Non-functional requirement:

1.Operational Requirements

1.1. The software will run on PC (both Windows or Mac OS, with web browser installed)

1.2. The software should automatically back up to the database once the data is changed by either coordinator or PV.

2.Performance Requirements

2.1.The software will store a new posted volunteering service in 10 seconds or less.

2.2.The software should be able to send everyone in the PV list a notification that there is a new requested volunteering service after it is posted.

2.3.The software will send coordinator a notification when someone responded to the requested volunteering service.

2.4.The software should be able to export the PV list with their basic information

3.Security Requirements

3.1.Only coordinator can post volunteering services on the software.

3.2.Only PV who registered on the PV list can respond to the requested volunteering services.

3.3.Only coordinator can export the PV list with their basic information.

3.4.Only coordinator can see PV's information.

Functional requirement:

1.Manage volunteering service request

1.1. Coordinator posts new volunteering service request to the system.

1.2. Coordinator modifies volunteering service's information on the system.

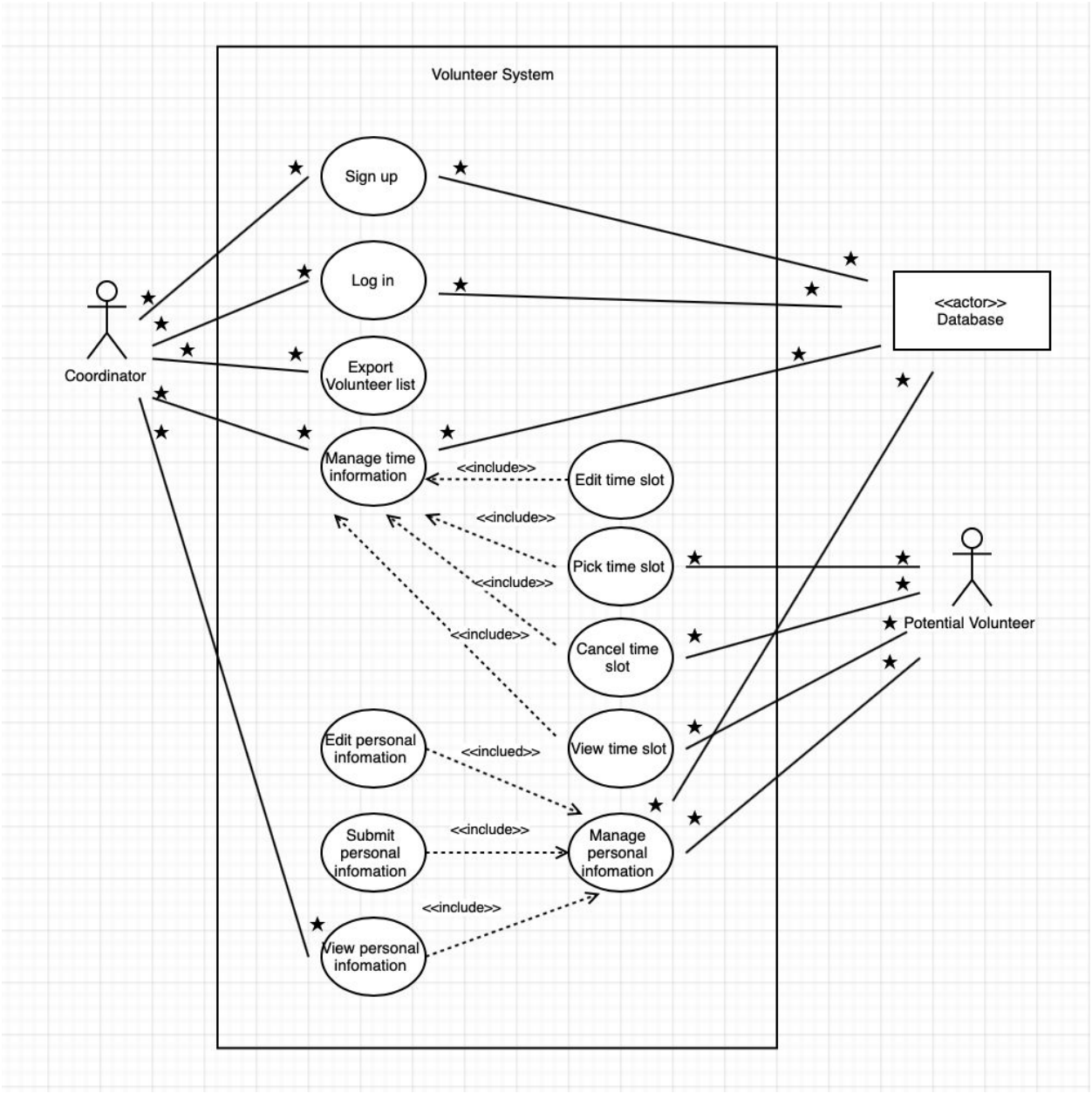
1.3. Coordinator deletes a volunteering service on the system.

1.4. Coordinator broadcasts volunteering service to all PV.

2. Service Sign Up Availability

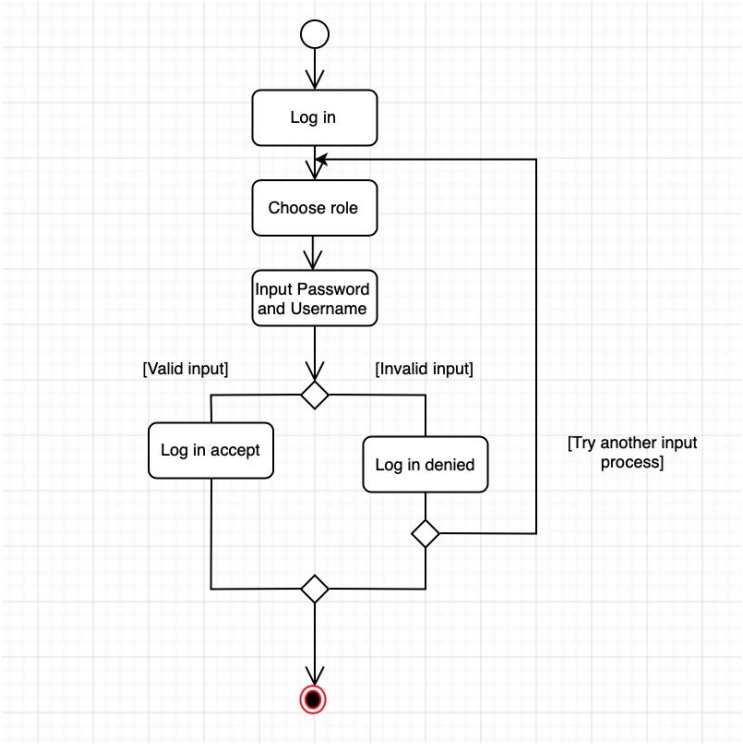
2.1. Coordinator sets the amount of volunteer needed for a time slot, if the amount is 0, then the time slot becomes unavailable to sign up.

User case diagram

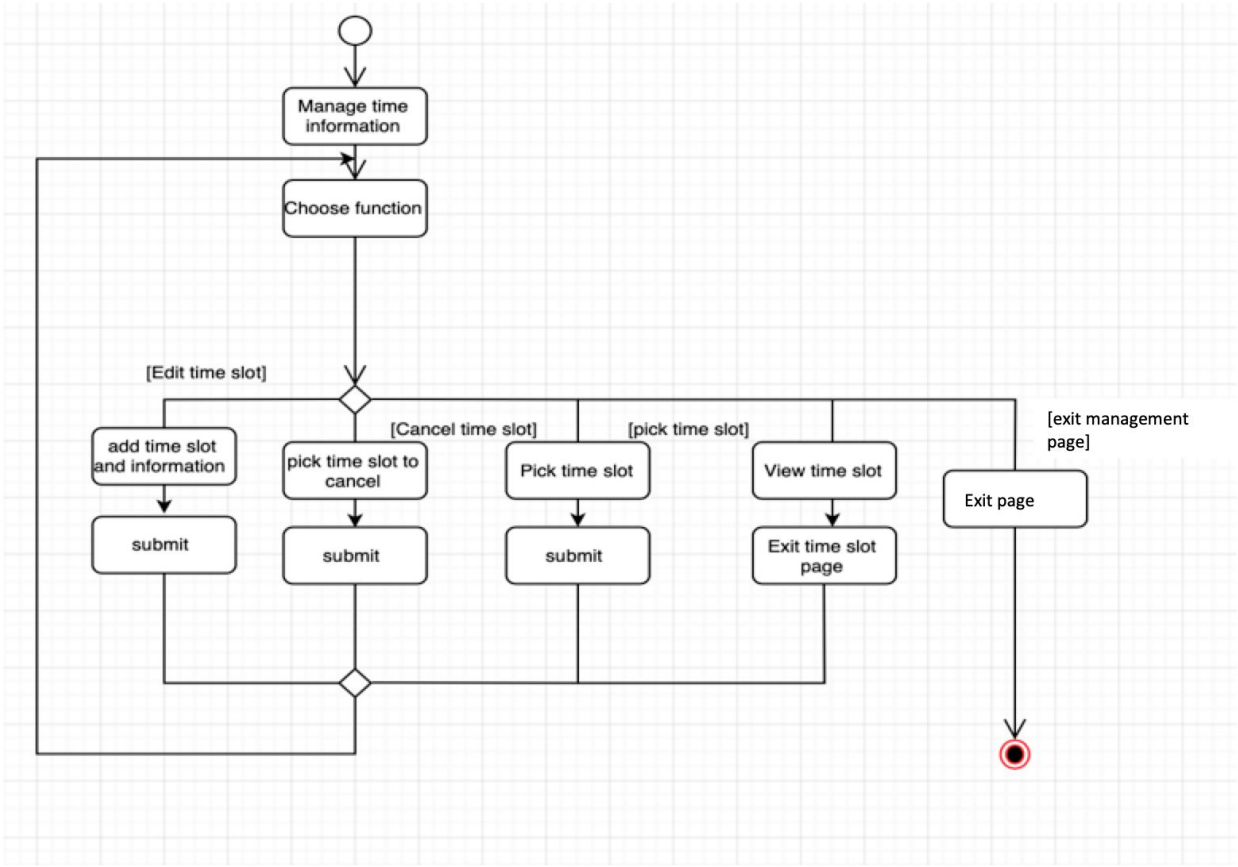


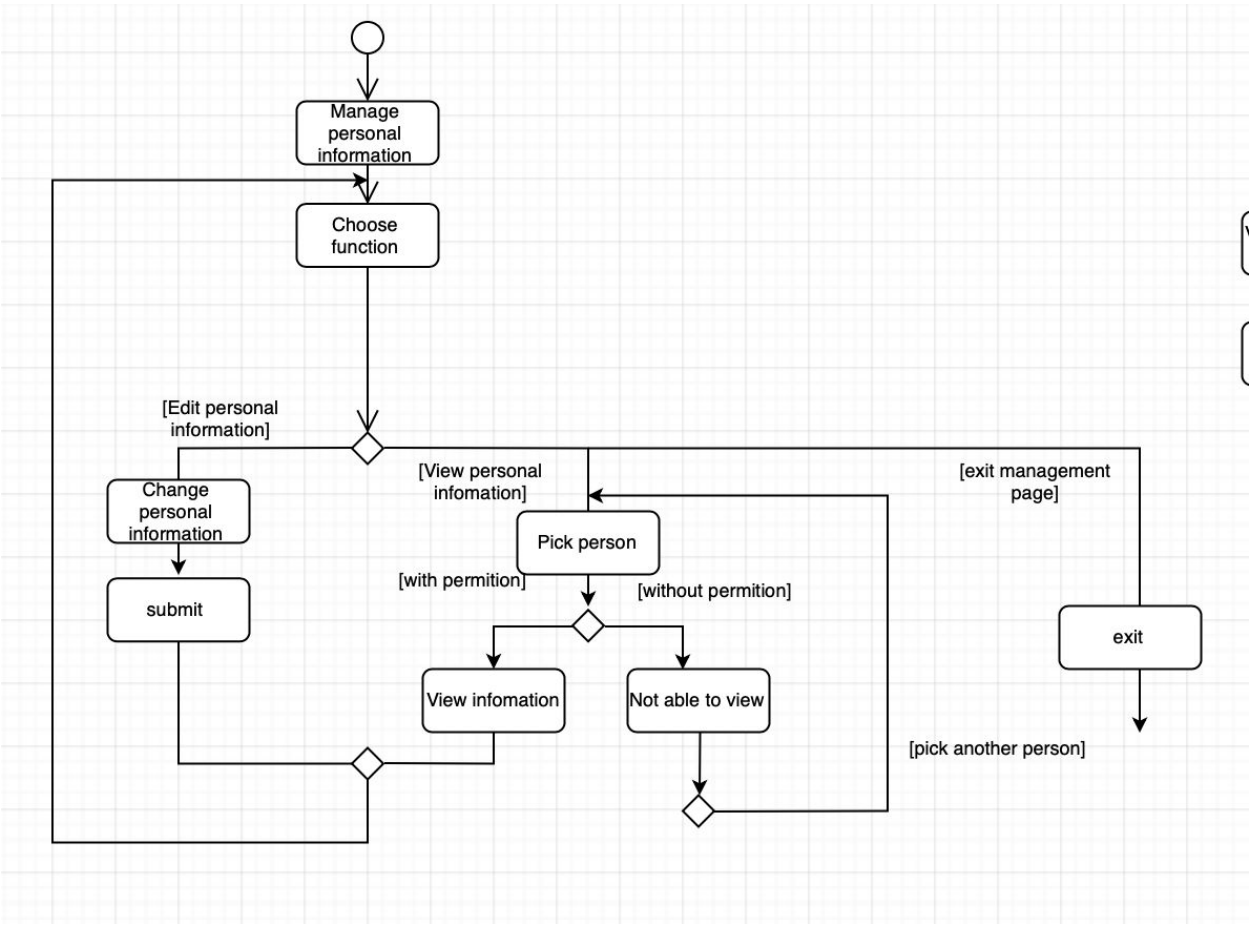
Depicts the different use cases that the user have. Both Coordinator and Potential Volunteer are able to sign up, log in the system. Coordinator can manage time information which include edit, cancel, pick and view time slots, and he could also export the volunteer schedule and view personal information. Potential Volunteer can use pick, cancel, view time slot, edit view and submit personal information.

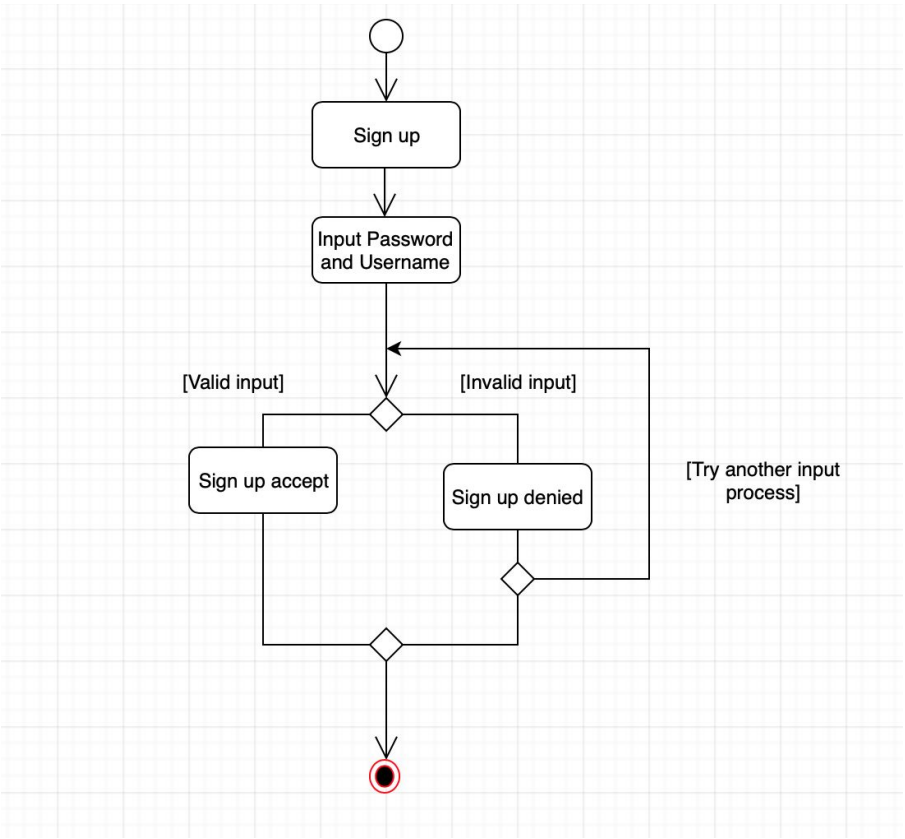
Activity Diagram



This depicts the process for when a user wants to log in. The user is prompted to enter their role, ID and password. If it's valid, then they successfully log in. Otherwise, the log in attempt is denied and the user needs to try again.


Manage time information
Choose function
[Edit time slot]
add time slot and information
submit
[Cancel time slot]
pick time slot to cancel
submit
[pick time slot]
Pick time slot
submit
View time slot
Exit time slot page
[exit management page]
Exit page


Manage personal information
Choose function
[Edit personal information]
[View personal infomation]
[exit management page]
Change personal information
submit
Pick person
[with permition]
[without permition]
exit
View infomation
Not able to view
[pick another person]


Sign up
Input Password and Username
[Valid input]
[Invalid input]
Sign up accept
Sign up denied
[Try another input process]

Use Case Description

Use Case Name: Sign Up
Importance Level: Middle
Primary Actor: Coordinator, Potential Volunteer
Type: Essential, Detail

Stakeholders & Interest:
Coordinator- to create their own account to match the Coordinator identity and store their necessary information in order to use the system at the first time.
Potential Volunteer- to create their own account to match the Potential Volunteer identity and store their necessary information in order to use the system at the first time.

Brief Description:
Require User's role, user name and pin in specific format and store in the database.

Trigger: Coordinator and Potential sign up the system
Type: External
Relationships:
Association: Coordinator, Potential Volunteer, Database
Include: -
Extend: -
Generalize: -

Normal flow of events:

1. User input his user name
1. User input PIN
2. User select their role
3. System store the input information in the Database
1. If User select the role as Coordinator

the S-1: Coordinator Sign up subflow is performed.

1. If User select the role as Potential Volunteer

the S-2: Potential Volunteer Sign up subflow is performed.

Subflow:
S-1**:** Coordinator Sign up
1. Store the information in the Coordinator category
S-2: Potential Volunteer Sign up
1. Store the information in the Potential Volunteer category

Use Case Name: Log in **Importance Level:** Middle
Primary Actor: Coordinator, Potential Volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Coordinator- User want to enter the system use their own identity as a coordinator to access the functions
Potential Volunteer- User want to enter the system use their own identity as a coordinator to access the functions

Brief Description:
Locks system until a potential volunteer or a coordinator enters unique and private PIN that .

Trigger: Coordinator and Potential sign up the system
Type: External
Relationships:
Association: Coordinator, Potential Volunteer, Database
Include: -
Extend: -
Generalize: -

Normal flow of events:

1. User input his user name
2. User input PIN
3. User select their role
4. System store the input information in the Database
    1. If User select the role as Coordinator

the S-1: Coordinator Sign up subflow is performed.

1. If User select the role as Potential Volunteer

the S-2: Potential Volunteer Sign up subflow is performed.

Subflow:
S-1**:** Coordinator Sign up
1. Store the information in the Coordinator category
S-2: Potential Volunteer Sign up
1. Store the information in the Potential Volunteer category

Use Case Name: Export Volunteer list **Importance Level:** High
Primary Actor: Coordinator **Type:** Essential, Detail

Stakeholders & Interest:
Coordinator - want export the volunteer list from the system
Brief Description:
web page will show the volunteer list from the database

Trigger: Coordinator want to have the volunteer list and click the button
Type: External
Relationships:
Association: Coordinator, Database
Include: -
Extend: -
Generalize: -

Normal flow of events:

1. User click volunteer list button
2. System provides web page to show the volunteer list

Use Case Name: Manage time information **Importance Level:** High
Primary Actor: Coordinator **Type:** Essential, Detail

Stakeholders & Interest:
Coordinator- want to cancel, pick, edit and view time slot as a coordinator

Brief Description:
Simple GUI with buttons classifying different suctions, such as edit time slot, cancel time slot, pick a time slot and create a time slot.

Trigger: Coordinator want to manage time information and click button of manage time
Type: External
Relationships:
Association: Coordinator, Database
Include: - edit time slot, cancel time slot, pick time slot and view time slot
Extend: -
Generalize: -

Normal flow of events:

1. User click time manage button
2. System provide option to edit, cancel, pick
3. User choose desired option
    1. If User select edit button

the S-1: edit time slot subflow is performed.

1. If User select pick button

the S-2: pick time slot subflow is performed.

1. If User select cancel button

the S-2: cancel time slot subflow is performed.

Subflow:
S-1**:** edit time slot
1. User will goes to edit time page
S-2: pick time slot
1. User will goes to pick time page
S-3: cancel time slot
1. User will goes to cancel time page

Use Case Name: Edit time slot
Primary Actor: Coordinator
Importance Level: High
Type: Essential, Detail

Stakeholders & Interest:
Coordinator- want edit time slot as a coordinator

Brief Description:
Web page that allow the coordinator to change information on the schedule interface and relative information in the Database.

Trigger: Coordinator want to edit time slot and click button of edit time slot
Type: External
Relationships:
Association: Coordinator
Include: -
Extend: -
Generalize: - Manage time information

Normal flow of events:

1. User click edit time slot button
2. System provide the schedule information in the database and allow the user to input desired information
3. User update information
4. User submit information

Use Case Name: Cancel time slot **Importance Level:** High
Primary Actor: Coordinator, potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Coordinator& potential volunteer- want cancel time slot as a coordinator or potential volunteer

Brief Description:
Web page that allow the coordinator and potential volunteer to cancel the time slot they picked on the schedule before

Trigger: Coordinator or potential volunteer want to cancel time slot and click button of cancel time slot
Type: External
Relationships:
Association: Coordinator, potential volunteer
Include: -
Extend: -
Generalize: - Manage time information

Normal flow of events:

1. User click cancel time slot button
2. System provide the schedule information in the database and allow the cancel the time slot they picked
3. User click the relative option they want to cancel
4. User submit their choice

Use Case Name: View time slot **Importance Level:** High
Primary Actor: Coordinator, Potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Coordinator & Potential Volunteer- want view time slot as a coordinator or potential volunteer

Brief Description:
Web page that allow the coordinator and potential volunteer to view the time slot exist on database

Trigger: Coordinator want to view time slot and click button of view time slot
Type: External
Relationships:
Association: Coordinator, potential volunteer
Include: -
Extend: -
Generalize: - Manage time information

Normal flow of events:

1. User click view time slot button
2. System provide the schedule information in the database

Use Case Name: Manage personal information **Importance Level:** High
Primary Actor: Potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Potential volunteer- want to edit, submit and view personal information as a potential volunteer

Brief Description:
web page classifying different functions of personal information page, such as edit personal information, submit personal information, view personal information

Trigger: potential volunteer want to manage personal information and click button of manage personal information
Type: External
Relationships:
Association: potential volunteer, Database
Include: - edit personal information, submit personal information, view personal information
Extend: -
Generalize: -

Normal flow of events:

1. User click information manage button
2. User pick the person they want to edit
3. System provides web page to allow user to edit and submit

Use Case Name: Edit personal information **Importance Level:** High
Primary Actor: Potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Potential volunteer- want to edit personal information as a potential volunteer

Brief Description:
Web page that allow the potential volunteer to edit personal information on the schedule interface and the relative information in the Database.

Trigger: potential volunteer want to edit personal information and click button of edit personal information
Type: External
Relationships:
Association: potential volunteer
Include: -
Extend: -
Generalize: - Manage personal information

Normal flow of events:

1. User click edit manage button
2. User pick the person they want to edit
3. System provides web page to allow user to edit
4. User input the personal information

Use Case Name: Submit personal information **Importance Level:** High
Primary Actor: Potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
potential volunteer- want to submit personal information as a potential volunteer

Brief Description:
Web page that allow the potential volunteer to submit personal information on the schedule interface and save relative information in the Database.

Trigger: potential volunteer want to submit personal information and click button of submit personal information
Type: External
Relationships:
Association: potential volunteer, coordinator
Include: -
Extend: -
Generalize: - Manage personal information

Normal flow of events:

1. User click the submit button
2. The information will save in the relevant person slot in database

Use Case Name: View personal information **Importance Level:** High
Primary Actor: Potential volunteer **Type:** Essential, Detail

Stakeholders & Interest:
Potential volunteer & coordinator - want to view personal information as a potential volunteer or coordinator

Brief Description:
Web page that allow the coordinator and potential volunteer to view the personal information that existed on database

Trigger: potential volunteer want to view personal information and click button of view personal information
Type: External
Relationships:
Association: potential volunteer
Include: -
Extend: -
Generalize: - Manage personal information

Normal flow of events:

1. User click the view button
2. User pick the person
3. System display the information about the person base on the data from database