Project name: MediGram

Team 22

red parts are meant probably to be modified later

```
blue parts -- Jay(Xiaohui) Liu
purple parts -- Jiaqi Liu
```

Use case ID naming convention:

```
UC -- Use Case, S -- Sign up, P -- Patient, C -- Care provider, PC -- P and C, SA -- System Admin
```

A general template for use cases (you can copy this to save some time):

<u>UC-</u>
Use case name: verb + noun
Actors:
•
Goal:
Triggers:
•
Preconditions:
•
•
Postconditions:
•
•
Basic flow:
1
2
3
Exception:
<u>UC-01</u>
Use case name: Sign in
Actors:

patient

• care provider

Goal: log the user into APP and take them to their corresponding page

Triggers:

user starts the APP

Preconditions:

• user has the APP installed

Postconditions:

- take patient to <u>UC-P-01</u>
- take care provider to <u>UC-C-01</u>
- take unregistered user to <u>UC-S-01</u>

Basic flow:

- 1. starts APP
- 2. enter user ID
 - 2.1. if user has no id, they can choose to sign up
 - 2.2 click "sign up" button
- 3. click "Sign in" button

Exception:

Exception 3: user ID not found

2.1: take user to sign up page

<u>UC-S-01</u> (<u>US 03.01.01</u>, <u>US 03.01.02</u>, <u>US 03.01.03</u>)

Use case name: sign up new account

Actors:

new user

Goal: user creates a new account

Triggers: "sign up" button in UC-01

Preconditions:

new user does not already have a user ID

Postconditions:

new user ID created and saved by the APP

Basic flow:

- 1. enter new user ID
- 2. enter email
- 3. enter phone number
- 4. click "Create an account" button

Exception:

Exception 1: user ID not valid (too short or already taken)

1.1: shows warning message to user

1.2: go back to 1.

UC-P-01 (US 03.02.01)

Use case name: select problem

Actors:

patient

Goal: see and edit patient profile, patient can select a specific body part to see its problems

Triggers:

- "Sign in" button in <u>UC-01</u>
- "Create an account" button in <u>UC-S-01</u>

Preconditions:

patient is signed in

Postconditions:

- if patient search a problem, take patient to <u>UC-P-02</u>
- if patient sign out, take patient to <u>UC-01</u>
- if patient edit profile, a keyboard pops up and user can type in new information

Basic flow:

- 1. patient reads the body map
- 2. patient clicks one of the buttons
 - a. click "sign out" button to log out and go back to sign in page
 - b. click "edit" button to edit user profile
 - c. enter a body part number/keyword and click "search" button to search specific problems

Exception:

Exception 2: user input invalid (no such number/keyword)

2.1: enter again

<u>UC-P-02</u> (<u>US 01.02.01</u>)

Use case name: view problems

Actors:

patient

Goal: show list of problems with titles, dates, and number of records

Triggers:

• "Search" button in UC-P-01

Preconditions:

patient entered valid body part number/keyword

Postconditions:

• search an existing problem: <u>UC-P-05</u>

• add new problem: <u>UC-P-03</u>

• edit existing problem: <u>UC-P-04</u>

• view records of a problem <u>UC-P-06</u>

 delete a problem by clicking on a problem and choose "delete problem" option UC-P-07

Basic flow:

1. read the history of problems

2. scroll down/up to see more

Exception:

UC-P-03 (US 01.01.02, US 01.01.03)

Use case name: add problem

Actors:

patient

Goal: add a new problem with title, date & time, and description

Triggers:

• "Add problem" button in <u>UC-P-02</u>

Preconditions:

• the list of problems is not full (is there a limit of # of problems?)

Postconditions:

- a new problem is added to history
- •

Basic flow:

- 1. enter a problem title
- 2. set date & time with pop-up calendar and clock
- 3. write description of the problem
- 4. confirm changes
- 5. new problem added

Exception:

Exception 1: problem title already exists or too long (limit 30 chars)

1.1: go back to 1, choose another title

Exception 3: description too long (limit 300 chars)

3.1: go back to 3, write description again

<u>UC-P-04</u> (<u>US 01.01.02</u>, <u>US 01.01.03</u>)

Use case name: edit problem

Actors:

patient

Goal: make change on an existing problem

Triggers:

"edit" button for a problem

Preconditions:

• The patient has already found the problem he wants to change

Postconditions:

problem editing page displayed

•

Basic flow:

- 1. edit title
- 2. edit date & time
- 3. edit description
- 4. confirm changes
- 5. problem edited

Exception:

Exception 1: problem title already exists or too long

1.1: go back to 1, choose another title

Exception 3: description too long

3.1: go back to 3, write description again

<u>UC-P-05</u> (<u>US 04.01.01</u>, <u>US 04.02.01-02</u>)

Use case name: search problem

Actors:

patient

Goal: search a problem from list of problems

Triggers:

enter the problem's keyword in the text input box at the top

Preconditions:

•

Postconditions:

problems matching with keywords show in the list

Basic flow:

- 1. user taps on search box
- 2. enter keywords
- 3. press "enter" key on virtual keyboard
- 4. search results show up (nothing shows up if no matching problems)

Exception:

<u>UC-P-06</u> (<u>US 02.01.01</u>)

Use case name: view record

Actors:

patient

Goal: view list of records of a problem

Triggers:

"view record" button in UC-P-02

Preconditions:

- there is at least one problem
- user chose a problem to add record

Postconditions:

- user can see the records of the problem
- user can use slideshow mode by clicking "slideshow" button
- user can add a record by clicking add record button (<u>UC-P-08</u>)
- user can

Basic flow:

- 1. user reads the list of records
- 2. user can scroll down/up to view more records

Exception:

UC-P-07 (US 01.04.01)

Use case name: delete problem

Actors:

patient

Goal: delete a problem from the list of problems

Triggers:

• "delete problem" option in the pop up menu after click on a problem in UC-P-02

Preconditions:

• at least one problem is in the list

Postconditions:

the problem selected is deleted from the list

Basic flow:

- 1. click on a problem on the list
- 2. click "delete problem" option in the pop up menu

Exception:

Exception 1: no problem in list

1.1 nothing happens

UC-P-08 (US 01.05.01, US 02.02-06.01, US 02.08.01)

Use case name: add record

Actors:

patient

Goal: add a detailed record to a problem

Triggers:

• add button in <u>UC-P-06</u>

Preconditions:

•

Postconditions:

 a new record with title, body location, picture, geo-location, date & time, and description is added to record list

Basic flow:

- 1. click add record button
- 2. enter title
- 3. add picture(s)
- 4. take a photo
- 5. add geo-location

- 6. add date & time
- 7. write a description
- 8. confirm changes
- 9. new record added

Exception:

Exception 7: description too long

7.1: do 7 again

UC-P-09

Use case name: edit record

Actors:

patient

Goal: make change(s) to an existing record

Triggers:

• click on a record in <u>UC-P-06</u>

Preconditions:

there is at least one record in record list

Postconditions:

• edited record with new information is updated

Basic flow:

- 1. click on a record in record list
- 2. edit title (user may leave it unchanged)
- 3. edit picture/photo (user may leave it unchanged)
- 4. edit geo-location (user may leave it unchanged)
- 5. edit date & time (user may leave it unchanged)
- 6. edit comment (user may leave it unchanged)
- 7. confirm changes
- 8. record updated

Exception:

Exception 2: title too long

2.1: do 2 again

Exception 6: comment too long

6.1: do 6 again

UC-C-01

Use case name: view patient(6.01.01)

Actors:

Care providers

Goal: The care provider can view the list of patients that he assigned to, also he is able to find the add button and searching bar on the screen

Triggers:

Care provider log into the app

Preconditions:

 the care provider need to connect to the internet, know his own id and the list of patient assign to him

Postconditions:

- If the add button is clicked, take the care provider to <u>UC-C-03</u>
- If some key words are typed in the searching bar, take the care provider to UC-C-02

Basic flow:

- 1. The care provider logged in
- 2. The system will show the searching bar at the top of the screen and provide the list of patient names with the edit button and a add patient button on the button to the user

Exception: 1. if there is no patient assign to this care provider display "none"

UC-C-02

Use case name: add patient 7.01.01

Actors:

care provider

Goal: care provider can add a new patient to his list of assigned patient

Triggers:

• care provider click the add button on the right side of the screen(<u>UC-C-01</u>)

Preconditions:

 The system will pop up a new activity that allow the care provider to add a patient

Postconditions:

- After the system received the input from the user, it append the new information into care provider's list.
- The care provider will have the patient USER ID showing on view patient(<u>UC-C-01</u>)

Basic flow:

- 1.The care provider click on the add button in view patient (<u>UC-C-01</u>)
- 2. The system generate a new activity that allow the care provider to input Patient User ID,Dates and a Description of the patient.
- 3. The care provider input these informations
- The system generate a new tag for the new patient in the view patient screen (<u>UC-C-01</u>)

Exception:

• 1.The minimum user id should be at least 8 characters

 2. The description should be no more than 300 words otherwise the
information will not be solved
<u>US-C-03</u>
Use case name: browse patient problems (US 07.01.02)
A of a co

Actors:

• care provider

Goal: The care provider will find the target patient by typing the user id in the searching bar and browse the patient problems

Triggers:

• The care provider starts to type in the searching bar

Preconditions:

• There is a list of patient who have already assign to the care provider

Postconditions:

Display the target patient

Basic flow:

- 1. The care provider type the target patient's user id in the searching bar
- 2. The system finds the target patient and display him on the top of the list
- 3. The care provider click the target patient
- 4. The system will show a list of the problem that the patient has
- 5. For specific problems the care provider will type the key words for the problem
- 6. The system will find the specific problem
- 7. The care provider click into the problem
- 8. The system display information includes gps location, picture of the past

records

Exception:

• 1.There could be no such patient so display "none"

US-C-04

Use case name: add comment records to patient problems (US 07.01.03)

Actors:

care provider

Goal:

• The care provider will be able to add comment to patient's problem

Triggers:

• The care provider find the specific problem he wants to comment

Preconditions:

• The patient has new record updated

Postconditions:

• The record of the patient will be updated and the the system will pop a message to indicate the patient that his record has been commented

Basic flow:

- 1. The care provider noticed that there a new record to be commented after he find the specific problems
 - 2. The care provider click the problem he needs to be commented
- 3. The system will show all the record of the problem in a list and pop up a window which ask the care provider to type in comment
 - 4. The care provider type his comment

Exception:

• 1.There could be no such patient so display "none"