Use Cases

Project name: MediGram

Team 22

Use case ID naming convention:

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

System Admin

UC-01

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:

- all user has the APP installed
- care provider has internet access (not necessary for patient).

Postconditions:

- take patient to UC-P-01
- take care provider to UC-C-01
- take unregistered user to UC-S-01

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 "create an account" button

3. click "Sign in" button

Exception:

   Exception 3: user ID not found

          3.1: take user to sign up page (2.1)

UC-S-01 (US 03.01.01, US 03.01.02, US 03.01.03)

Use case name: sign up new account

Actors:

- new user

Goal: user creates a new account

Triggers: "create an account" button in UC-01

Preconditions:

- new user does not already have a user ID

Postconditions:

- new user ID created and saved by the APP

- take user to UC-01

Basic flow:

1. enter new user ID
2. enter email
3. enter phone number
4. choose a role from "patient" and "care provider"
5. 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 Basic flow 1

UC-P-01 (US 03.02.01)

Use case name: view profile

Actors:

- patient

Goal: review patient profile, patient can select a specific body area to see its problems

Triggers:

- "Sign in" button in UC-01

Preconditions:

- patient is signed in

Postconditions:

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

Basic flow:

1. patient reads the page
   a. review profile
   b. reads body map
2. patient clicks one of the buttons/text input box
   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 area keyword and click "search" button to search specific problems

Exception:

Exception 2c: user input invalid (no such keyword)

2.1: enter again

UC-P-02 (US 01.02.01, US 02.09.01)

Use case name: view problem list

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 area keyword

Postconditions:

- new problem is added: UC-P-03
- existing problem is edited: UC-P-04
- search an existing problem: UC-P-05
- show records of a problem UC-P-06
- a problem is deleted: UC-P-07
- a daily reminder is added

Basic flow:

1. read the history of problems
2. make a decision
   a. add a new problem by clicking plus button
   b. edit a problem by holding press on the problem icon, and choose "edit problem" option in the pop up menu
   c. search problem(s) by typing keywords in the search box (nothing shows up if no matching results)
   d. view records of a problem by clicking on the problem icon
   e. delete a problem by holding press on the problem icon, and choose "delete problem" option in the pop up menu
   f. add a daily reminder by holding press on the problem icon, and choose "add daily reminder" option in the pop up menu

Exception:

UC-P-03 (US 01.01.01, US 01.01.02, US 01.01.03, US 09.03.01, US 11.03.01)

Use case name: add problem

Actors:

- patient

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

Triggers:

- plus button in UC-P-02

Preconditions:

-

Postconditions:

- a new problem is added to list of problems

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 to list of problems
6. add at least two pictures

Exception:

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

    1.1: go back to flow 1, choose another title

Exception 3: description too long (limit 300 chars)

    3.1: go back to flow 3, write description again

Exception 6: less than 2 pictures or picture size too big

    6.1: ask user to re-add

UC-P-04 (US 01.01.02, US 01.01.03, US 01.03.01, US 09.03.01, US 11.03.01)

Use case name: edit problem

Actors:

- patient

Goal: make change on an existing problem

Triggers:

- "edit" button for a problem

Preconditions:

- there is at least one problem

Postconditions:

- edited problem updated to the list of problems

Basic flow:

1. edit title
2. edit date & time
3. edit description
4. edit pictures
5. confirm changes
6. problem updated

Exception:

Exception 1: problem title too long

1.1: go back to flow 1, choose another title

Exception 3: description too long

3.1: go back to flow 3, write description again

Exception 4: less than 2 pictures or picture size too big

4.1: ask user to re-add

UC-P-05 (US 04.01.01-02)

Use case name: search problem

Actors:

- patient

Goal: search a problem from list of problems

Triggers:

- press enter key after typing the problem's keyword(s) in the text input box at the top

Preconditions:

-

Postconditions:

- problems matching with keywords shown in the list

Basic flow:

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

Exception:

UC-P-06 (US 02.01.01, US 10.03.01, US 11.01.01)

Use case name: view record list

Actors:

- patient

Goal: view list of records of a problem

Triggers:

- click on a problem icon in UC-P-02

Preconditions:

- there is at least one problem

Postconditions:

- slideshow mode
- one specific record is shown
- a new record added
- geo-locations for all records shown
- details of one specific record shown

Basic flow:

1. user reads the list of records
2. user can make a decision
   a. user can use slideshow mode by clicking "slideshow" button

b. user can go to one record by clicking on record icon and can see its geo-location on a map

c. user can add a record by clicking add record button (UC-P-08)

d. user can see geo-locations for all records by clicking map button

e. user can see details of one record by clicking on the record icon (UC-P-11)

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 holding press 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. hold press a problem on the list

2. click "delete problem" option in the pop up menu

Exception:

UC-P-08 (US 01.01.02, US 01.01.03, US 01.05.01, US 02.02-06.01, US 02.08.01, US 09.01.02, US 09.03.01, US 10.01.01, US 11.02.01)

Use case name: add record

Actors:

- patient

Goal: add a detailed record to a problem

Triggers:

- add record button in UC-P-06

Preconditions:

- current record is in the scope of a problem

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. choose to add picture(s) that indicate a specific part on body location photo
4. take a photo
5. Indicate body location number.
6. add geo-location
7. add date & time
8. write a description
9. confirm changes
10. new record added

Exception:

Exception 2: title too long

        2.1: re-enter tile

Exception 3: user input body location not found

        3.1: re-enter a body location

Exception 5: total number of photo more than 10 or photo size exceeds 65536 kb

        5.1: refuse to save photo

Exception 7: description too long

        7.1: do 7 again

UC-P-09 (US 10.01.01, US 01.01.02, US 01.01.03, US 09.01.02, US 09.03.01)

Use case name: edit record

Actors:

- patient

Goal: make change(s) to an existing record

Triggers:

- "edit" button on the record icon in UC-P-06

Preconditions:

- there is at least one record in record list

Postconditions:

- edited record with new information is updated

Basic flow:

1. click on edit record button
2. edit title (user may leave it unchanged)
3. edit picture/photo that indicate a specific part on body location 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 in Basic flow again

  Exception 3: total number of photo more than 10 or photo size exceeds 65536 kb

       3.1: refuse to save photo

  Exception 6: comment too long

       6.1: do flow 6 again

UC-P-10 (US 04.01.01, US 04.02.01-02)

Use case name: search record

Actors:

- patient

Goal: search a record from list of record

Triggers:

- enter the record's keyword in the text input box at the top

Preconditions:

-

Postconditions:

- records matching with keywords shown in the list

Basic flow:

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

Exception:

UC-P-11 (US 02.04.01, US 09.02.01, US 09.03.01, US 10.01.01, US 10.02.01, US 11.04.01)

Use case name: view one record

Actors:

- patient

Goal: see details of one record

Triggers:

- clicking on a record in UC-P-06

Preconditions:

- there is at least one record in the list of records

Postconditions:

- add photo and select corresponding body location

- gallery of patient's body location pictures

- add comment dialog

- add geo-location

Basic flow:

1. make a decision

    a. add comment by clicking add comment button

    b. add a picture

        i. take a photo

        ii. select body location

    c. see timestamp

    d. add geo-locations

    e. see gallery of pictures (up to 10 pictures, each under 65536 kb in size)

    f. read care provider' comment(s)

Exception:

Exception 1b: picture too big in size or more than 10 pictures in total

1b.1: refuse to add picture

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 UC-C-03
- 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(UC-C-01)

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 the patient USER ID showing on view patient (UC-C-01)

Basic flow:

- 1.The care provider click on the add button in view patient (UC-C-01)

- 2. The system generate a new activity that allow the care provider to input Patient User ID
- 3. The care provider input these informations
- 4.The system generate a new tag for the new patient in the view patient screen (UC-C-01)

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

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US-C-03

Use case name: browse patient problems (US 07.01.02)

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 and submit the comment

5.The system update the comment to the list of the problem

Exception:

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

UC-C-05 (US 04.01.01,US 04.02.01,US 04.03.01)

Use case name: search problem

Actors:

● Care provider

Goal: search problems and records according to specific key word

Triggers:

● When the care provider start to type in the searching bar

Preconditions:

● There is a search function based on geo locations and body parts

Postconditions:

● problems matching with keywords shown in the list

Basic flow:

1. The care provider type in the searching box with keywords (can include geo-location and body parts for problem and records keywords)

    2.The system pops up the problem or the records which matches the keywords

Exception:1.if the keywords doesn't exist then display "none"

"Wow" Factor

a nice UI for the paper-cut-out-doll view in selecting body parts for the records