Cardinal Cupboard

Business Process & Website Improvement
Use Case Specifications

Version 1.0

Revision History

Date	Version	Description	Author
01/Nov/21	1.0	Descriptions, use case diagrams, prototypes, class diagrams and sequence diagrams for 6 use cases.	Raul Chevalier

Table of Contents

1. Volunteer Login 5
   - 1.1 Brief Description 5
   - 1.2 Flow of Events 5
     - 1.2.1 Basic Flow : Access Granted 5
     - 1.2.2 Alternative Flow : Access Not Granted 5
   - 1.3 Special Requirements 6
   - 1.4 Pre-conditions 6
   - 1.5 Post-conditions 6
   - 1.6 Extension Points 6
   - 1.7 Use case Diagram 6
   - 1.8 Use case Prototype 7
   - 1.9 Class Diagram 7
   - 1.10 Sequence Diagram 8

2. Volunteer Logout 8
   - 2.1 Brief Description 8
   - 2.2 Flow of Events 8
     - 2.2.1 Basic Flow : Successful Logout 8
     - 2.2.2 Alternative Flow : None 8
   - 2.3 Special Requirements 8
   - 2.4 Pre-conditions 8
   - 2.5 Post-conditions 8
   - 2.6 Extension Points 8
   - 2.7 Use case Diagram 9
   - 2.8 Use case Prototype 9
   - 2.9 Class Diagram 9
   - 2.10 Sequence Diagram 10

3. Contact Staff Member 10
   - 3.1 Brief Description 10
   - 3.2 Flow of Events 10
     - 3.2.1 Basic Flow : Successful Submission 10
     - 3.2.2 Alternative Flow : None 10
   - 3.3 Special Requirements 10
   - 3.4 Pre-conditions 10
   - 3.5 Post-conditions 11
   - 3.6 Extension Points 11
   - 3.7 Use case Diagram 11
   - 3.8 Use case Prototype 11
   - 3.9 Class Diagram 12
   - 3.10 Sequence Diagram 12

4. Schedule a Pick-up 12
   - 4.1 Brief Description 12
   - 4.2 Flow of Events 13
     - 4.2.1 Basic Flow : Appointment Created 13
     - 4.2.2 Alternative Flow : Appointment Not Created 13
   - 4.3 Special Requirements 13

4.4 Pre-conditions 13
4.5 Post-conditions 13
4.6 Extension Points 13
4.7 Use case Diagram 13
4.8 Use case Prototype 14
4.9 Class Diagram 15
4.10 Sequence Diagram 15

5. Re-schedule a Pick-up 16
5.1 Brief Description 16
5.2 Flow of Events 16
5.2.1 Basic Flow : Appointment Change is Created 16
5.2.2 Alternative Flow : Appointment Change is Not Created 16
5.3 Special Requirements 16
5.4 Pre-conditions 16
5.5 Post-conditions 16
5.6 Extension Points 17
5.7 Use case Diagram 17
5.8 Use case Prototype 17
5.9 Class Diagram 18
5.10 Sequence Diagram 18

6. Cancel a Pick-up 19
6.1 Brief Description 19
6.2 Flow of Events 19
6.2.1 Basic Flow : Appointment is Canceled 19
6.2.2 Alternative Flow : None. 19
6.3 Special Requirements 19
6.4 Pre-conditions 19
6.5 Post-conditions 19
6.6 Extension Points 19
6.7 Use case Diagram 19
6.8 Use case Prototype 20
6.9 Class Diagram 21
6.10 Sequence Diagram 21

Use Cases Trace Matrix

The following table provides a trace matrix that associates the use cases described in this document with current system requirements.

Requirement ID	Actor	Description (system requirement)	Use Case
SR01	Volunteer	Volunteers shall be able to login to their account.	Volunteer Login
SR02	Volunteer	Volunteers shall be able to logoff from their account.	Volunteer Logout
SR03	Visitor	Website visitors should be able to contact a staff member.	Contact Staff Member
SR04	Recipient	Recipients shall be able to schedule an appointment for a pick-up.	Schedule a Pick-up
SR05	Recipient	Recipients shall be able to change an appointment for a pick-up.	Re-schedule a Pick-up
SR06	Recipient	Recipients shall be able to cancel an appointment for a pick-up.	Cancel a Pick-up

Use Case Specifications

1. Volunteer Login

1.1 Brief Description

A volunteer logs on the website to check for new events, messages, or assignments.

Main actor: Volunteer.

Secondary Actors: None.

1.2 Flow of Events

1.2.1 Basic Flow : Access Granted

- The main actor selects “LOGIN” at the Cardinal Cupboard’s Home page.
- The system displays the LOGIN page.
- The main actor enters his/her username and password.
- The main actor clicks on the LOGIN button.
- The system validates the credentials against the user database.
- The credentials are valid, and the system grants access and displays appropriate page.

1.2.2 Alternative Flow : Access Not Granted

- The main actor selects “LOGIN” at the Cardinal Cupboard’s Home page.
- The system displays the LOGIN page.
- The main actor enters his/her username and password.

- The main actor clicks on the LOGIN button.
- The system validates the credentials against the user database.
- The credentials are not valid, and the system will show an error message and display the refreshed LOGIN page.

1.3 Special Requirements

None.

1.4 Pre-conditions

The main actor is not logged on the Cardinal Cupboard's website.

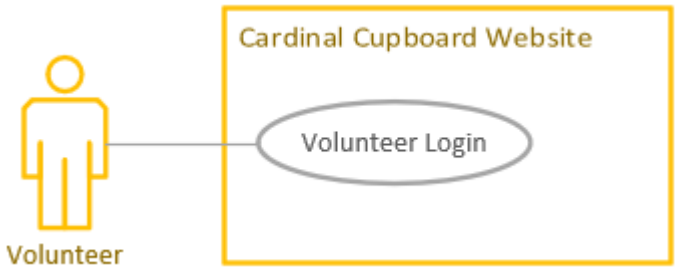
1.5 Post-conditions

The main actor is granted access to his/her customized page.

1.6 Extension Points

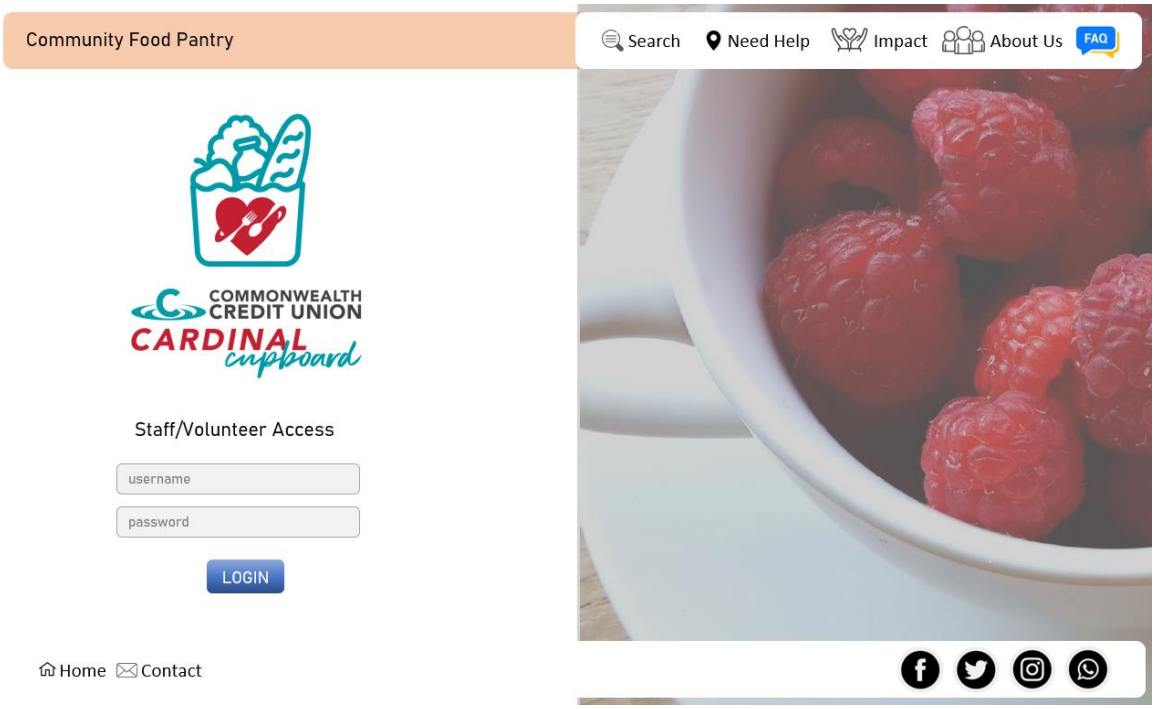
None.

1.7 Use case Diagram

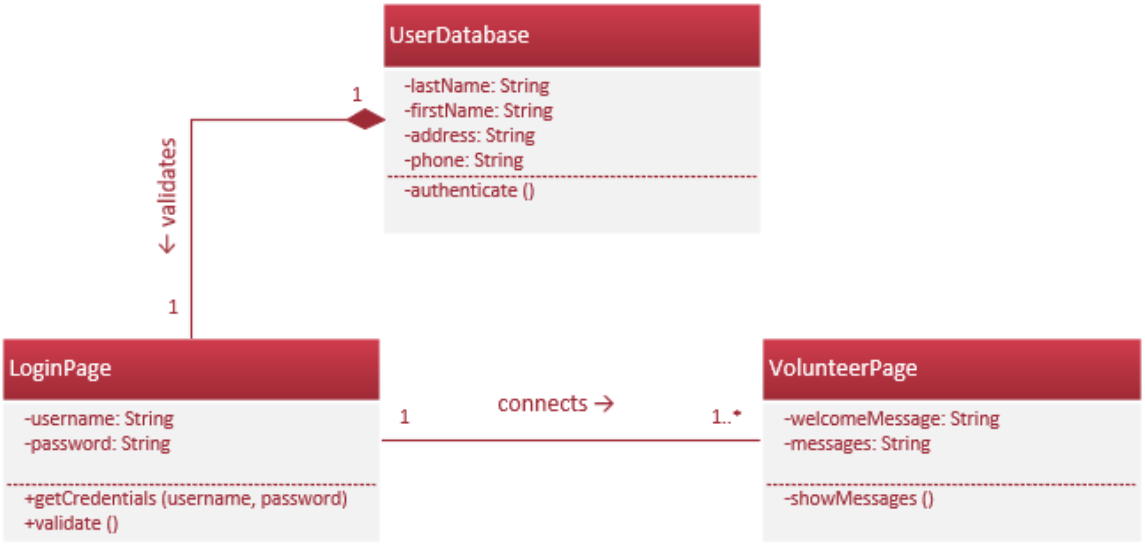


Interpretation: A volunteer uses the LOGIN page in the Cardinal Cupboard website to access his/her customized page to check for events, messages, or assignments.

1.8 Use case Prototype

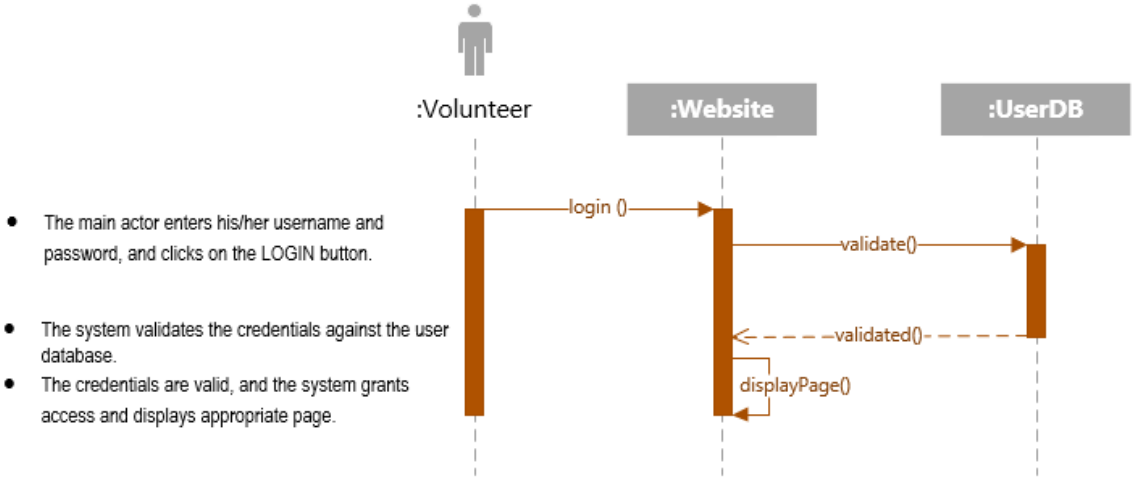


1.9 Class Diagram



Interpretation: The system *LoginPage* gets the user credentials (username and password) and requests validation to the *UserDatabase*. Next, the system *UserDatabase* will validate the user credentials and grant access. Finally, the system will display the customized *VolunteerPage*.

1.10 Sequence Diagram



2. Volunteer Logout

2.1 Brief Description

A volunteer logs off the website after checking his/her customized page for new events, messages, or assignments.

Main actor: Volunteer.

Secondary Actors: None.

2.2 Flow of Events

2.2.1 Basic Flow : Successful Logout

- The main actor selects “LOGOUT” at his/her customized page.
- The system securely ends the session.
- The system displays the LOGIN page.

2.2.2 Alternative Flow : None

2.3 Special Requirements

None.

2.4 Pre-conditions

The main actor is logged on the Cardinal Cupboard’s website.

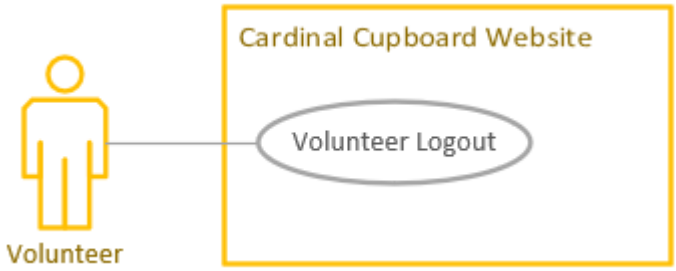
2.5 Post-conditions

The main actor is logged out from the system.

2.6 Extension Points

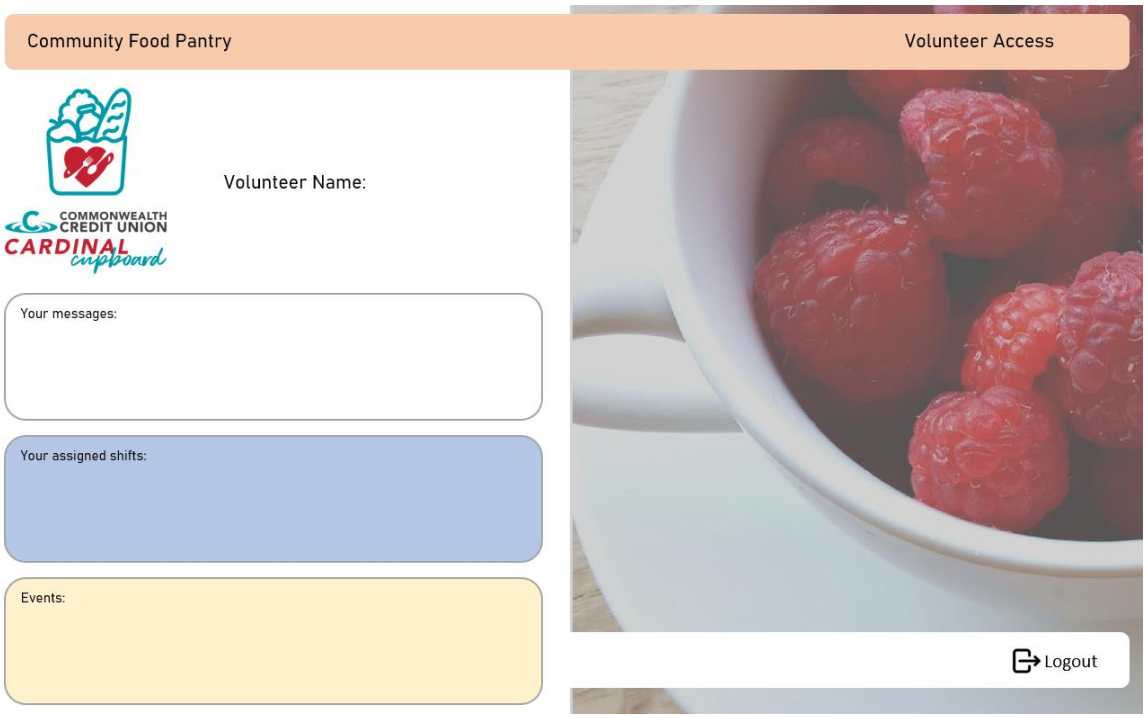
None.

2.7 Use case Diagram



Interpretation: A volunteer selects the LOGOUT button to request the system to securely end his/her session.

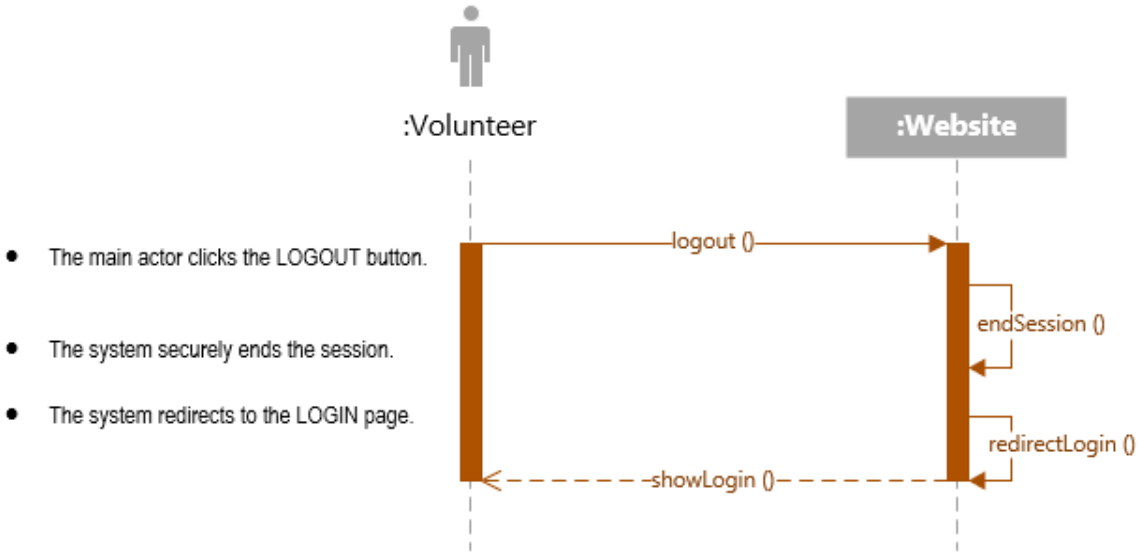
2.8 Use case Prototype



2.9 Class Diagram

Interpretation: The volunteer selects LOGOUT from his/her customized page. The system securely ends the session and displays the website Home Page.

2.10 Sequence Diagram



3. Contact Staff Member

3.1 Brief Description

A website visitor completes a contact form to requests a staff member additional information.

Main actor: Visitor.

Secondary Actors: None.

3.2 Flow of Events

3.2.1 Basic Flow : Successful Submission

- The main actor selects “Contact” at any of the Cardinal Cupboard website pages.
- The system displays a new page with a form to be filled out by the actor.
- The actor completes the form and clicks the SEND button.
- The request is sent to the staff account and waits for a confirmation.
- The system displays a confirmation message and redirects to the HOME page.

3.2.2 Alternative Flow : None

3.3 Special Requirements

None.

3.4 Pre-conditions

The main actor has additional questions and wants to contact a staff of the Cardinal Cupboard’s website.

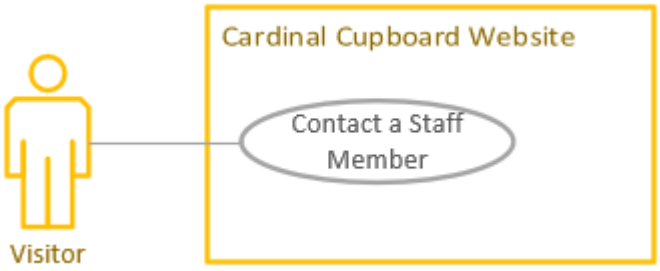
3.5 Post-conditions

The contact form is sent to the staff and the main actor is notified by the system.

3.6 Extension Points

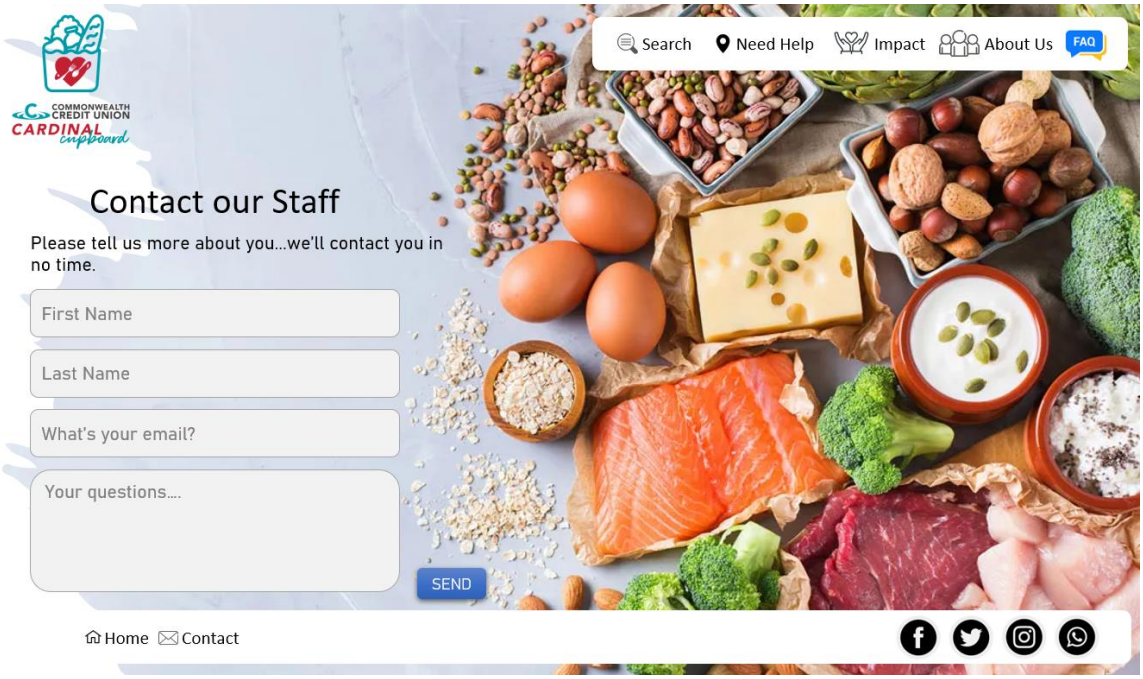
None.

3.7 Use case Diagram

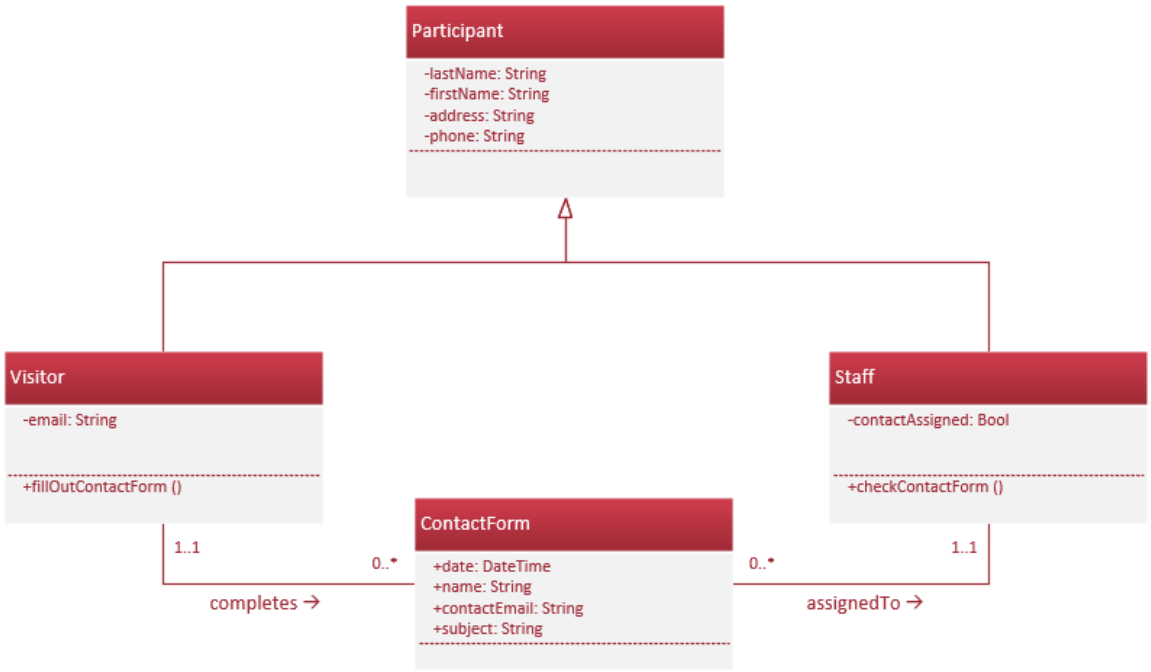


Interpretation: A visitor fills out a form with his/her contact information and questions or reasons asking a staff member for further information.

3.8 Use case Prototype



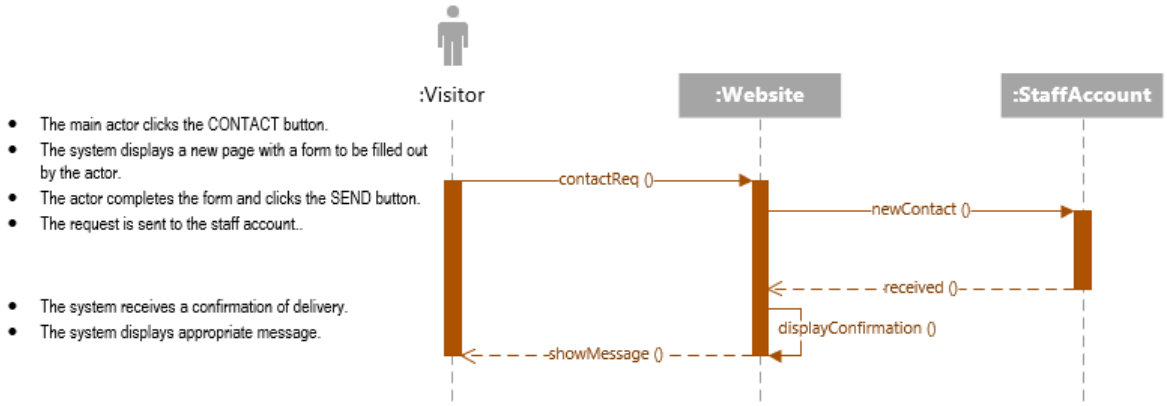
3.9 Class Diagram



Interpretation: The visitor completes a Contact Form with his/her contact information as well as subject or questions for the staff member. Both the visitor and the staff member have similar attributes (name, address, phone) so we are showing them as children of the Participant class to avoid repeating attributes in each class.

The system assigns the form to the corresponding staff member.

3.10 Sequence Diagram



4. Schedule a Pick-up

4.1 Brief Description

A person in need creates an appointment to pick up goods from the pantry.

Main actor: Recipient.

Secondary Actors: None.

4.2 Flow of Events

4.2.1 Basic Flow : Appointment Created

- The main actor selects “Need Help” at the Cardinal Cupboard’s Home page.
- The system displays the “Need Help” page where there will be an option to select “Click n’ Cook Recipes”, “Schedule a Pick-up”, “Re-schedule a Pick-up” or “Cancel a Pick-up”.
- The main actor selects “Schedule a Pick-up”.
- The system displays the “Schedule a Pick-up” page.
- The main actor enters his/her name, email, date, and time for the pick-up.
- The main actor clicks on the “Get Appointment” button.
- The system checks staff availability in the internal scheduler application.
- The system assigns the appointment to the available staff member and sends a confirmation message to the main actor.

4.2.2 Alternative Flow : Appointment Not Created

- The main actor selects “Need Help” at the Cardinal Cupboard’s Home page.
- The system displays the “Need Help” page where there will be an option to select “Click n’ Cook Recipes”, “Schedule a Pick-up”, “Re-schedule a Pick-up” or “Cancel a Pick-up”.
- The main actor selects “Schedule a Pick-up”.
- The system displays the “Schedule a Pick-up” page.
- The main actor enters his/her name, email, date, and time for the pick-up.
- The main actor clicks on the “Get Appointment” button.
- The system checks staff availability in the internal scheduler application.
- The system determines the requested date/time is not possible and sends a message to the main actor asking to create a new appointment.

4.3 Special Requirements

A scheduler application to keep track of events, appointments, and staff assignments.

4.4 Pre-conditions

The main actor must select the “Need Help” option at the Cardinal Cupboard’s Home page.

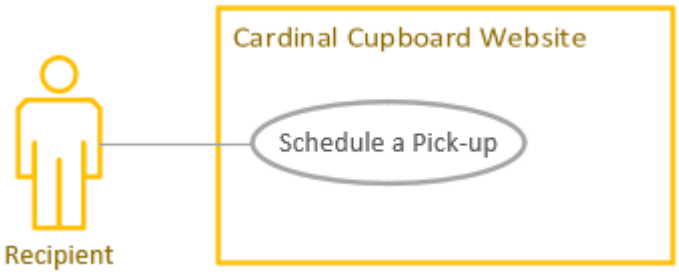
4.5 Post-conditions

An appointment for goods pick-up is created and a confirmation message is sent to the main actor.

4.6 Extension Points

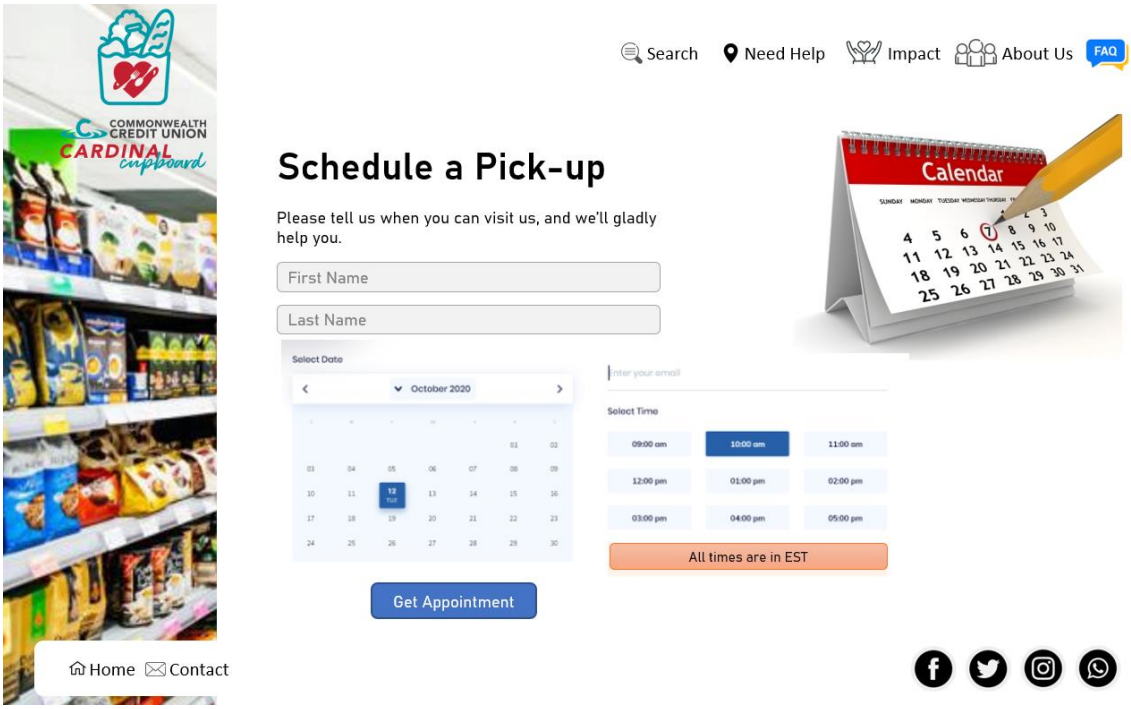
None.

4.7 Use case Diagram

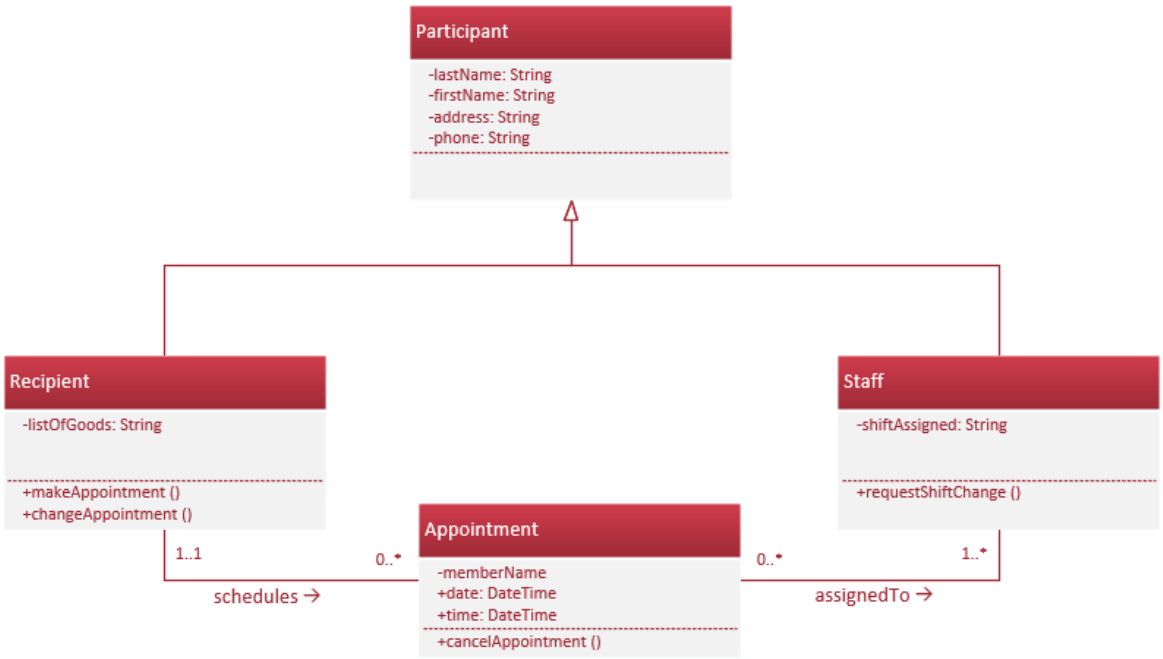


Interpretation: A person in need visits the website and creates an appointment to pick up goods from the pantry.

4.8 Use case Prototype



4.9 Class Diagram



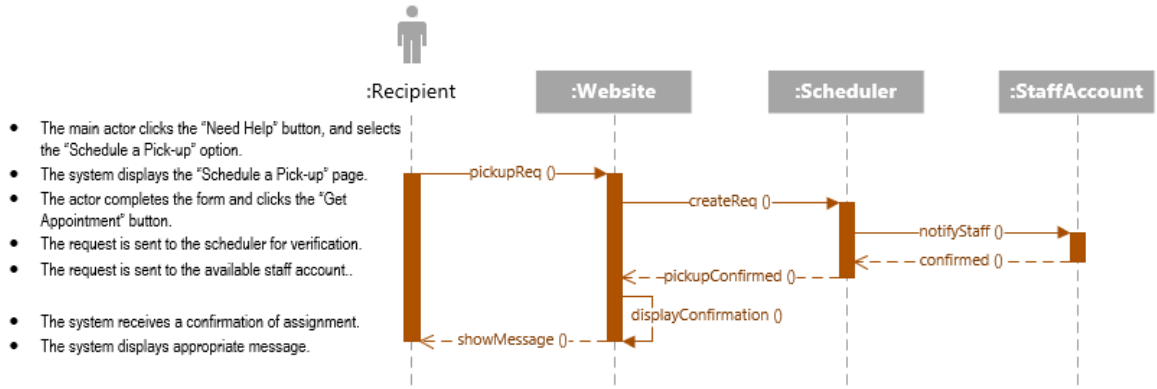
Interpretation: The person in need (recipient) creates an appointment to pick up goods at the pantry using the form on the website. The *makeAssignment* operation is used.

The system scheduler application will create the appointment and assign a staff member to be there and help with the delivery.

Both the recipient and the staff member have similar attributes (name, address, phone) so we are showing them as children of the Participant class to avoid repeating attributes in each class.

The system will display a confirmation message.

4.10 Sequence Diagram



5. Re-schedule a Pick-up

5.1 Brief Description

A person in need changes an appointment to pick up goods from the pantry.

Main actor: Recipient.

Secondary Actors: None.

5.2 Flow of Events

5.2.1 Basic Flow : Appointment Change is Created

- The main actor selects “Need Help” at the Cardinal Cupboard’s Home page.
- The system displays the “Need Help” page where there will be an option to select “Click n’ Cook Recipes”, “Schedule a Pick-up”, “Re-schedule a Pick-up” or “Cancel a Pick-up”.
- The main actor selects “Re-schedule a Pick-up”.
- The system displays the “Re-schedule a Pick-up” page.
- The main actor enters his/her name, email, date, and time for the pick-up.
- The main actor clicks on the “Get New Appointment” button.
- The system checks staff availability in the internal scheduler application.
- The system assigns the appointment to the available staff member and sends a confirmation message to the main actor.

5.2.2 Alternative Flow : Appointment Change is Not Created

- The main actor selects “Need Help” at the Cardinal Cupboard’s Home page.
- The system displays the “Need Help” page where there will be an option to select “Click n’ Cook Recipes”, “Schedule a Pick-up”, “Re-schedule a Pick-up” or “Cancel a Pick-up”.
- The main actor selects “Re-schedule a Pick-up”.
- The system displays the “Re-schedule a Pick-up” page.
- The main actor enters his/her name, email, date, and time for the pick-up.
- The main actor clicks on the “Get New Appointment” button.
- The system checks staff availability in the internal scheduler application.
- The system determines the requested date/time is not possible and sends a message to the main actor asking to create a new appointment.

5.3 Special Requirements

A scheduler application to keep track of events, appointments, and staff assignments.

5.4 Pre-conditions

The main actor must select the “Need Help” option at the Cardinal Cupboard’s Home page.

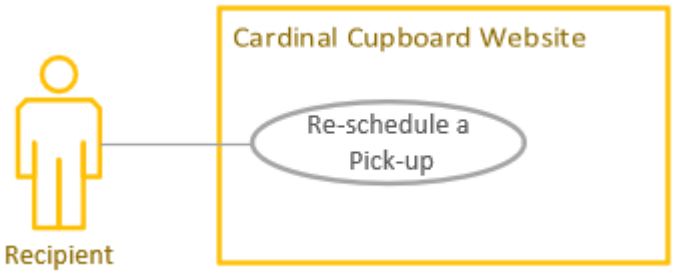
5.5 Post-conditions

A new appointment for goods pick-up is created and a confirmation message is sent to the main actor.

5.6 Extension Points

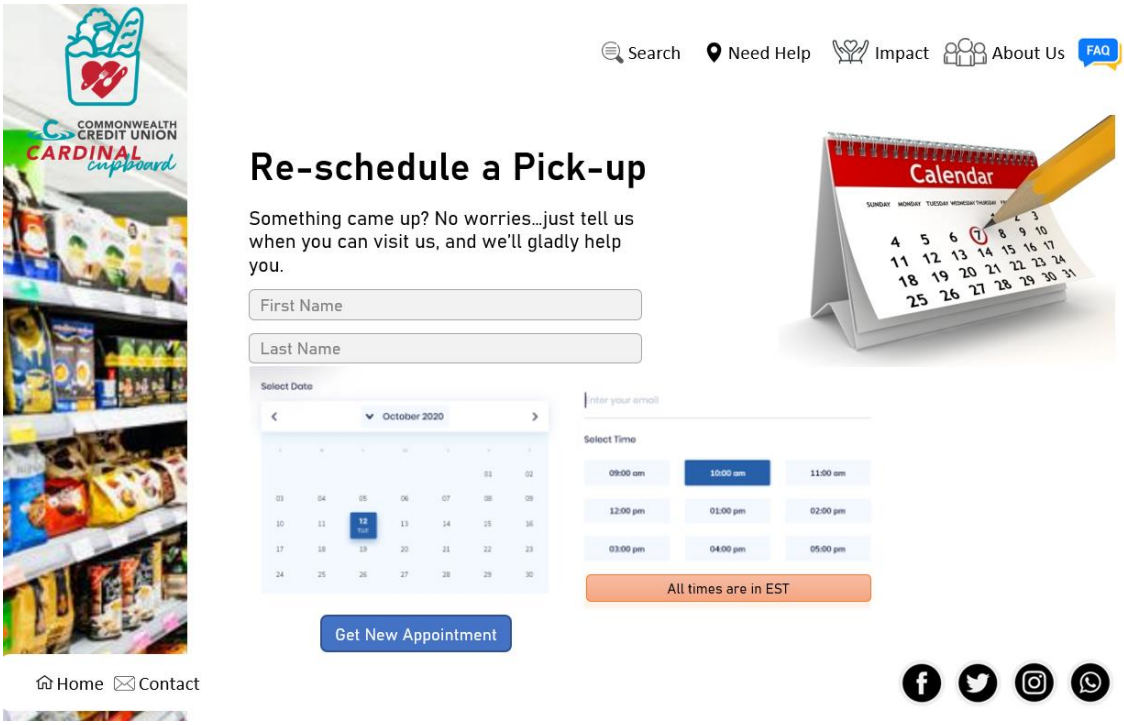
None.

5.7 Use case Diagram

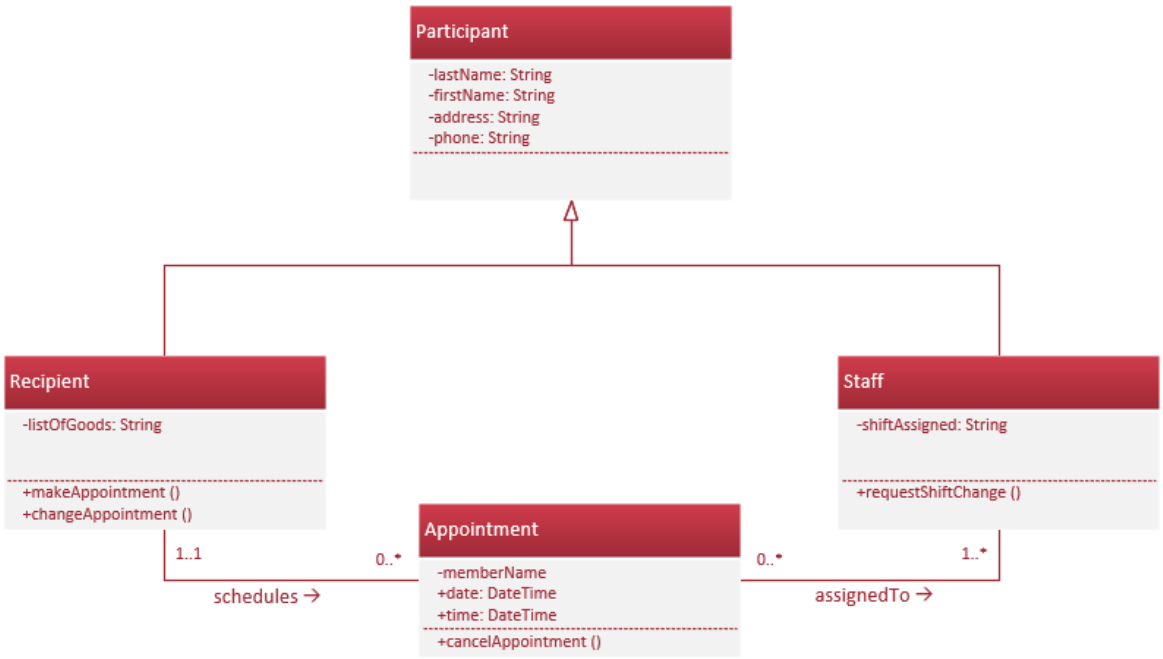


Interpretation: A person in need visits the website and changes an appointment to pick up goods from the pantry.

5.8 Use case Prototype



5.9 Class Diagram



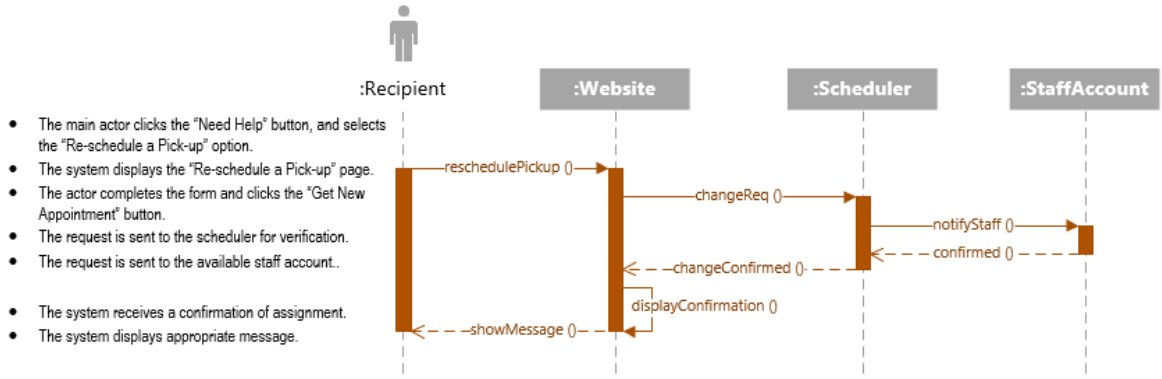
Interpretation: The person in need (recipient) creates a new appointment to pick up goods at the pantry using the form on the website. The *changeAssignment* operation is used.

The system scheduler application will create the new appointment and assign a staff member to be there and help with the delivery.

Both the recipient and the staff member have similar attributes (name, address, phone) so we are showing them as children of the Participant class to avoid repeating attributes in each class.

The system will display a confirmation message.

5.10 Sequence Diagram



6. Cancel a Pick-up

6.1 Brief Description

A person in need cancels an appointment to pick up goods from the pantry.

Main actor: Recipient.

Secondary Actors: None.

6.2 Flow of Events

6.2.1 Basic Flow : Appointment is Canceled

- The main actor selects “Need Help” at the Cardinal Cupboard’s Home page.
- The system displays the “Need Help” page where there will be an option to select “Click n’ Cook Recipes”, “Schedule a Pick-up”, “Re-schedule a Pick-up” or “Cancel a Pick-up”.
- The main actor selects “Cancel a Pick-up”.
- The system displays the “Cancel a Pick-up” page.
- The main actor enters his/her name, email, date, and time for the pick-up.
- The main actor clicks on the “Cancel Appointment” button.
- The system sends the request to the internal scheduler application.
- The system receives confirmation of appointment cancellation and send a confirmation message to the main actor.

6.2.2 Alternative Flow : None.

6.3 Special Requirements

A scheduler application to keep track of events, appointments, and staff assignments.

6.4 Pre-conditions

The main actor must select the “Need Help” option at the Cardinal Cupboard’s Home page.

6.5 Post-conditions

A previous appointment for goods pick-up is canceled and a confirmation message is sent to the main actor.

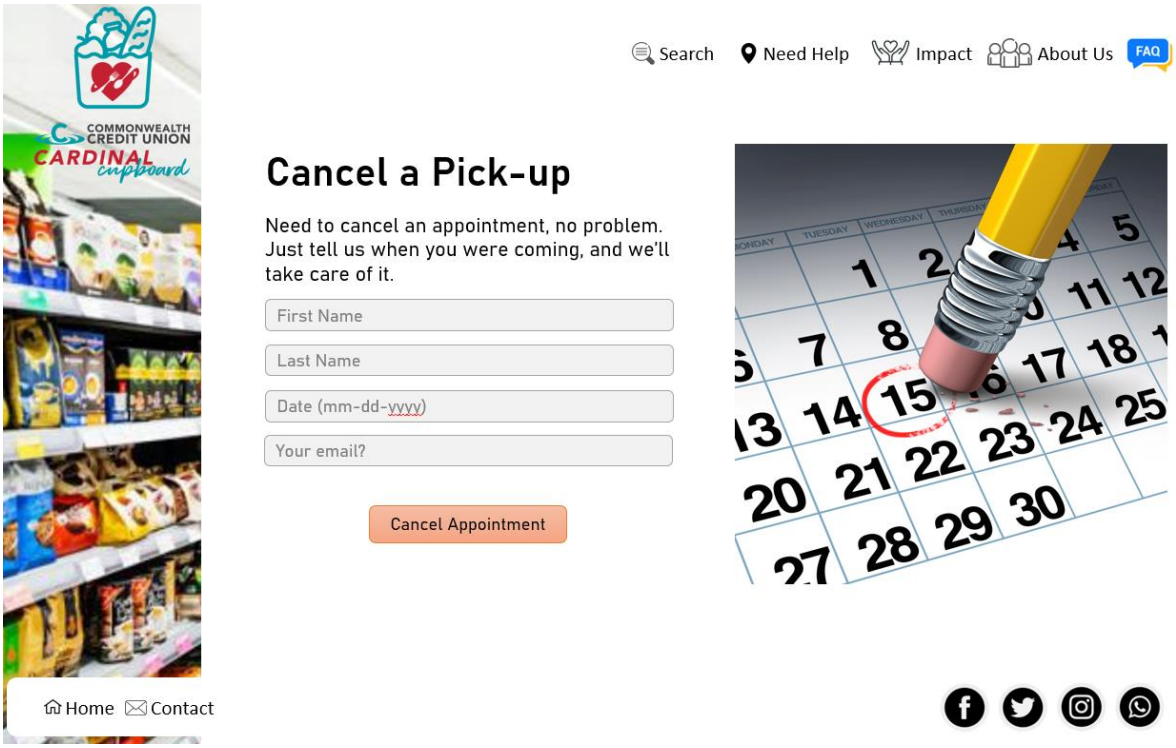
6.6 Extension Points

None.

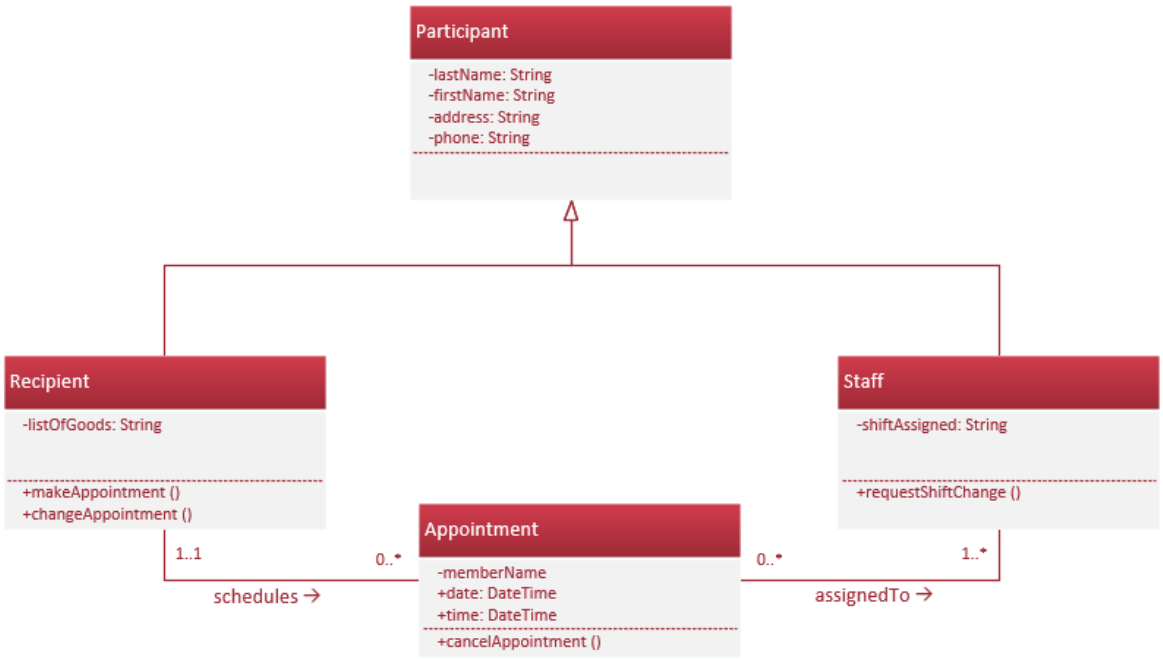
6.7 Use case Diagram

Interpretation: A person in need visits the website and cancels an appointment to pick up goods from the pantry.

6.8 Use case Prototype



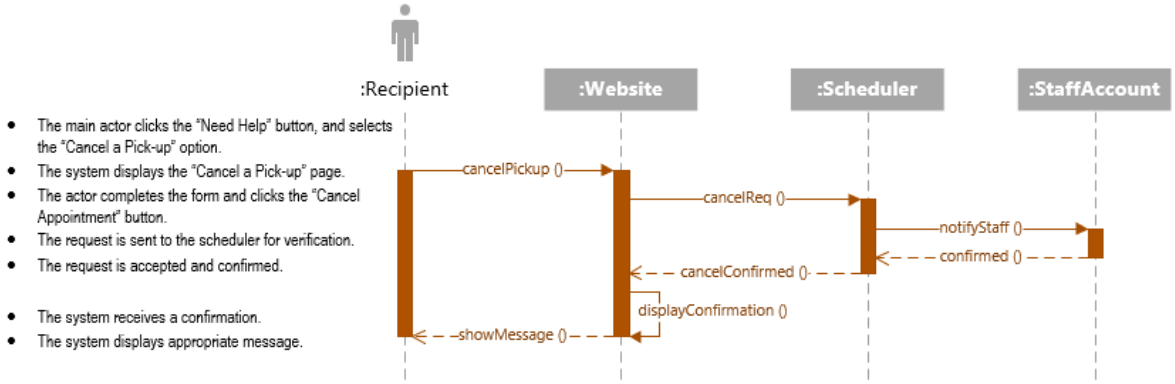
6.9 Class Diagram



Interpretation: The person in need (recipient) creates a new appointment to pick up goods at the pantry using the form on the website. The *cancelAppointment* operation within the Appointment class is used.

The system scheduler application will create the new appointment and assign a staff member to be there and help with the delivery.

Both the recipient and the staff member have similar attributes (name, address, phone) so we are showing them as children of the Participant class to avoid repeating attributes in each class.

The system will display a confirmation message.

6.10 Sequence Diagram