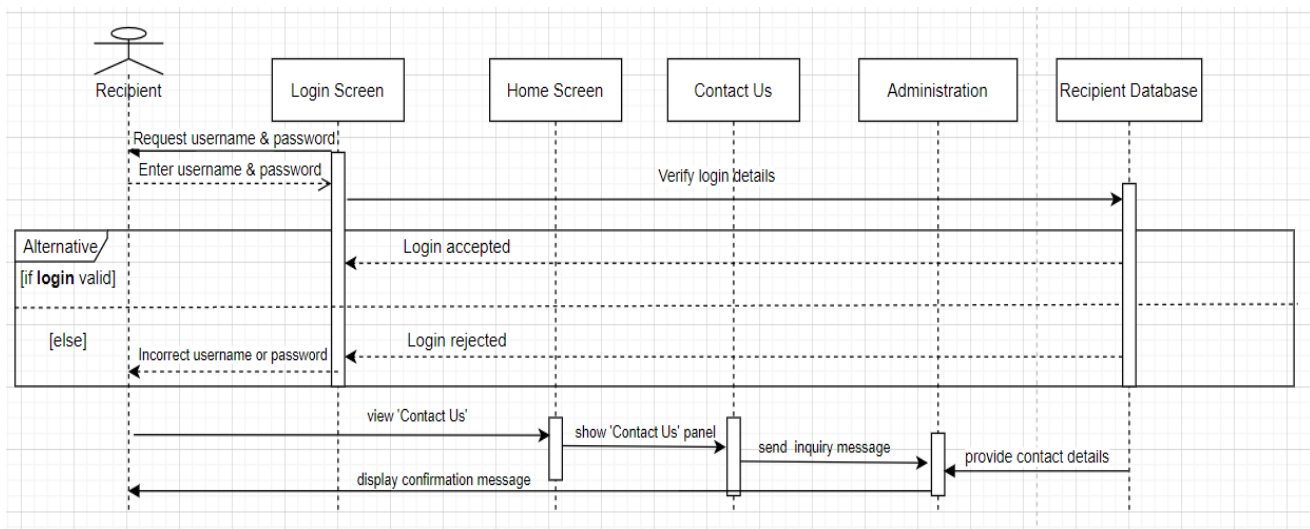


Figure 1.2i Recipient's 'Acquire Assistance' sequence diagram

## 4.2.3 Distributor

### 4.2.3.1 Sign up as rider

- 1) The Distributor enters the required Distributor Account information values and requests that the system saves the entered values.
- 2) The system validates the entered Distributor Account information.
- 3) The values for the Distributor Account information are stored in the Distributor's account database.
- 4) The system notifies the Distributor that the account has been created.
- 5) If the system determines that the Distributor entered invalid Distributor Account information, an error message will be displayed and the system will prompt the distributor to re-enter the valid information.



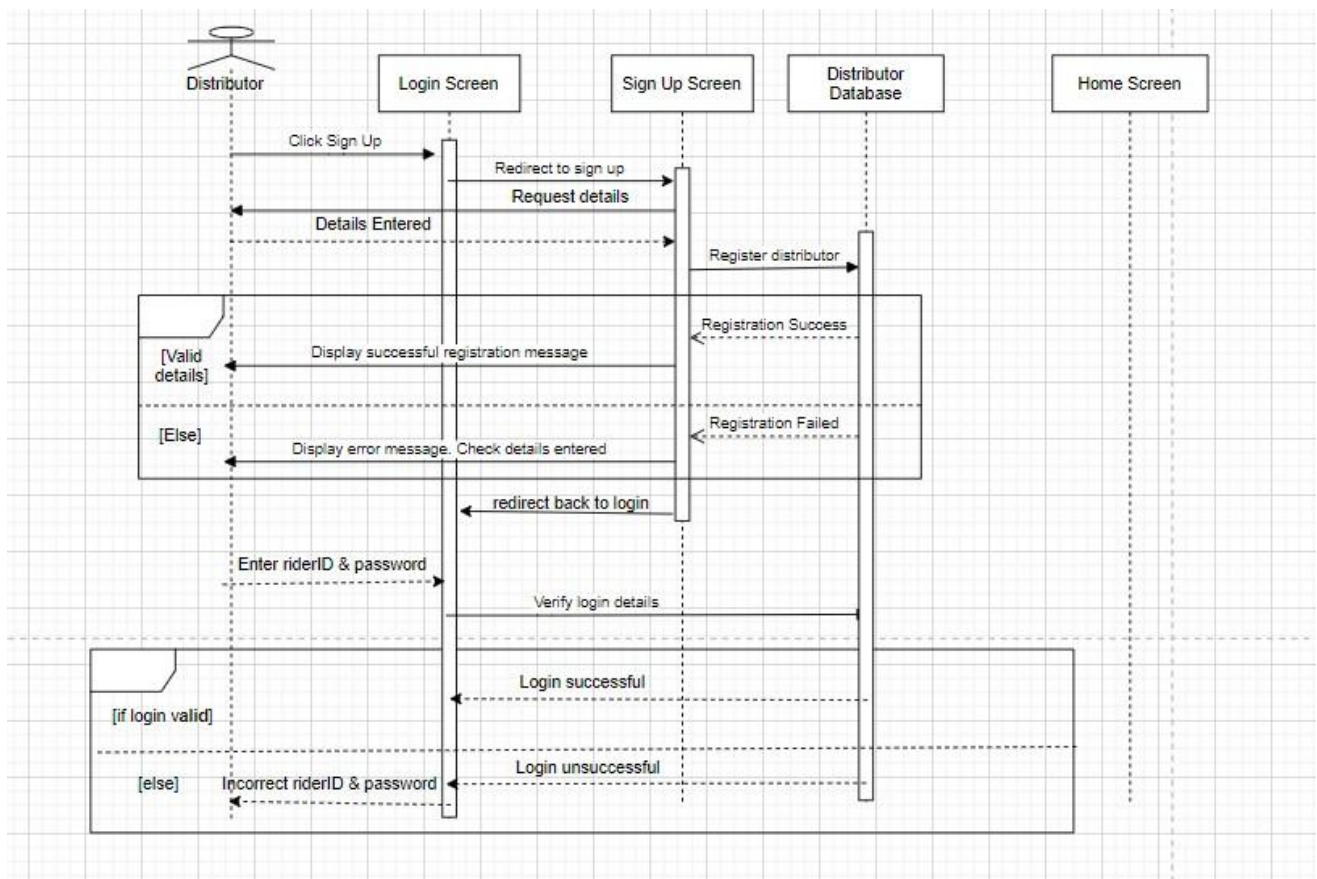


Figure 3.1 Distributor's 'Sign up as rider' sequence diagram

#### 4.2.3.2 Login

- 1) The system requests that the distributor enter his/her username and password.
- 2) Then, the distributor enters his/her username and password.
- 3) The system will retrieve data from the distributor database and compare the username and password.
- 4) If the information provided is correct, The system will validate the entered username and password and log the distributor into the system.
- 5) If the distributor enters an invalid username and/or password, the system displays an error message.

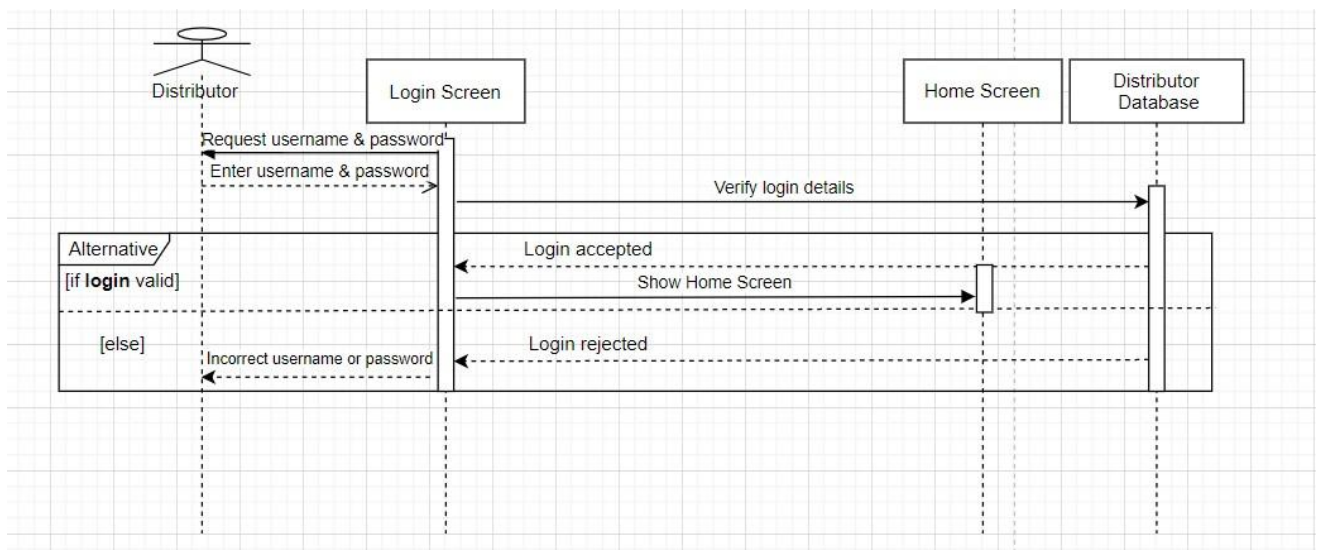


Figure 3.2 Distributor's 'Login' sequence diagram

#### 4.2.3.3 Edit profile

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor selects the "View Profile" page to view their personal details.
6. System will retrieve data from the distributor database and display the data in the personal detail form.
7. The distributor later selects the 'Edit Profile' feature to update their personal details.
8. The distributor can edit their personal details and select the save button once they're done to update their information.
9. System will prompt a confirmation message, and the distributor can either select yes or no.
10. If the distributor chooses yes, the system confirms and updates the information in the distributor's database. If the distributor chooses no, then the system will go back to the edit profile state.

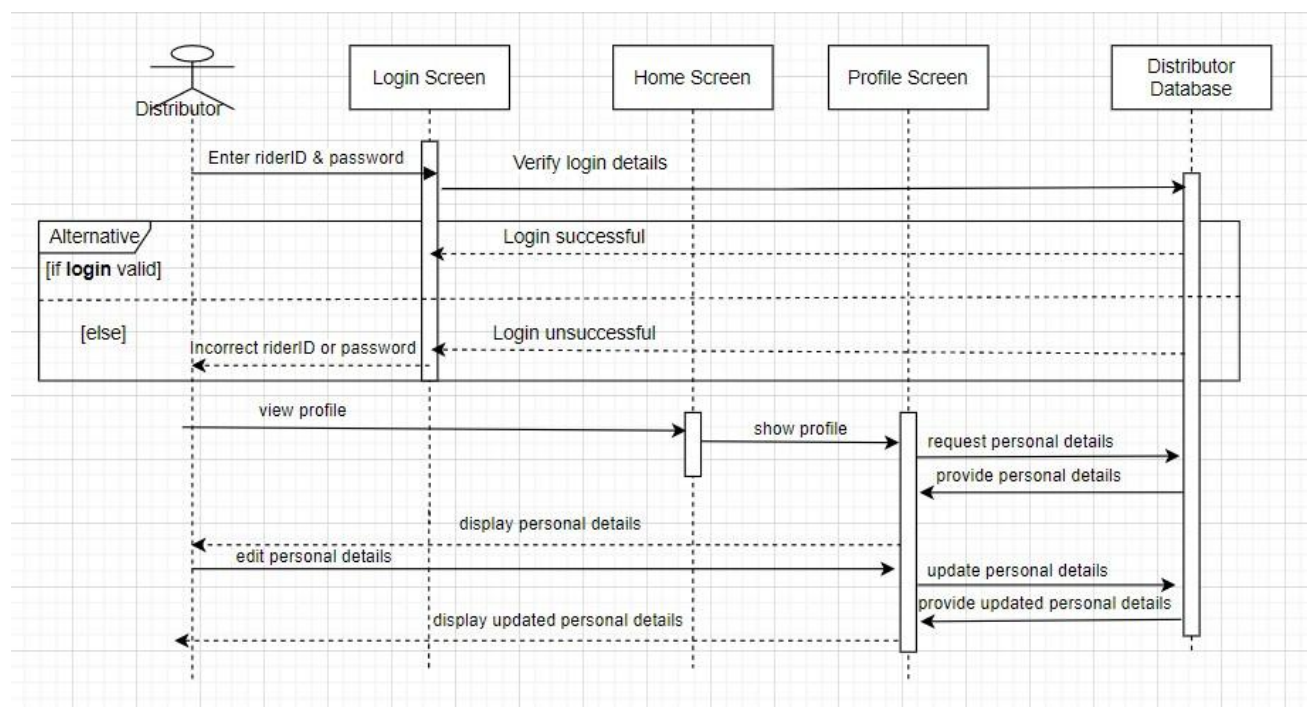


Figure 3.3 Distributor's 'Edit profile' sequence diagram

#### 4.2.3.4 View profile

1. The system requests the donor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor selects the 'View Profile' page to view their personal details.
6. System will retrieve data from the distributor database and display the data in the personal detail form.

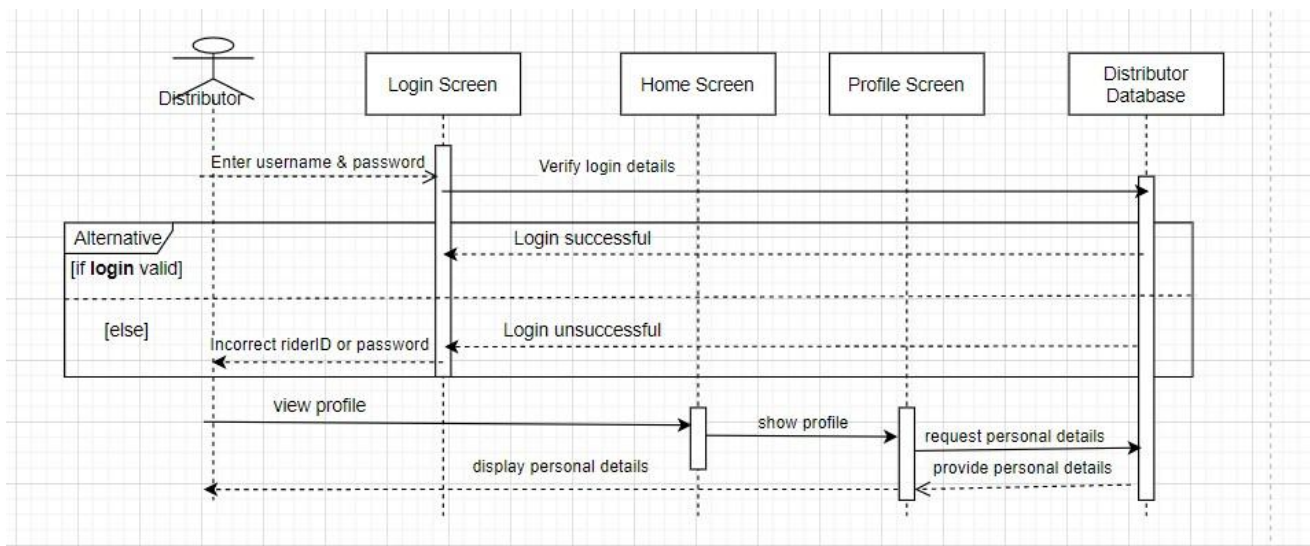


Figure 3.4 Distributor's 'View profile' sequence diagram

#### 4.2.3.5 Search for nearby foodbank locations

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor selects the "Find" page.
6. System requests the Distributor's state from the Distributor Database and receives it.
7. System requests the Food Bank's state the Food Bank and receives it.
8. System compares the location of the distributor and the food bank according to the state.
9. If the distributor is in the same state as the food bank, the system displays the nearest food bank to the distributor. If the distributor is not in the same state as the food bank, the system displays all food banks.

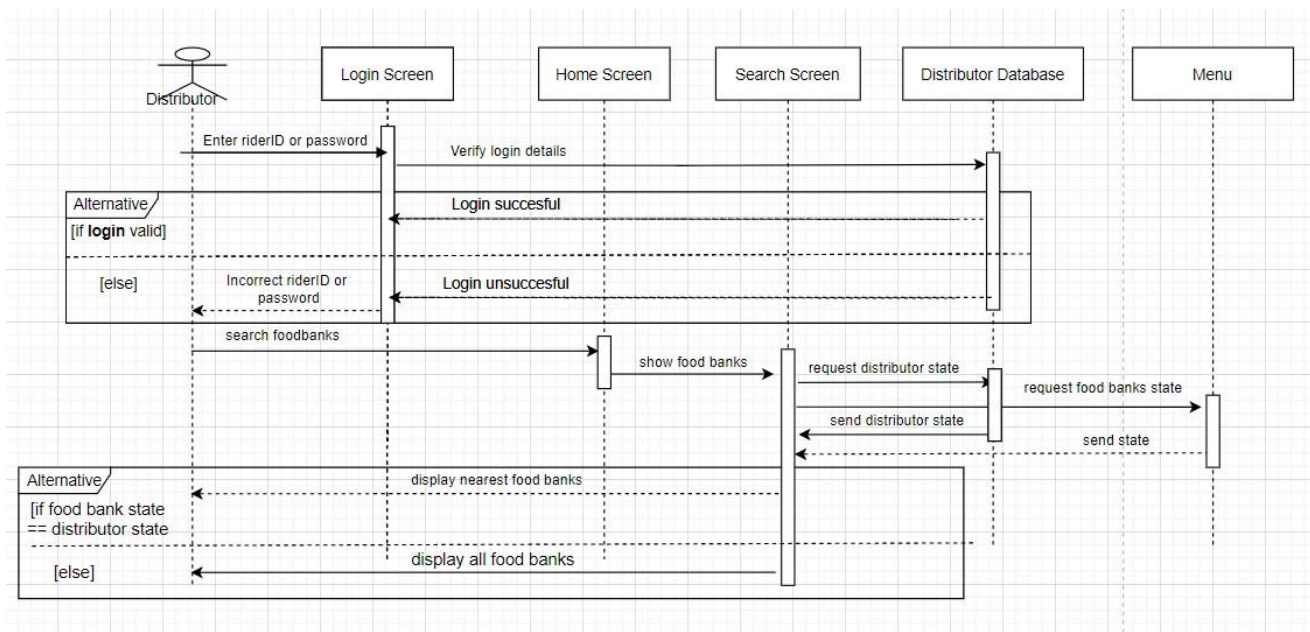


Figure 3.5 Distributor's 'Search for nearby foodbank locations' sequence diagram

#### 4.2.3.6 Check status of reserved food

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor selects the "Search Foodbanks" page.
6. System requests the status of reserved food from the Food Bank. Later, the Food Bank sends the request to the Menu Database.
7. The Menu Database provides the food status data to the Food Bank. The Food Bank sends the information to the Search Screen interface.
8. From the Search Screen interface, the system displays the status of reserved food.



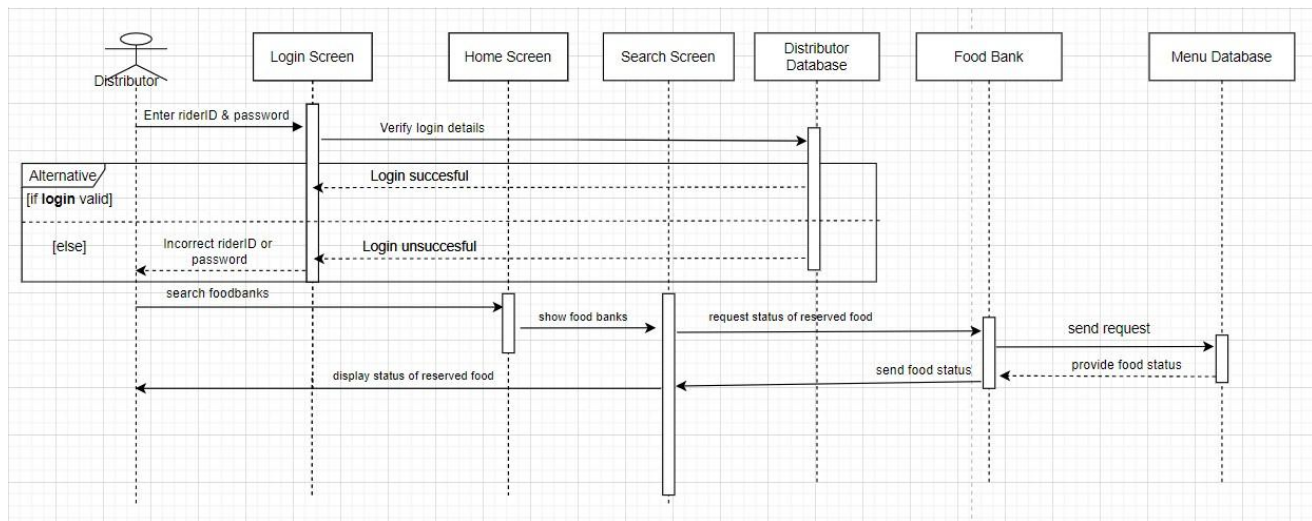


Figure 3.6 Distributor's 'Check status of reserved food' sequence diagram

#### 4.2.3.7 Pick up food

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor selects the "Menu " page and proceeds to confirm the pick up at the menu screen.
6. Then, System reports pick up to the Foodbank.
7. System will then remove the amount of food that is being delivered by the distributor from the Foodbank.
8. System will update the number of food available and reserved in the specific Foodbank.
9. System will retrieve data from the Menu database and display the pick up details in the menu page.

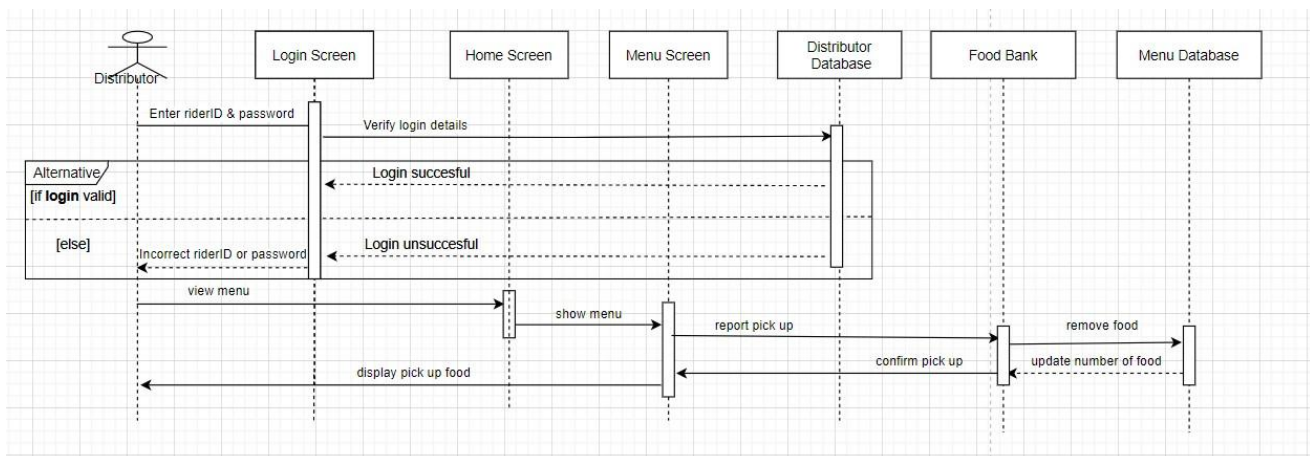


Figure 3.7 Distributor's 'Pick up food' sequence diagram

#### 4.2.3.8 View delivery status

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. The distributor can select the 'View menu' function to view all the food that they can deliver and that are available for deliveries.
6. System requests the delivery status from the Food Bank. Later, System updates the delivery status sent from the Foodbank.
7. System will display the delivery status at the menu page.

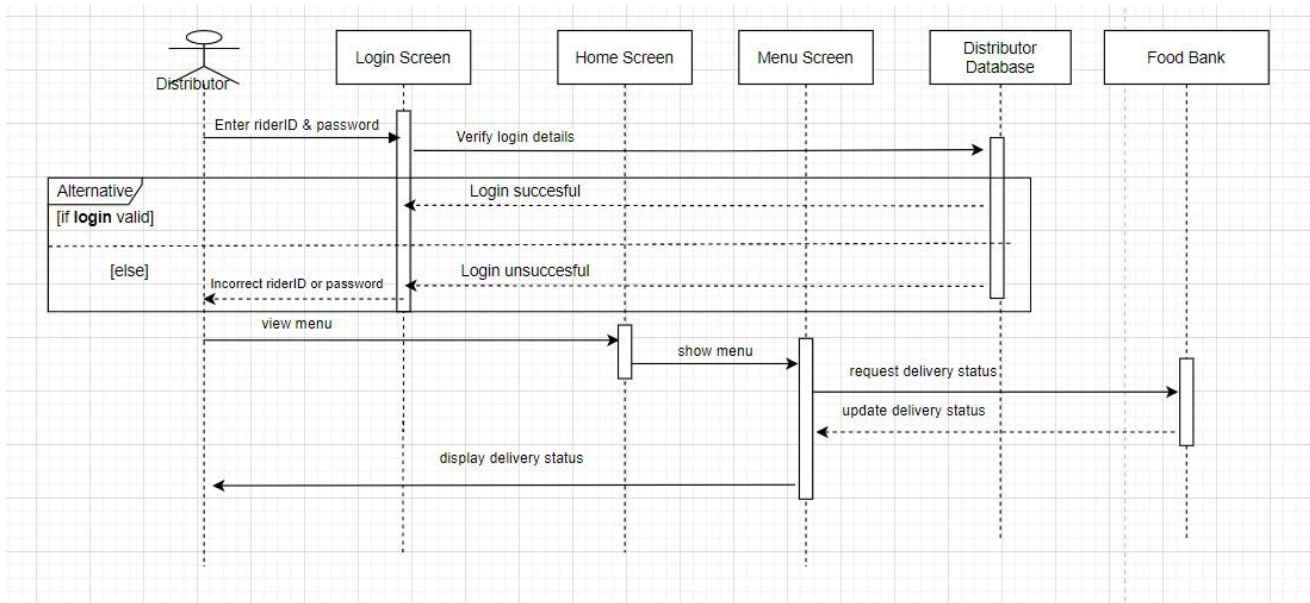


Figure 3.8 Distributor's 'View delivery status' sequence diagram

#### 4.2.3.9 Drop-off food

1. The system requests the distributor to enter their riderID and password.
2. The distributor will enter their riderID and password into the system.
3. The system will retrieve data from the distributor database and compare the riderID and password.
4. If login is successful, the system shows the home page; If login is unsuccessful, the system goes back to the login page.
5. After food has been delivered to the recipient, the distributor has to select the "Menu " page and proceed to select the drop off food function at the menu screen.
6. Then, System reports drop off to the menu database.
7. System will retrieve data from the Menu database and confirm the drop off details in the menu screen.
9. System will then display delivery successful to the distributor.



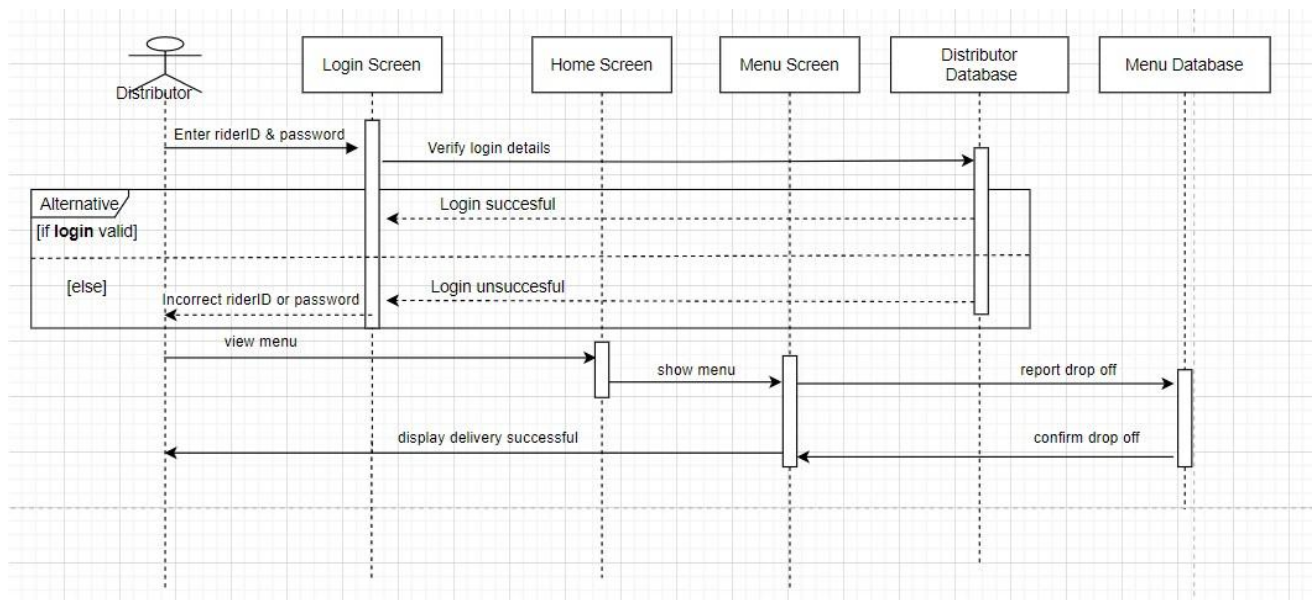


Figure 3.9 Distributor's 'Drop-off food' sequence diagram

#### 4.2.4 Admin

##### View Main Menu

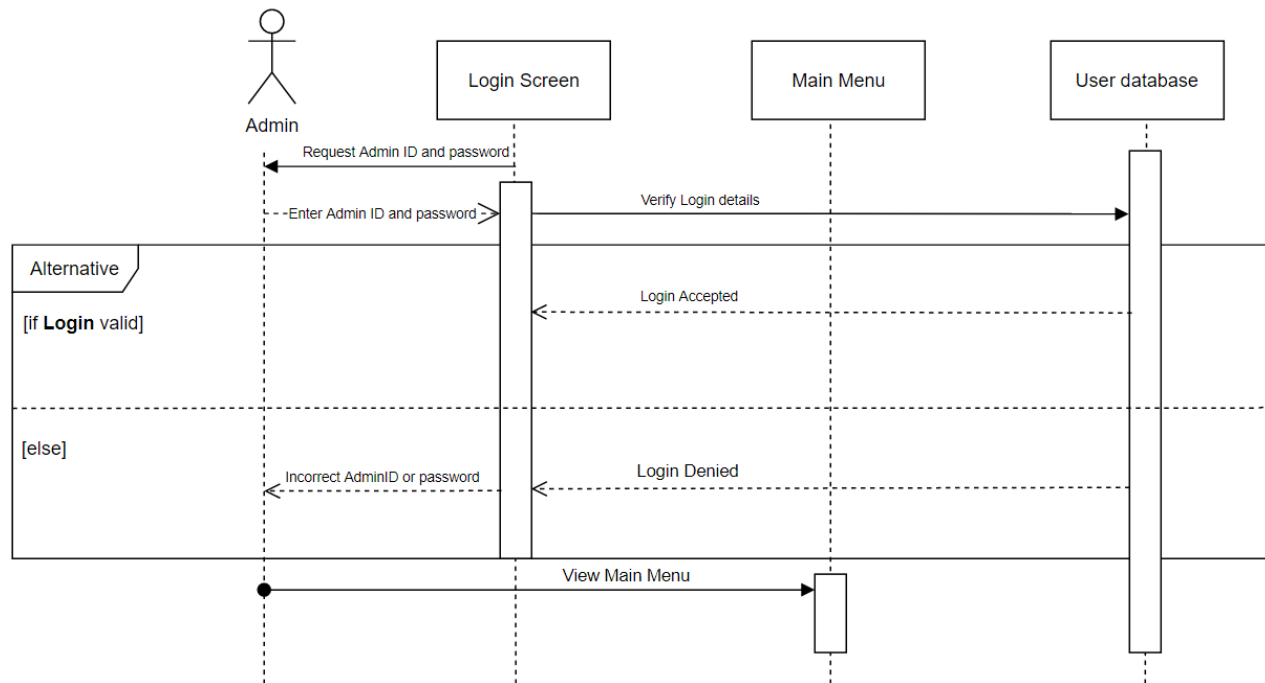


Figure 4.1 Admin's Main Menu Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.

## Add Users

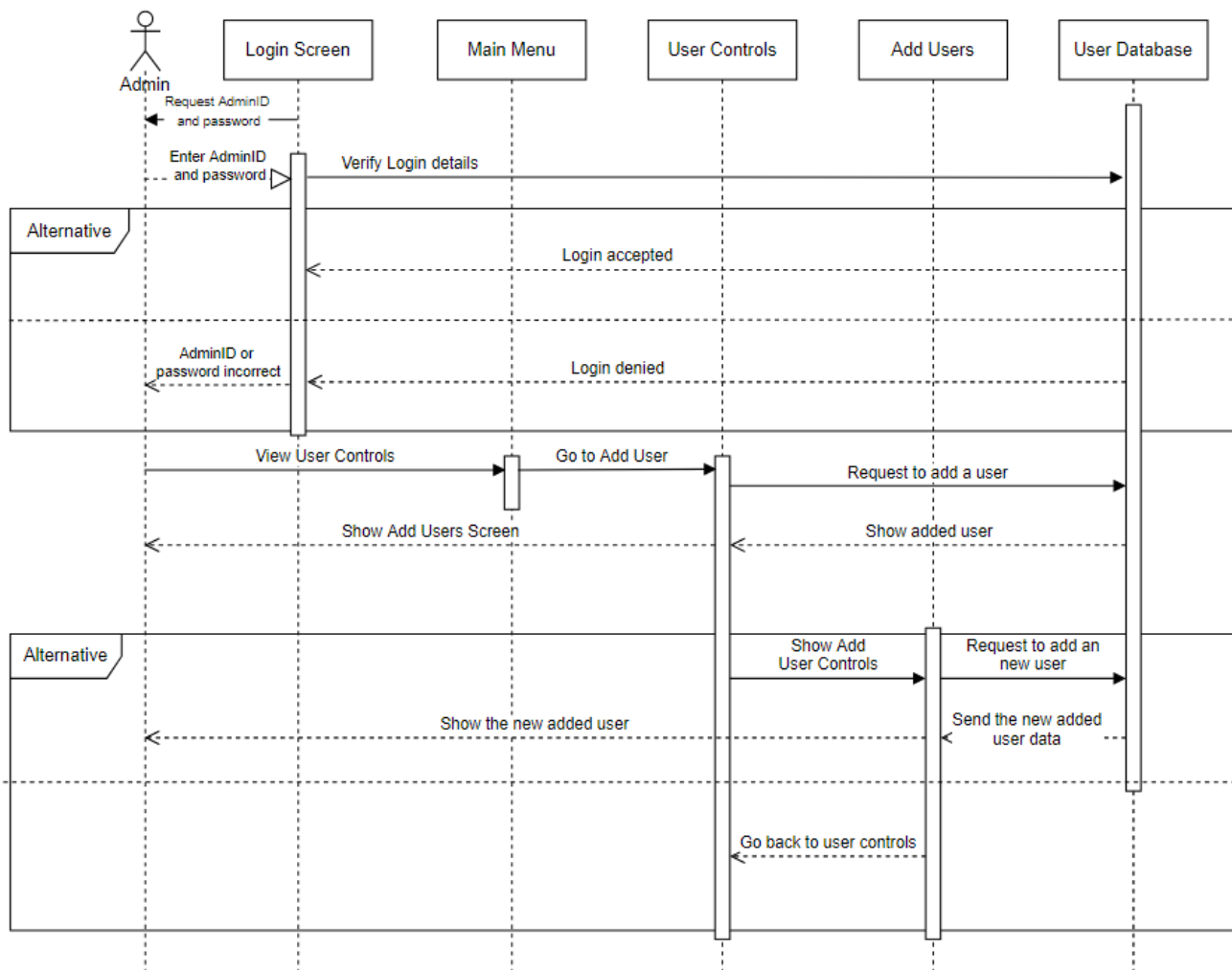


Figure 4.2 Admin's Add Users Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Add users, the admin will navigate to User Controls.
6. In User Control, the admin is able to navigate to Add User.

7. *Add User Controls will be displayed and the admin able to input data for a new user to be added in the User database.*
8. *After input, the database sends the new added user data back to Add User Control.*
9. *The system will let the admin know that the new added user is in the database.*
10. *The admin is able to go back to the User Control if finish adding new users.*

## Add Food Bank Report

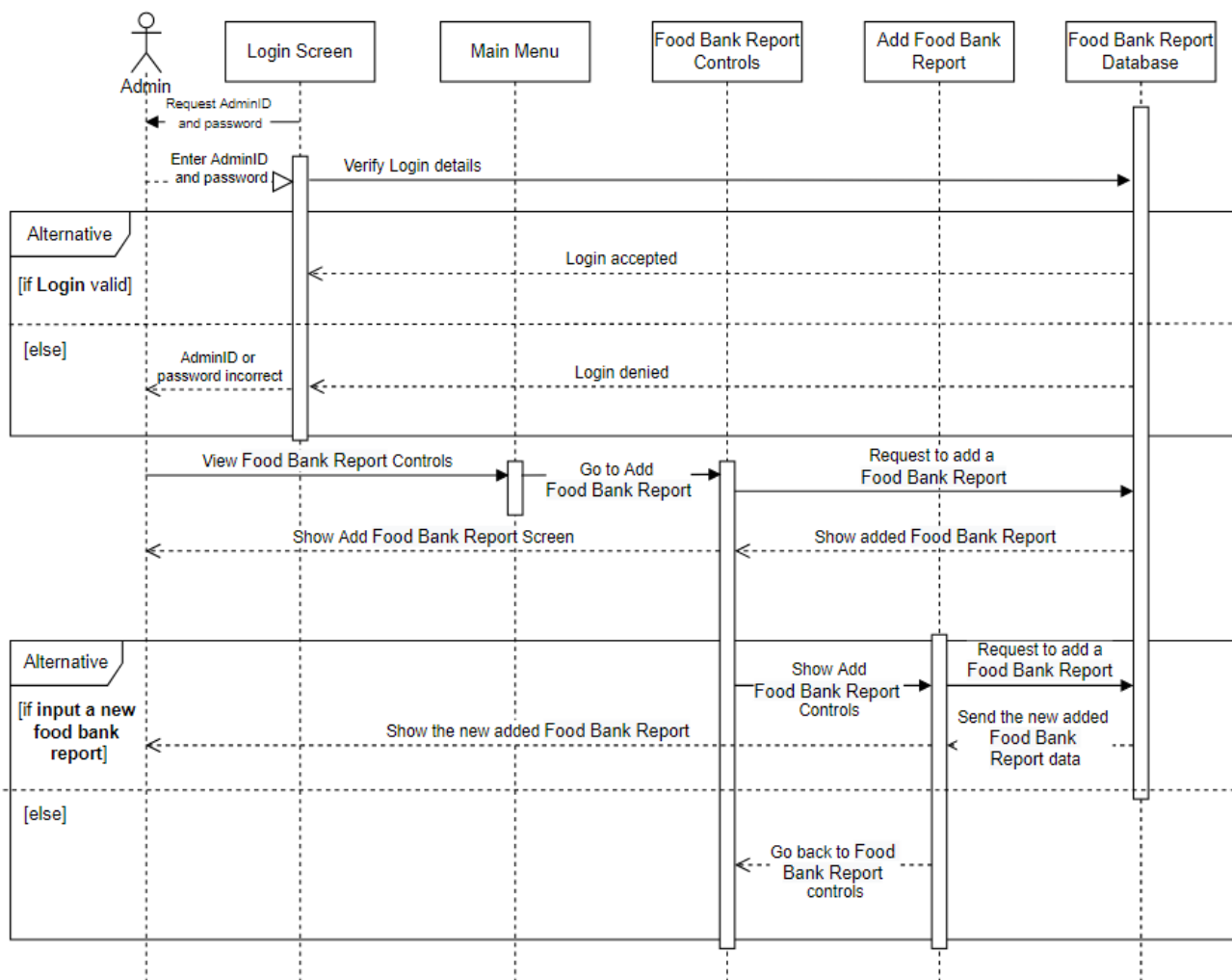


Figure 4.3 Admin's Add Food Bank Report Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Add Food Bank Report, the admin will navigate to Food Bank Report Controls.
6. In Food Bank Report Control, the admin is able to navigate to Add Food Bank Report.

7. *Add Food Bank Report Controls will be displayed and the admin able to input data for a new Food Bank Report to be added in the Food Bank Report database.*
8. *After input, the database sends the new added Food Bank Report data back to Add Food Bank Report Control.*
9. *The system will let the admin know that the new added Food Bank Report is in the database.*
10. *The admin is able to go back to the Food Bank Report Control if finish adding new reports.*

## Add Distribution Location

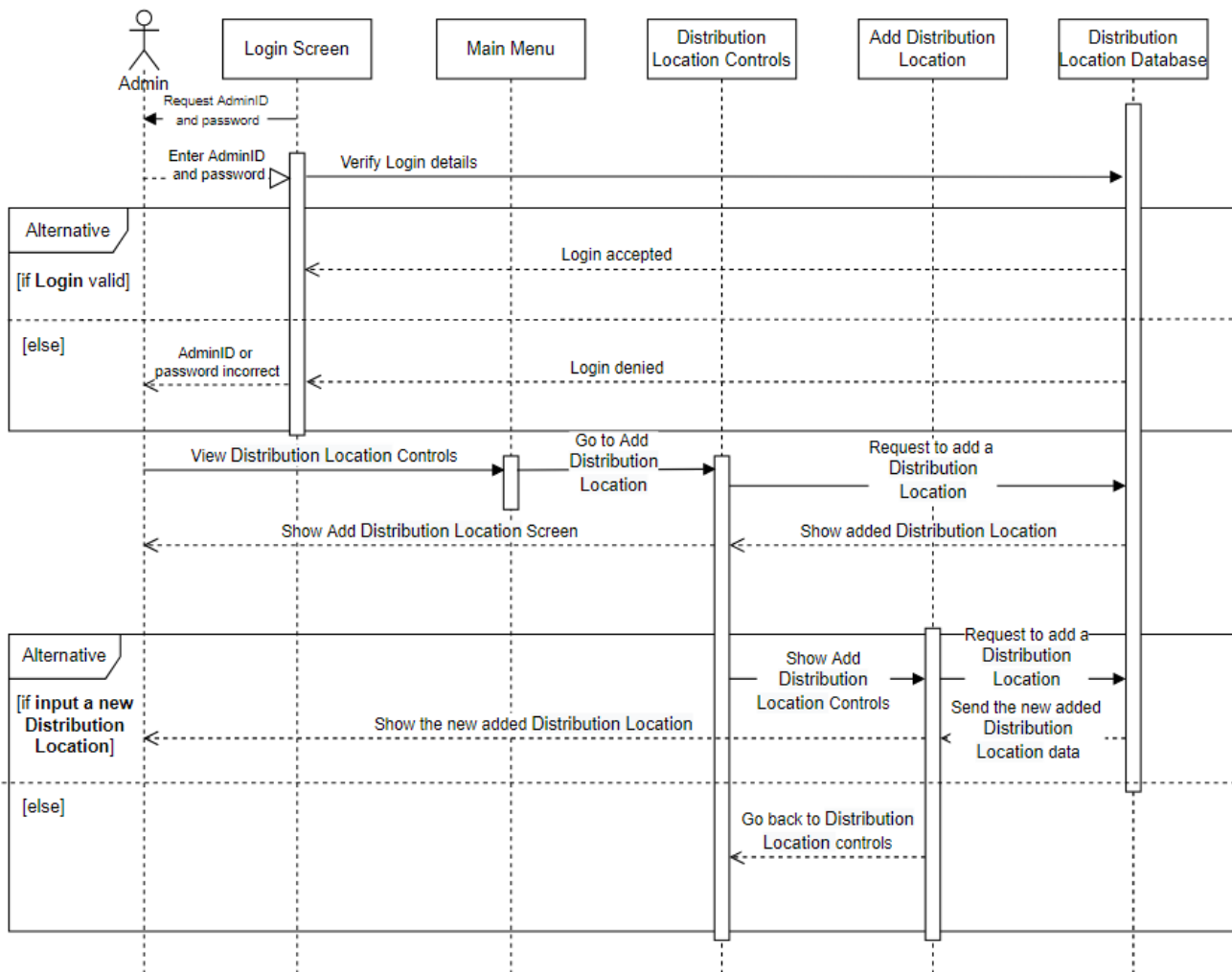


Figure 4.4 Admin's Add Distribution Location Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Add Distribution Location, the admin will navigate to Distribution Location Controls.
6. In Distribution Location Control, the admin is able to navigate to Add Distribution Location.

7. *Add Distribution Location Controls will be displayed and the admin able to input data for a new Distribution Location to be added in the Distribution Location database.*
8. *After input, the database sends the new added Distribution Location data back to Add Distribution Location.*
9. *The system will let the admin know that the new added Distribution Location is in the database.*
10. *The admin is able to go back to the Food Bank Report Control if finish adding new locations.*



## Add Food Categories

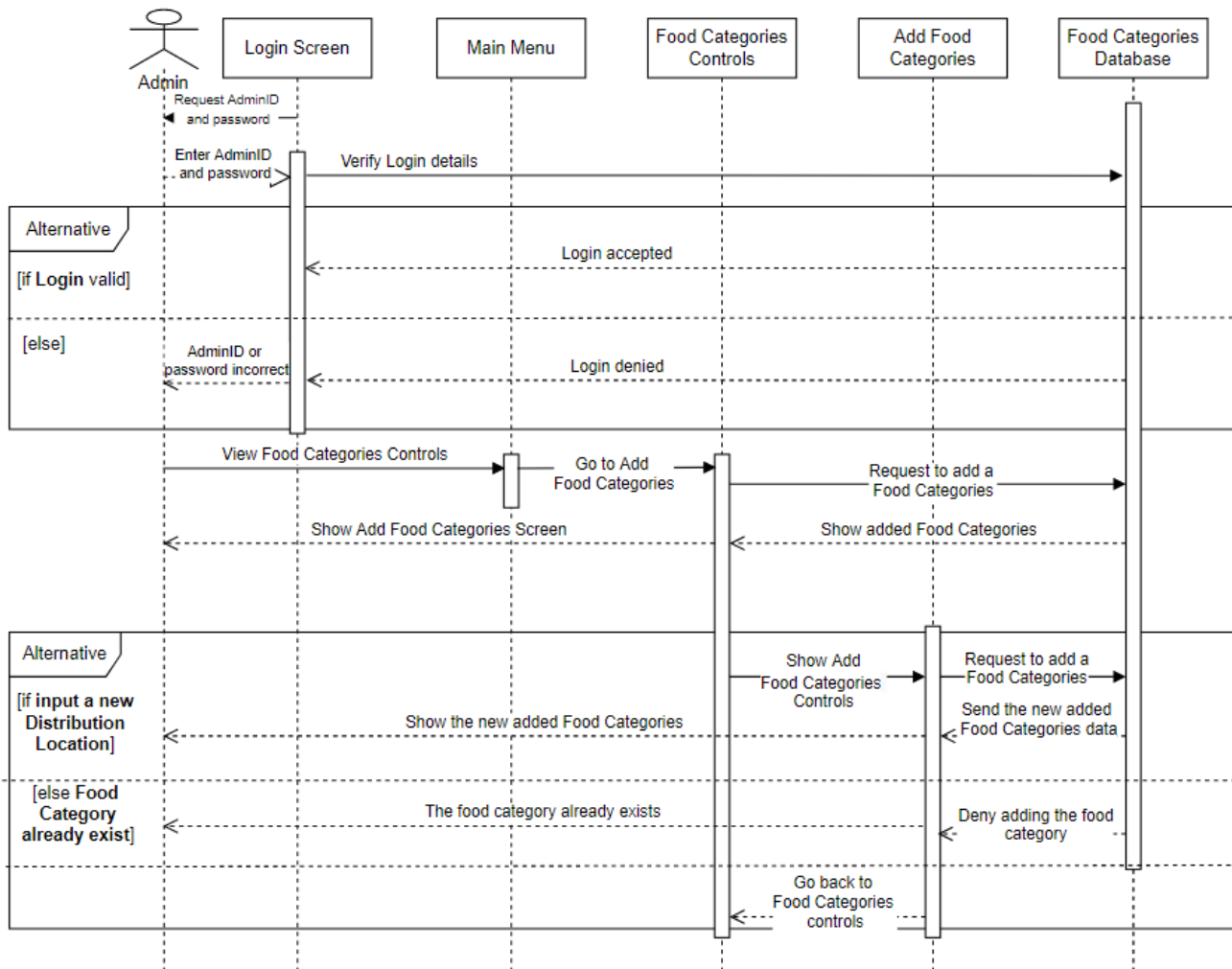


Figure 4.5 Admin's Add Food Categories Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Add Food Categories, the admin will navigate to Food Categories Controls.

6. *In Food Categories Control, the admin is able to navigate to Add Food Categories.*
7. *Add Food Categories Controls will be displayed and the admin able to input data for a new Food Category to be added in the Food Categories database.*
8. *After input, the database sends the new added Food Category data back to Add Food Categories.*
9. *The system will let the admin know that the new added Food Category is in the database.*
10. *The admin is able to go back to the Food Categories Control if finish adding new categories.*

## Delete Users

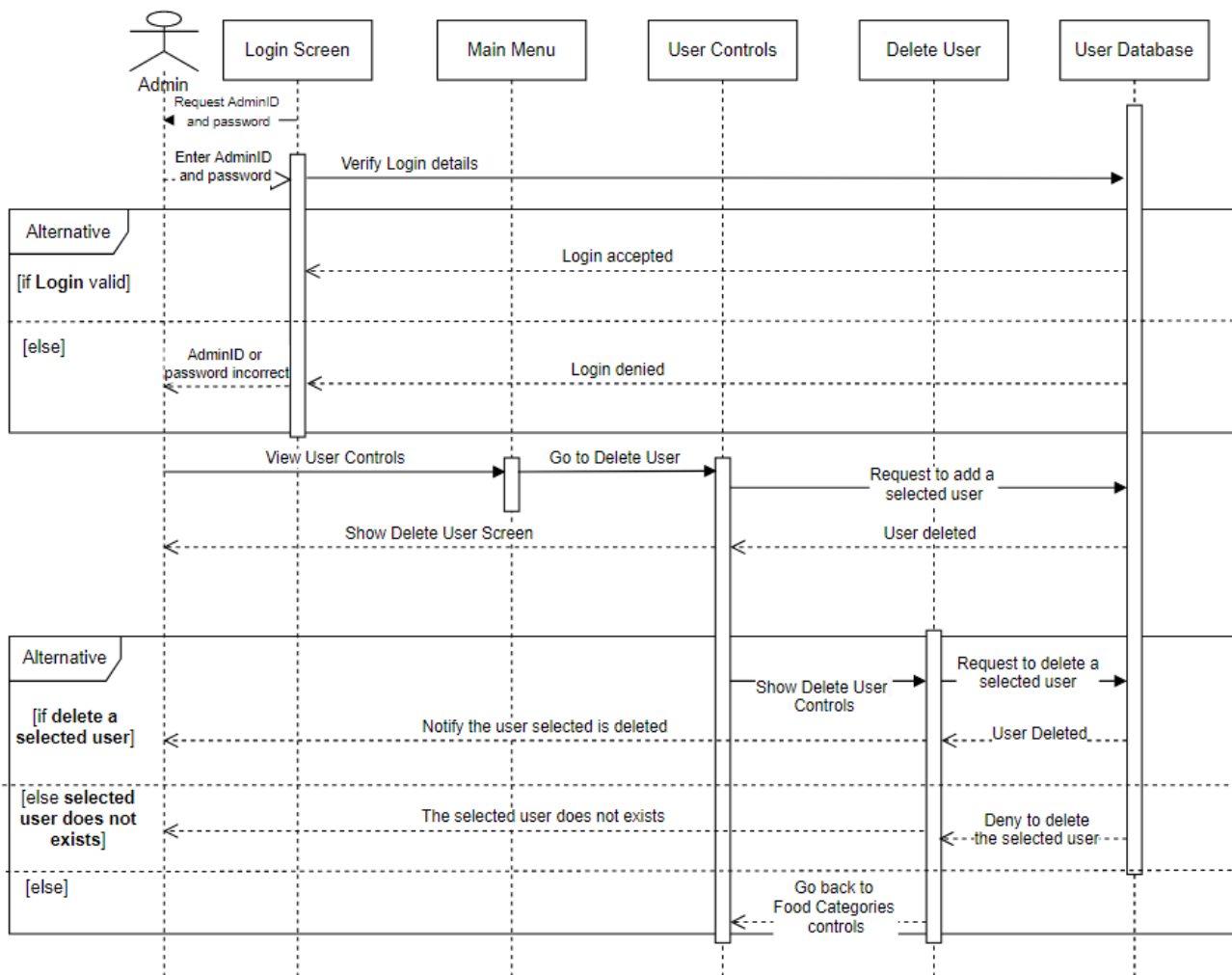


Figure 4.6 Admin's Delete Users Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Delete users, the admin will navigate to User Controls.
6. In User Control, the admin is able to navigate to Delete User.

7. *Delete User Controls will be displayed and the admin able to select data for a user to be deleted from the User database.*
8. *After input, the database informs the admin that the selected user if exists is deleted from the database. If it does not exist, the database will not take any action and the system tells the admin that the user does not exist.*
9. *The admin is able to go back to the User Control if finish deleting users.*

## Delete Food Bank Report

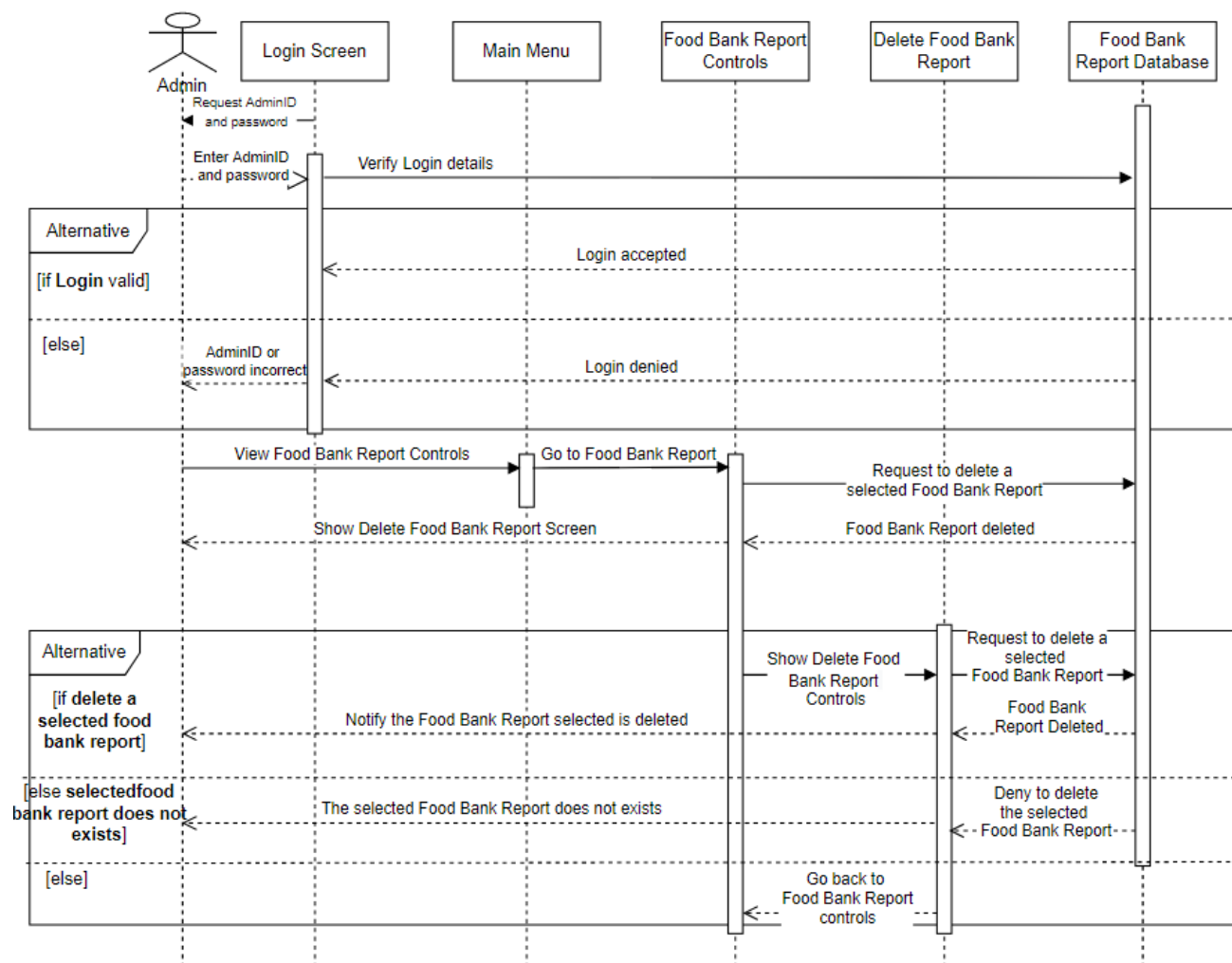


Figure 4.7 Admin's Delete Users Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Delete Food Bank Report, the admin will navigate to Food Bank Report Controls.

6. *In Food Bank Report Control, the admin is able to navigate to Delete Food Bank Report.*
7. *Delete Food Bank Report Controls will be displayed and the admin able to select data for a report to be deleted from the Food Bank Report database.*
8. *After input, the database informs the admin that the selected report if it exists is deleted from the database. If it does not exist, the database will not take any action and the system tells the admin that the report does not exist.*
9. *The admin is able to go back to the Food Bank Report Control if finish deleting reports.*

## Delete Distribution Location

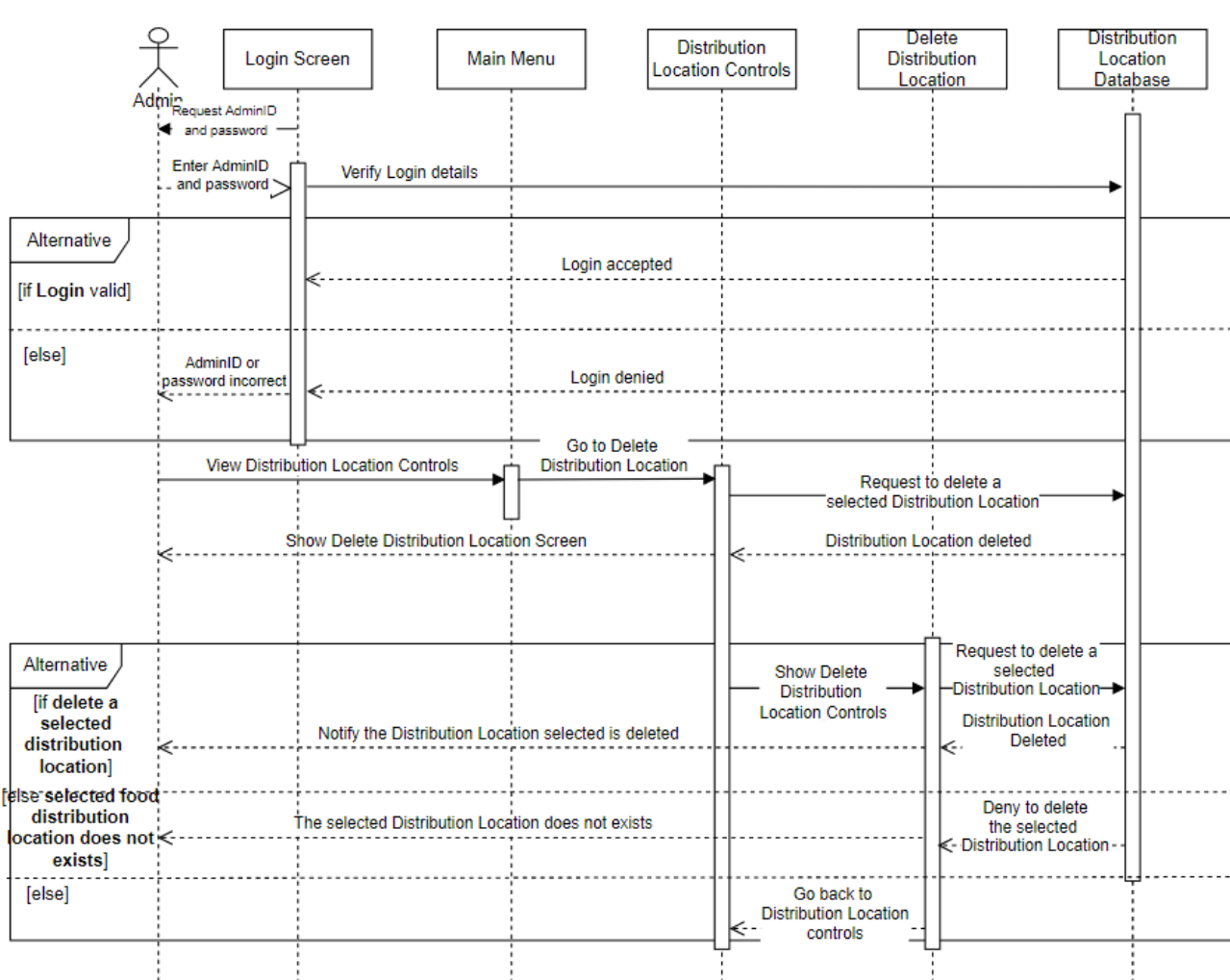


Figure 4.8 Admin's Delete Distribution Location Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Delete Distribution Location, the admin will navigate to Distribution Location Controls.

6. *In Distribution Location Control, the admin is able to navigate to Delete Distribution Location.*
7. *Delete Distribution Location Controls will be displayed and the admin able to select data for a location to be deleted from the Distribution Location database.*
8. *After input, the database informs the admin that the selected location if it exists is deleted from the database. If it does not exist, the database will not take any action and the system tells the admin that the location does not exist.*
9. *The admin is able to go back to the Distribution Location Control if finish deleting locations.*



## Delete Food Categories

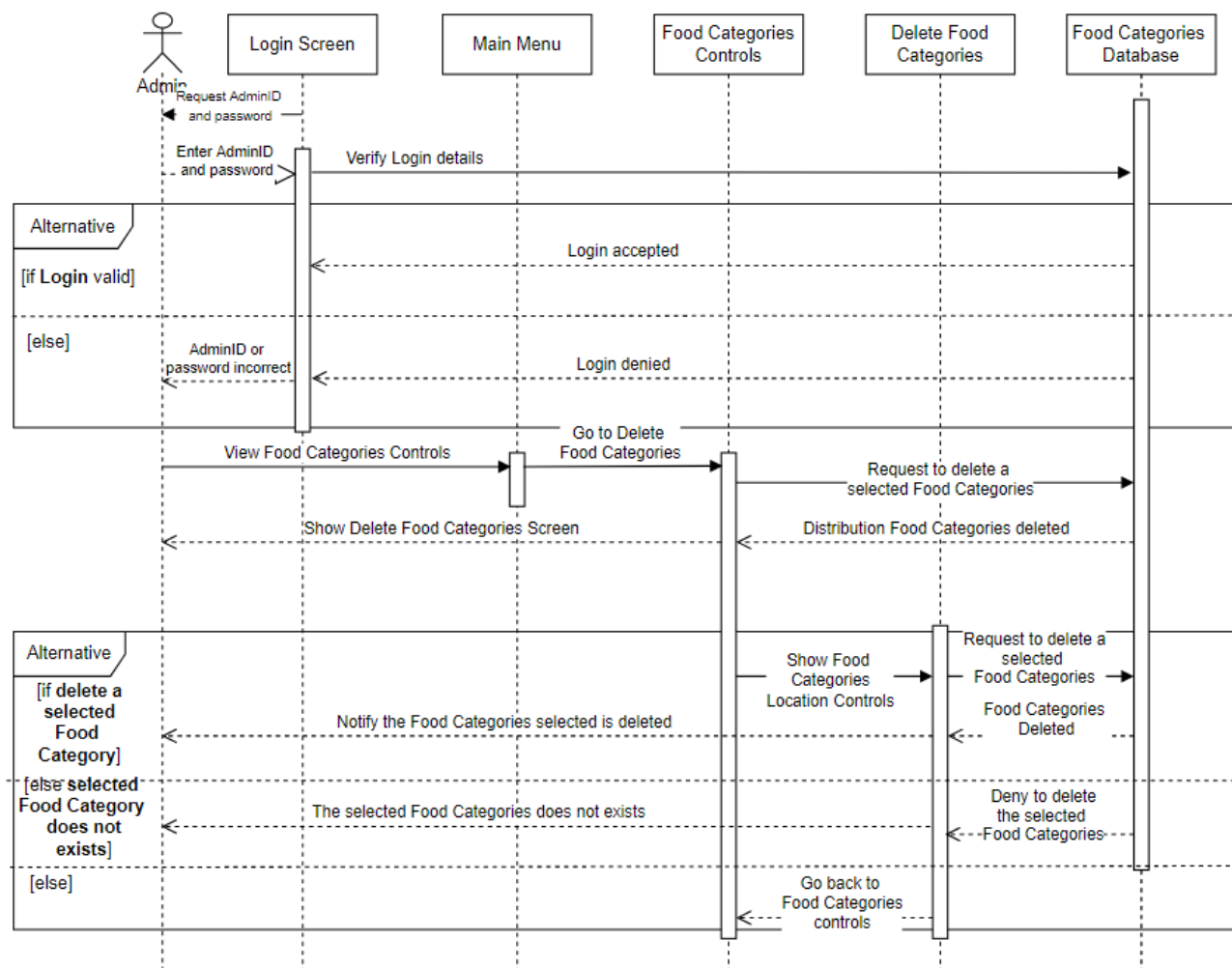


Figure 4.9 Admin's Food Categories Location Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Delete Food Categories, the admin will navigate to Food Categories Controls.
6. In Food Categories Control, the admin is able to navigate to Delete Food Categories.

7. *Delete Food Categories Controls will be displayed and the admin able to select data for a category to be deleted from the Food Categories database.*
8. *After input, the database informs the admin that the selected category if it exists is deleted from the database. If it does not exist, the database will not take any action and the system tells the admin that the category does not exist.*
9. *The admin is able to go back to the Food Categories Control if finish deleting categories.*

## Edit Users

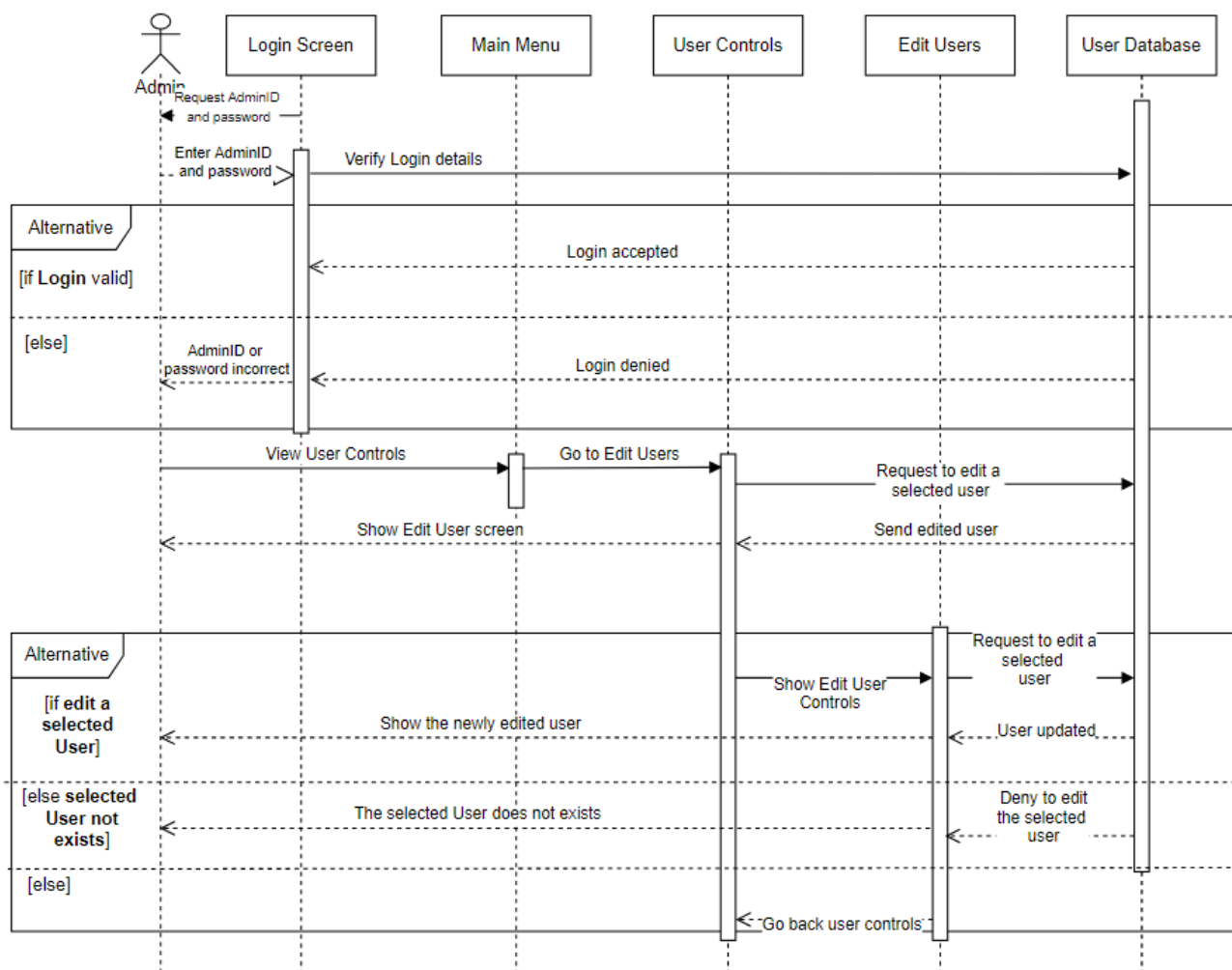


Figure 4.10 Admin's Edit Users Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Edit Users, the admin will navigate to User Controls.
6. In User Control, the admin is able to navigate to Edit Users.

7. *Edit Users Controls will be displayed and the admin able to select data for a user to be updated from the Users database.*
8. *After input, the database returns the edited users data to Edit Users Control to show that the user selected if it exists is updated. If it does not exist, the database informs the admin the user selected does not exist and no action is taken.*
9. *The admin is able to go back to the User Control if finish editing users.*

## Edit Food Bank Report

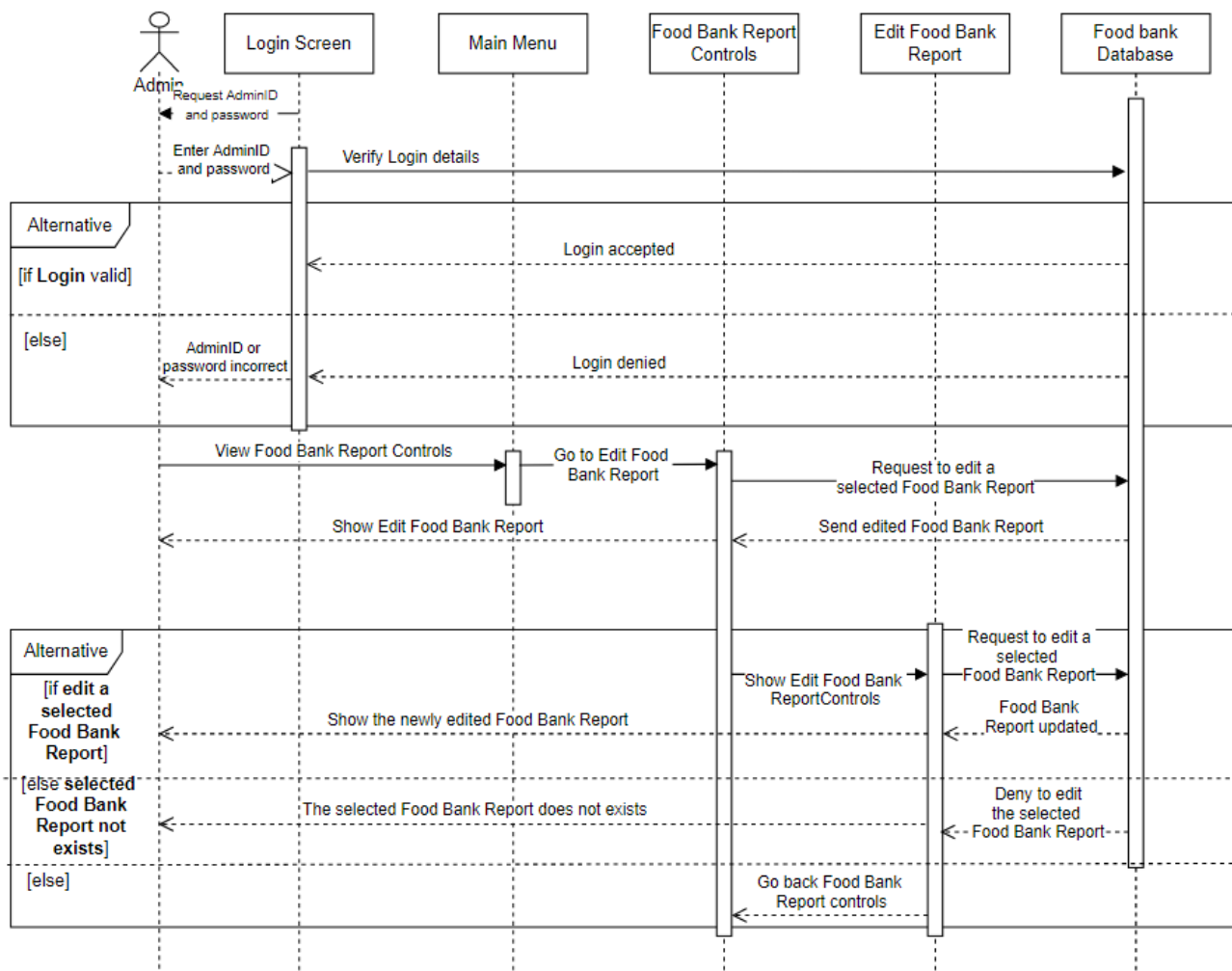


Figure 4.11 Admin's Edit Food Bank Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Edit Food Bank Report, the admin will navigate to Food Bank Report Controls.
6. In Food Bank Report Control, the admin is able to navigate to Edit Food Bank Report.

7. *Edit Food Bank Report Controls will be displayed and the admin able to select data for a report to be updated from the Food Bank Report database.*
8. *After input, the database returns the edited report data to Edit Food Bank Report Control to show that the report selected if it exists is updated. If it does not exist, the database informs the admin the report selected does not exist and no action is taken.*
9. *The admin is able to go back to the Food Bank Report Control if finish editing reports.*

## Edit Distribution Location

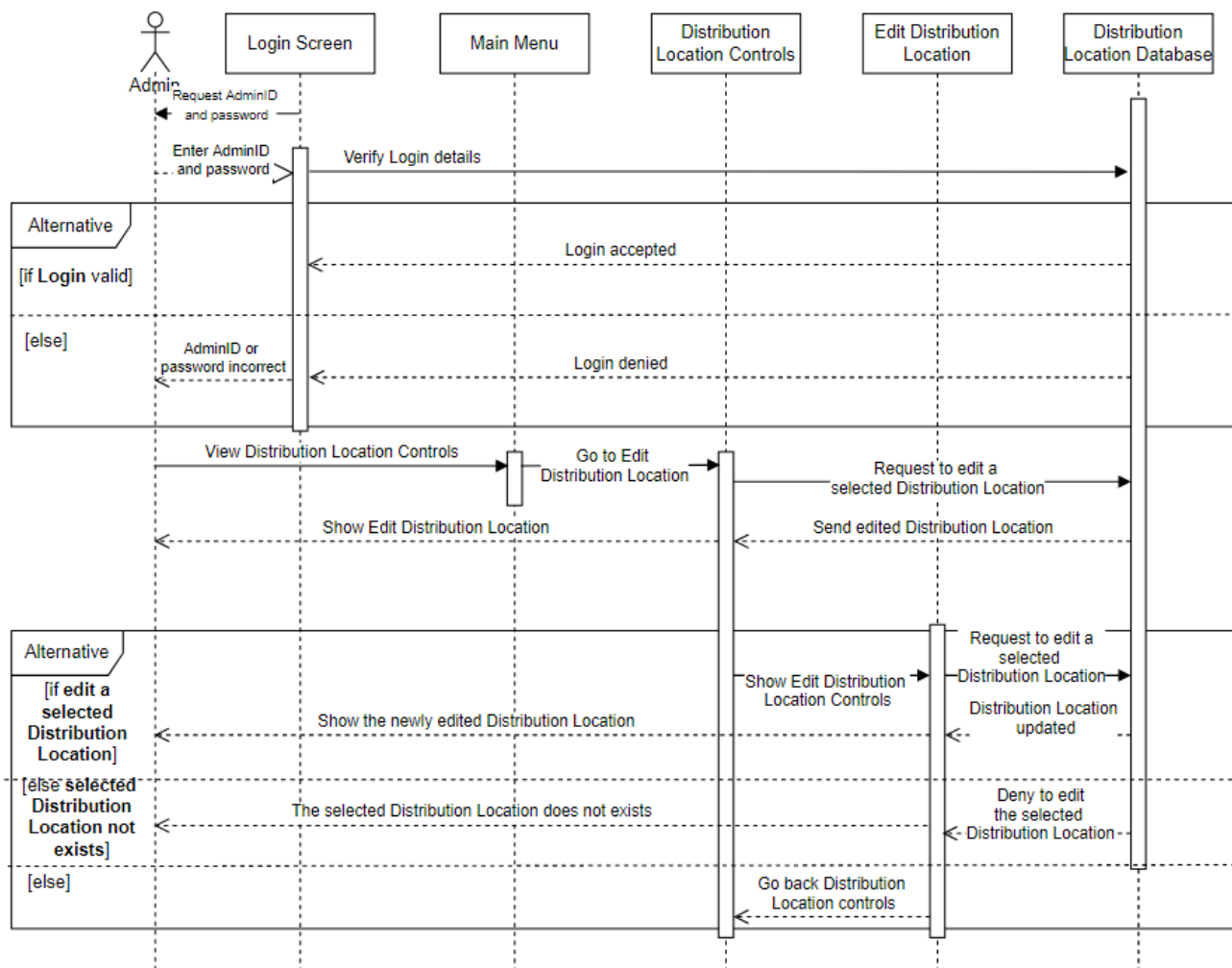


Figure 4.12 Admin's Edit Distribution Location Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Edit Distribution Location, the admin will navigate to Distribution Location Controls.
6. In Distribution Location Control, the admin is able to navigate to Edit Distribution Location.

7. *Edit Distribution Location Controls will be displayed and the admin able to select data for a location to be updated from the Distribution Location database.*
8. *After input, the database returns the edited location data to Edit Distribution Location Control to show that the location selected if it exists is updated. If it does not exist, the database informs the admin the location selected does not exist and no action is taken.*
9. *The admin is able to go back to the Distribution Location Control if finish editing locations.*



## Edit Food Categories

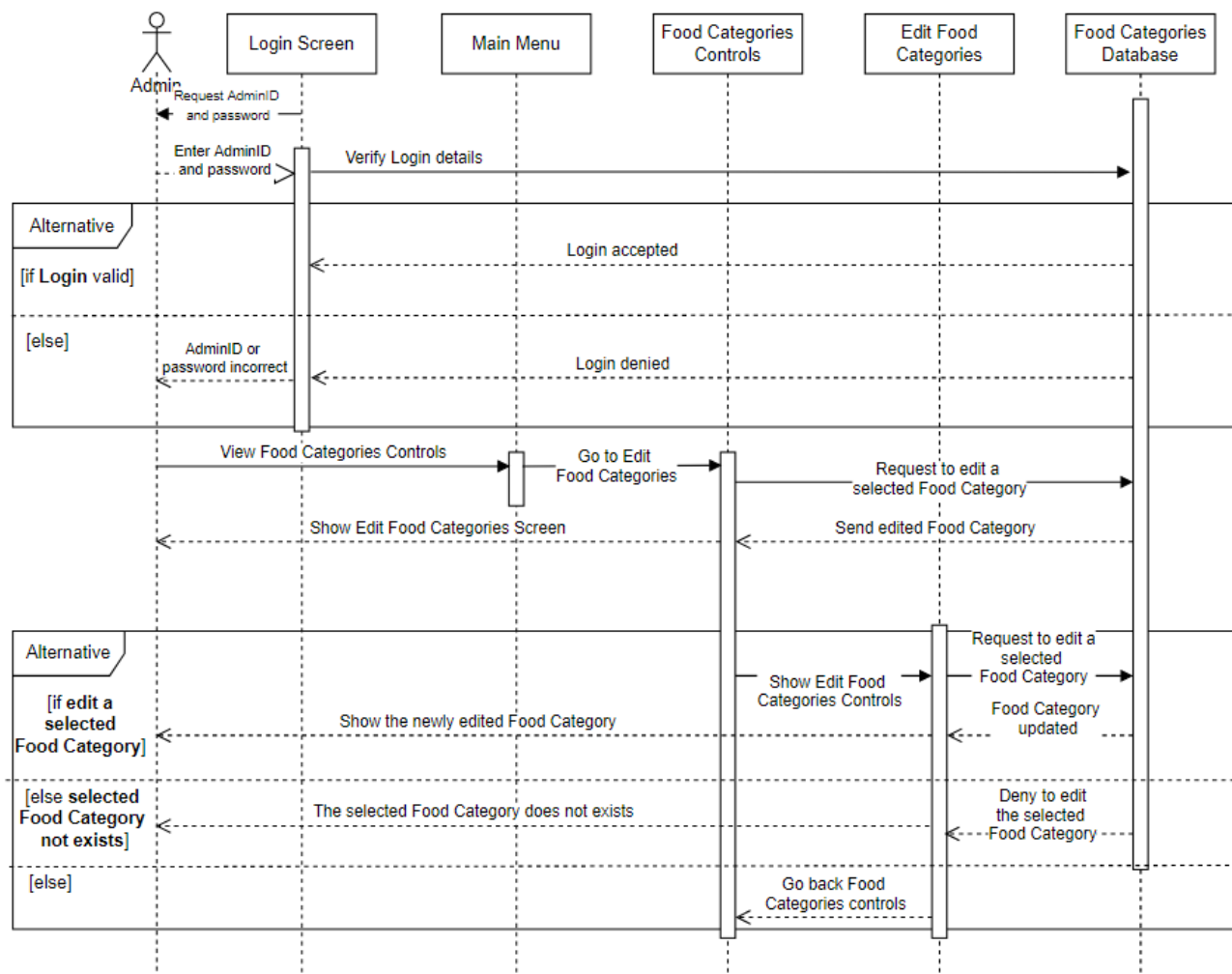


Figure 4.13 Admin's Edit Food Categories Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Edit Food Categories, the admin will navigate to Food Categories Controls.

6. *In Food Categories Control, the admin is able to navigate to Food Categories Location.*
7. *Edit Food Categories Controls will be displayed and the admin able to select data for a category to be updated from the Food Categories database.*
8. *After input, the database returns the edited category data to Edit Food Categories Control to show that the category selected if it exists is updated. If it does not exist, the database informs the admin the category selected does not exist and no action is taken.*
9. *The admin is able to go back to the Food Categories Control if finish editing categories.*

## Find Users

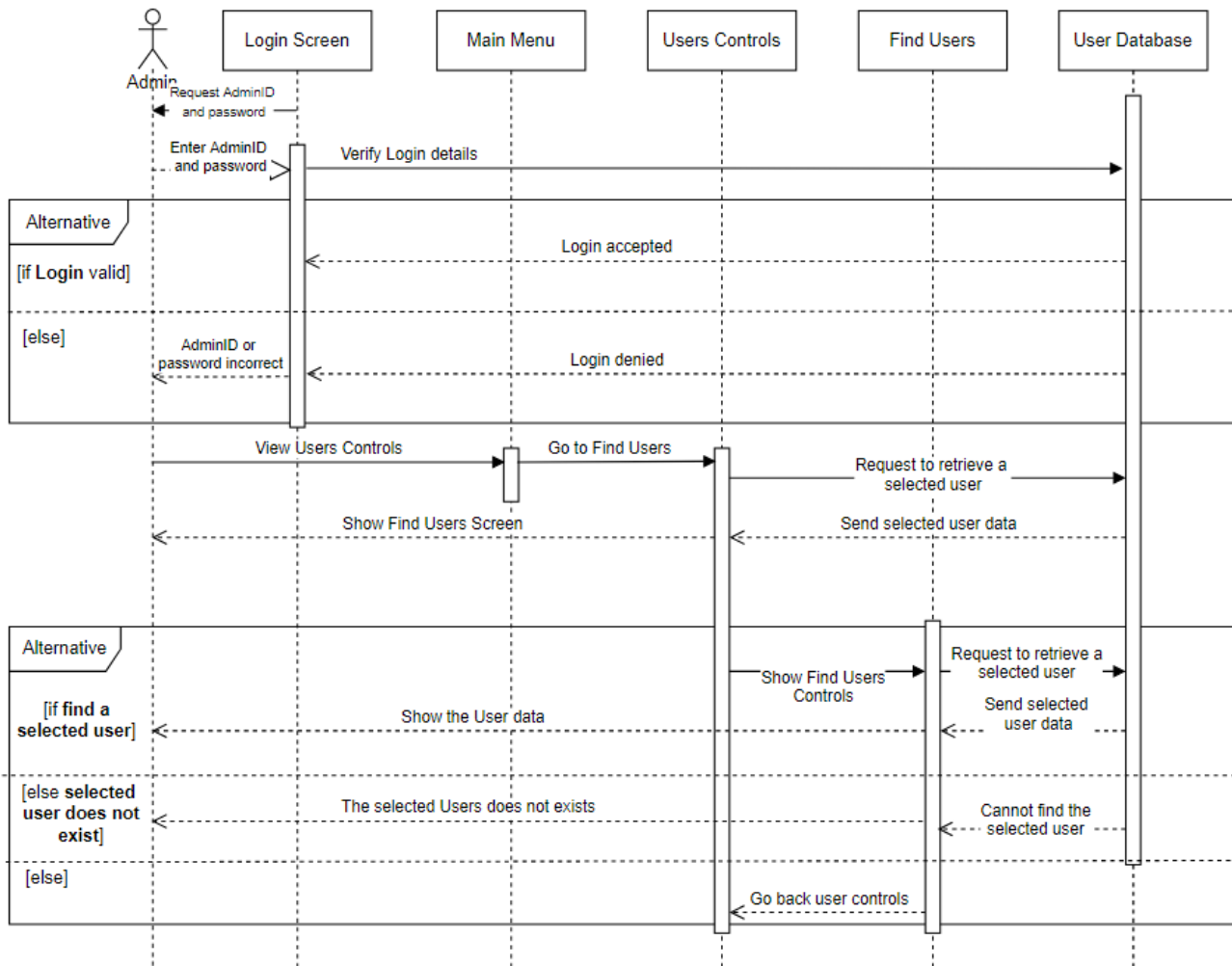


Figure 4.14 Admin's Find Users Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Find Users, the admin will navigate to User Controls.
6. In User Control, the admin is able to navigate to Find Users.

7. *Find Users Controls will be displayed and the admin able to search a user from the Users database.*
8. *The database then returns the user data to Find Users Control to show the user selected data if it exists. If it does not exist, the database informs the admin the user does not exist and no action is taken.*
9. *The admin is able to go back to the User Control if finish searching users.*

## Find Food Bank Report

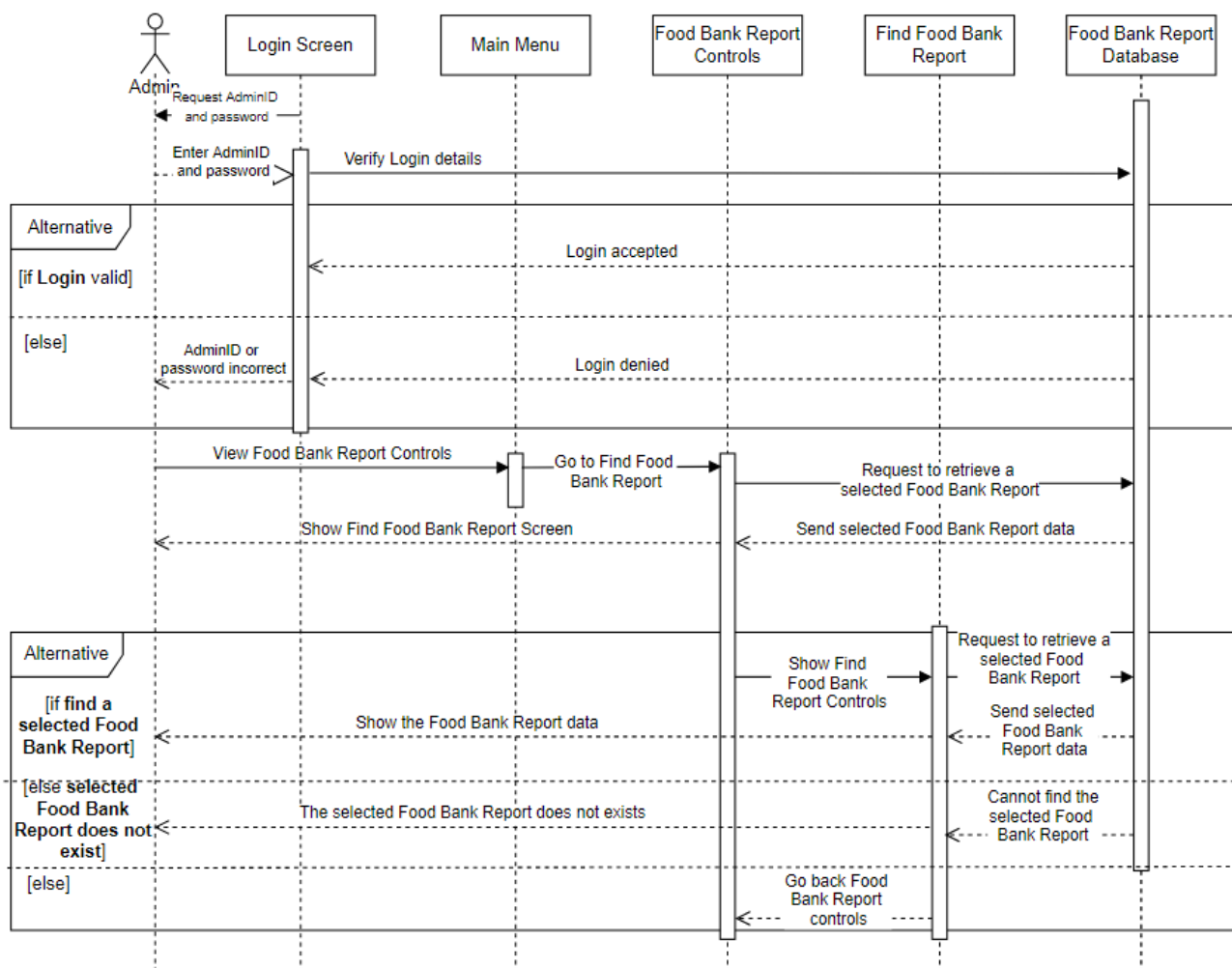


Figure 4.15 Admin's Find Food Bank Report Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Find Food Bank Report, the admin will navigate to Food Bank Report Controls.

6. *In Food Bank Report Control, the admin is able to navigate to Find Food Bank Report.*
7. *Find Food Bank Report Controls will be displayed and the admin able to search a report from the Food Bank Report database.*
8. *The database then returns the report data to Find Food Bank Report Control to show the report selected data if it exists. If it does not exist, the database informs the admin the report does not exist and no action is taken.*
9. *The admin is able to go back to the Food Bank Report Control if finish searching reports.*

## Find Distribution Location

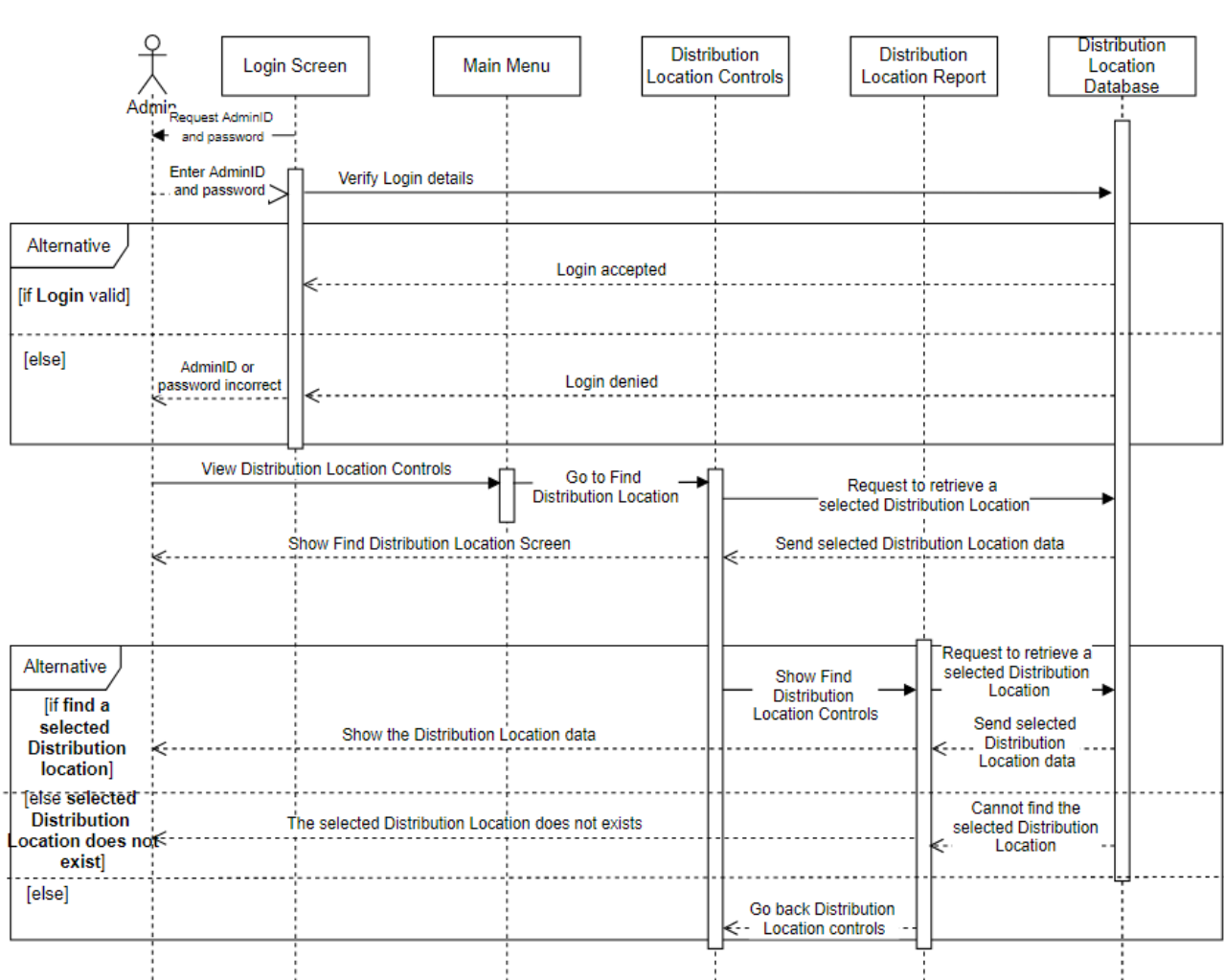


Figure 4.16 Admin's Find Distribution Location Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Find Distribution Location, the admin will navigate to Distribution Location Controls.
6. In Distribution Location Control, the admin is able to navigate to Find Distribution Location.

7. *Find Distribution Location Controls will be displayed and the admin able to search a location from the Distribution Location database.*
8. *The database then returns the location data to Find Distribution Location Control to show the location selected data if it exists. If it does not exist, the database informs the admin the location does not exist and no action is taken.*
9. *The admin is able to go back to the Distribution Location Control if finish searching locations.*



## Find Food Categories

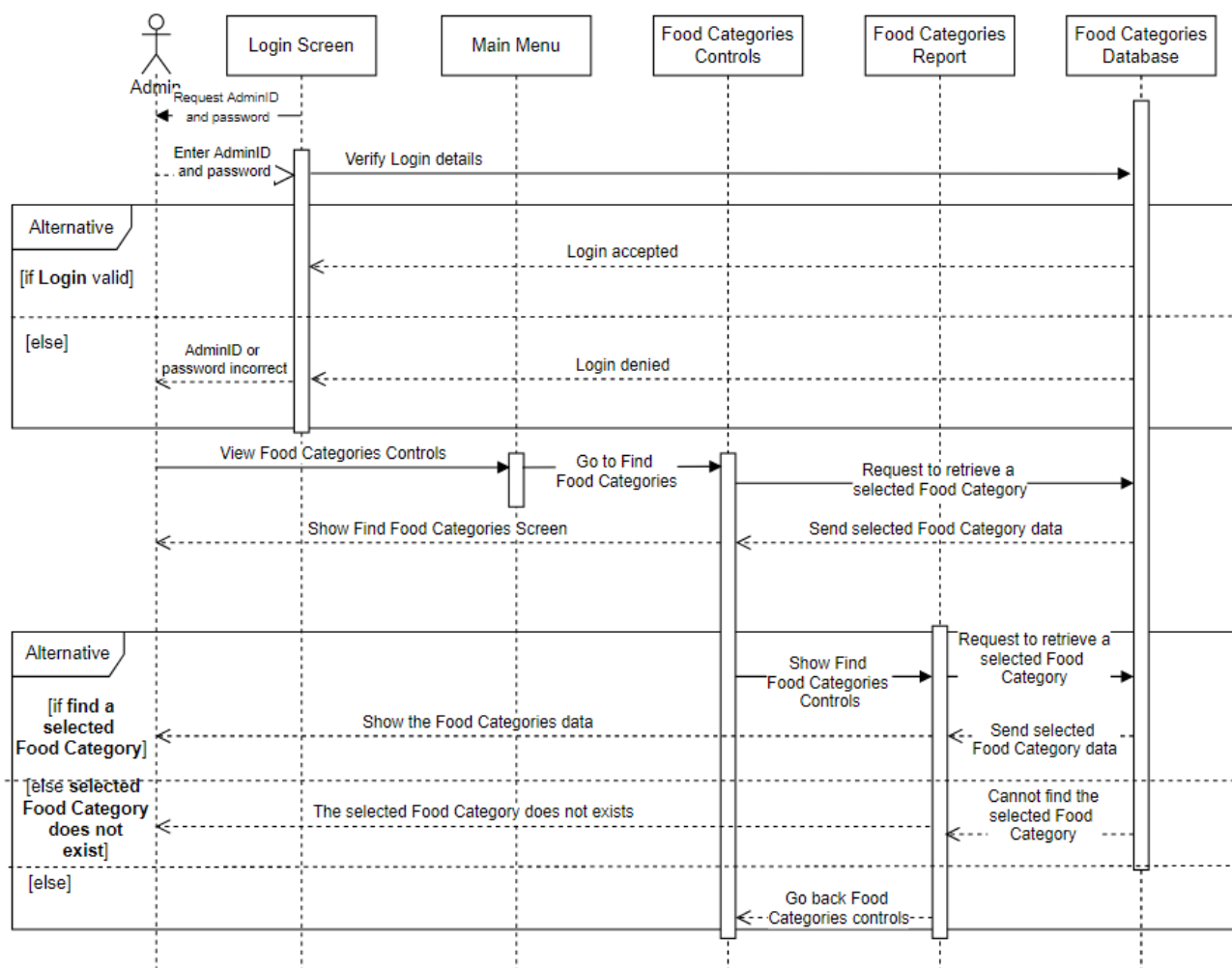


Figure 4.17 Admin's Find Food Categories Sequence Diagram

1. The system will request Admin ID and password.
2. The admin enters their Admin ID and password
3. The system will refer to the user database to search a match from the user input
4. If there is a match, the admin will be redirected to the admin's main menu, otherwise the system will prompt the admin to login again.
5. To Find Food Categories, the admin will navigate to Food Categories Controls.

6. *In Food Categories Control, the admin is able to navigate to Find Food Categories.*
7. *Find Food Categories Controls will be displayed and the admin able to search a category from the Food Categories database.*
8. *The database then returns the category data to Find Food Categories Control to show the category selected data if it exists. If it does not exist, the database informs the admin the category does not exist and no action is taken.*
9. *The admin is able to go back to the Food Categories Control if finish searching categories.*

## 5 Other Requirements

### 5.1 APPENDIX

#### 5.1.1 SURVEY

##### SECTION A

Section A identifies the demographic of the respondents.

1) Age  
22 responses

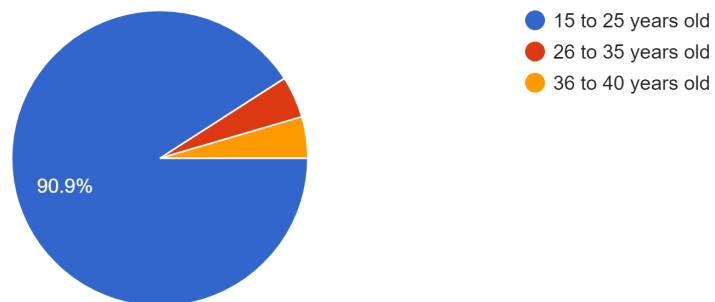
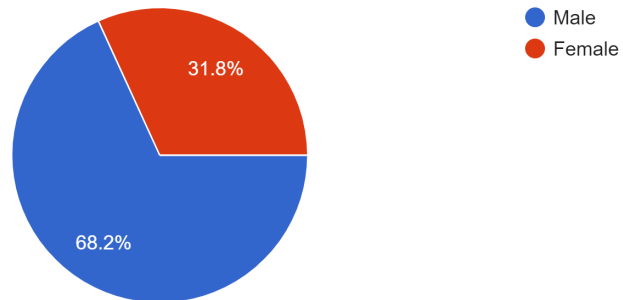


Figure 1.1 Pie Chart for Age

This pie chart shows 90.9% respondents were between 15 to 25 years old.

## 2) Gender

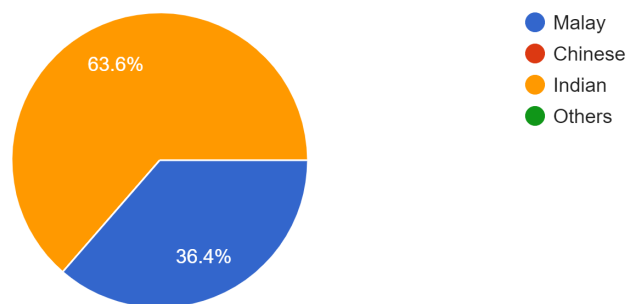
22 responses

*Figure 1.2 Pie Chart for Gender*

*This pie chart shows 68.2% of respondents were Males and 31.8% of respondents were Females.*

## 3) Race

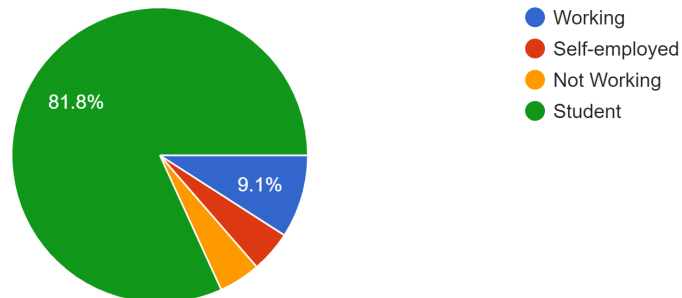
22 responses

*Figure 1.3 Pie Chart for Race*

*This pie chart shows 63.6% of respondents were Indian while 36.4% of respondents were Malay.*

## 4) Occupation

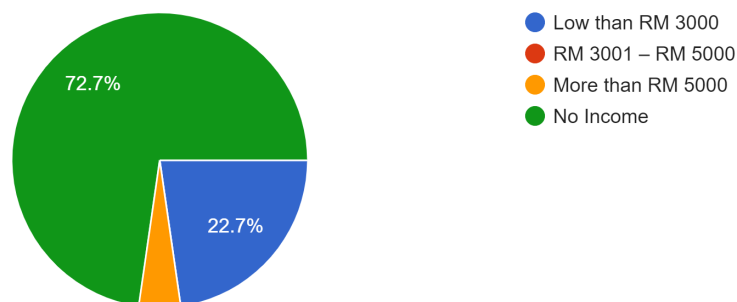
22 responses

*Figure 1.4 Pie Chart for Occupation*

*This pie chart shows 81.8% of respondents were Students. Other minorities were Workers, Self-employed people and unemployed people.*

## 5) Monthly Income

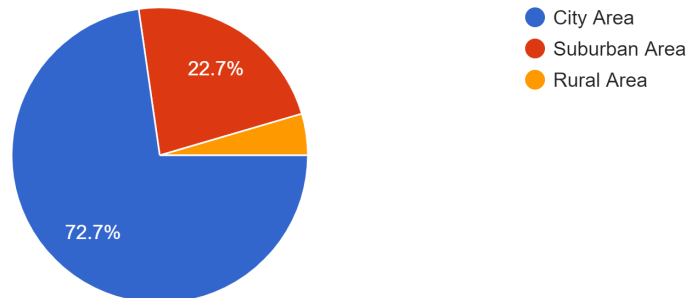
22 responses

*Figure 1.5 Pie Chart for Monthly Income*

*This pie chart shows the monthly income of the respondents. The majority is in the no income category while only 22.7% of the respondents earned less than RM 3000. This provides data on the state of wellbeing of everyone currently.*

## 6) Residential Area

22 responses

*Figure 1.6 Pie Chart for Residential Area*

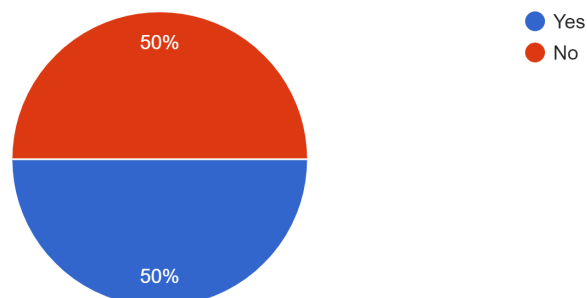
*This pie chart shows respondents who live in the type of residential areas. The majority of respondents live in city area, while 22.7% of the respondents live in the suburban area and the other few in rural areas.*

**SECTION B**

*Section B investigates the amount of respondents who have had a certain connection with any food banks.*

## 1) Have you ever been asked to donate food?

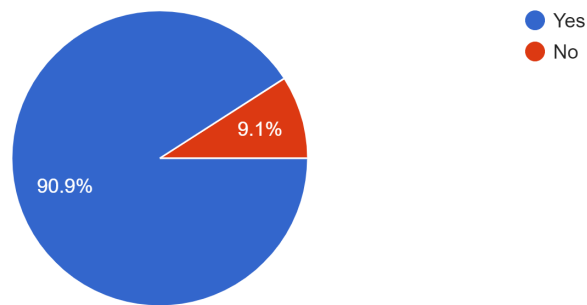
22 responses

*Figure 1.7 Pie Chart for percentage of those have who donated food*

*This pie chart shows the percentage of respondents who have donated food before. The result is even.*

2) Do you know the function of Food Bank?

22 responses

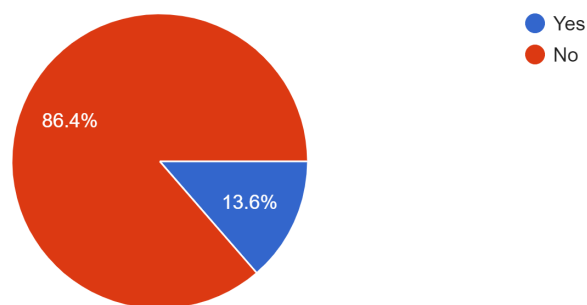


*Figure 1.8 Pie Chart for those who knows what food bank does*

*This pie chart shows 90.9% of the respondents understand what a food bank does while 9.1% of the respondents are clueless.*

3) Have you or your family ever used the Food Bank service?

22 responses



*Figure 1.9 Pie Chart shows respondents family ever use food bank service*

*This pie chart shows the percentage of respondents who have used a food bank service before. The majority being 86.4% answering yes while 13.6% answered no.*

## 4) How often do you donate?

22 responses

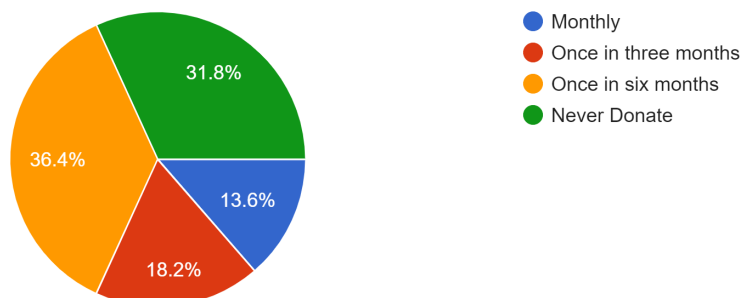


Figure 2.0 Pie Chart shows how often respondent donates

This pie chart shows 36.4% of the respondents donate once in six months, 13.6% respondents donate monthly, 18.2% of the respondents donate once in three months while 31.8% of the respondents never donated at all.

## 5) Where is your channel to donate?

18 responses

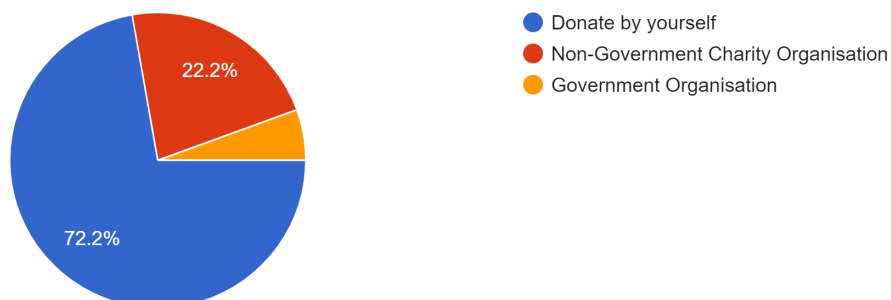


Figure 2.1 Pie Chart shows the channel respondents use to donate

This pie chart shows the majority of respondents donate by themselves while 22.2% approach a non governmental organization for their donations.

## SECTION C

In Section C, the survey identified how many respondents felt that a Food Bank Distribution App would be impactful to the community.



1) Do you agree if there are platforms such as apps on smartphones available for Food Bank in Malaysia?

22 responses

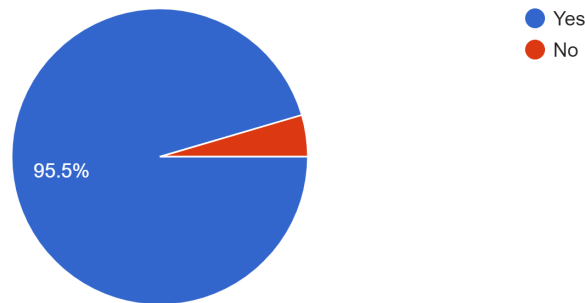


Figure 2.2 Pie Chart respondents agree having food bank for smartphones

This pie chart shows 95.6% of respondents answered Yes to the idea of food bank apps on smartphones.

2) If yes, what are the special features need to be implemented in the application?

22 responses

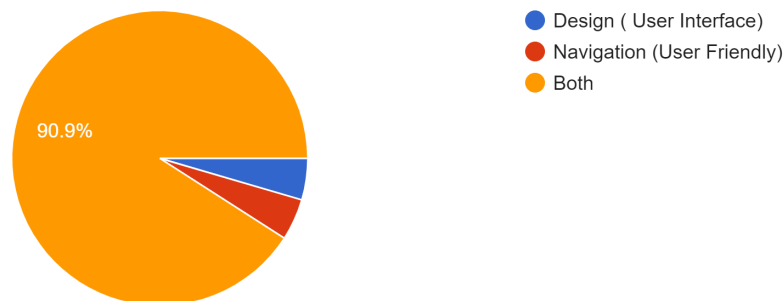
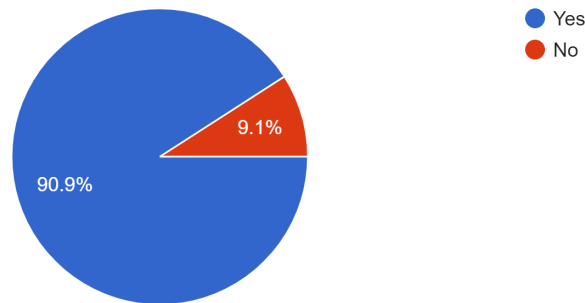


Figure 2.3 Pie Chart shows which feature respondents would like to have in app

This pie chart shows suggestions on what the respondents think might be useful for a food bank app. 90.9% of the respondents want a nice design and a user-friendly navigation page for food bank apps.

3) In your opinion, is the smartphone app for Food Bank in Malaysia helping in the donation process?

22 responses



*Figure 2.4 Pie Chart shows if respondents think app would be helpful in Malaysia*

*This pie chart shows how many respondents agree with the idea of food bank being convenient for those wanting to donate. The majority of the respondents, 90.9%, agree by saying Yes while 9.1% said No.*