Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

Click through link for quick navigation
1. As a user, I want to define tasks. (Michael)
2. As a user, I want to share tasks. (Jeanine)
3. As a user, I want to fulfill tasks. (Jason)
4. As a user, I want some tasks to requires photos. (Katherine)
5. As a user fulfilling a task I want to take photos and attach the photos to the task. (Jeanine)
6. As a user who defines a task I want to receive the results of users fulfilling a task. (Jason)
7. As a user I want to be able to fulfill my own tasks. (Katherine)
8. As a user fulfilling a task I want my actions time stamped. (Jason)
9. As a user, I want tasks to be stored so I can view them offline. (Katherine)
10. As a user, I want to fulfill tasks that require text by entering text. (Jason)
11. As a user fulfilling a task, I want to be able to attach multiple photos. (Jason)
12. As a user, I should be able to retake photos I am taking, if I fail to take the photo I want to correct, so that I don't have erroneous photos. (Jeanine- edited by Jason)
13. As a user I should be able to get tasks from other users somehow. (Michael)
14. As a user fulfilling a task I should be able to send the fulfilled report back to the task writing user somehow. (Jeanine- edited by Jason)
15. As a user creating a task I want some tasks to be local only to myself. (Jeanine - edited by Jason)

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

1.As a user, I want to define tasks. (Michael)

Use Case Name	DefineNewTask
Participating Actors	App User
Goal	User creates new task
Trigger	Meal planner selects New Task
Precondition	User has a goal in mind and needs content other users could supply
Postcondition	On success, task is added to user's collection and the cloud of tasks.

Basic Flow 1	App provides form to the user with the following pieces: Name - How will you refer to this task?: (Textbox) ...(fill in)
2	User submits form
3	App displays user's list of tasks so the user can see how this new task will appear to others.

Exceptions 2	This Task is very similar to an existing task in the cloud
2.1	App prompts the user to simply subscribe to the existing task
2.12	User subscribes to the existing task and has option to append new requests to it.
2.2	User declines using the existing task and this new task is created

Qualities	Shows immediate feedback to button presses.
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	
Open Issues	Can we find some way to have it suggest similar existing Tasks as the user enters new info, without slowing down the system or getting in the way of the user?

Reasonable Test Cases:

-User defines a task. the task now exists

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

2.As a user, I want to share tasks (Jeanine)

Use Case Name	ShareATask
Participating Actors	App User, Recipient App User
Goal	App User shares a task
Trigger	App User choose the Share option
Precondition	Task already exists, or User has supplied task information (if Share option is available during Task creation)
Postcondition	On success, Recipient App Users have information access to task

Basic Flow 1	System prompts App User to enter Recipient App Users' username(s)
2	App User submits username(s)
3	System grants access of Task to Recipient(s)
4	System confirms that the Task has been shared

Exceptions 2	If there are no matching user name(s)
2.1	System displays an error
2.2	System returns to Step 4

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	
Open Issues	

Reasonable Test Cases:
-Enter name of an existing recipient. The task is now shared with the recipient.
-Enter name not matching any recipient. Appropriate error handling occurs.
-Enter name of a recipient, for whom the task is already shared. Appropriate error handling occurs.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

3.As a user, I want to fulfill tasks. (Jason)

Use Case Name	FulfillATask
Participating Actors	App User
Goal	App User fulfills a task
Trigger	App User selects fulfill option on a task
Precondition	Unfulfilled task available
Postcondition	The task is marked as fulfilled

Basic Flow 1	The task displays 'Complete Task' screen
2	The App User selects 'Completed'
3	The task is marked as fulfilled

Exceptions 2	Task is missing a required entry (ex. Photo)
2.1	The system informs the user that not all requirements are completed
2.2	The system sends the user back to the task screen

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	Can a task not be completed until all requirements are met?
Open Issues	

Reasonable Test Cases:
-User selects fulfill on a task which does not require anything. Task is fulfilled.
-User selects fulfill on a task which has all requirements met. Task is fulfilled.
-User selects fulfill on a task which is missing a requirement (ex. Photo). Appropriate Error handling occurs (is not fulfilled).

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

 4.As a user, I want some tasks to require photos. (Katherine)

Use Case Name	TaskRequiresPhoto
Participating Actors	App User
Goal	Task requires photo
Trigger	App User wants to complete tasks requiring a photo
Precondition	A user has selected a task
Postcondition	Task is set to require photos

Basic Flow 1	App User checks off requires photo option
2	App User confirms change
3	Task now requires photo

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	To be fulfilled must a task requiring a photo have a photo?
Open Issues	

Reasonable Test Cases:
-User checks off requires photo option. User confirms selection. Task now requires photo.
-User unchecks photo option. User confirms selection. Task now does not require a photo.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

5. As a user fulfilling a task I want to take photos and attach the photos to the task. (Jeanine)

Use Case Name	AttachPhoto
Participating Actors	App User
Goal	Take photos and attach it to a task being fulfilled
Trigger	User selects Take Photo option
Precondition	Task already exists and user knows of what to take a picture; Task is currently open
Postcondition	A new photo is added to the task

Basic Flow 1	System opens camera and prompts user to take a photo
2	User takes a photo
3	System displays captured photo
4	User confirms photo
5	System saves photo
6	System returns to Task with photo displayed

Exceptions 5	System does not have enough memory to save photo
5.1	System displays error
5.2	System returns to Step 1 or to Task

Qualities	
Constraints	
Includes	
Extends	3. FulfillATask
Related Artifacts	
Notes	Should give warning to user if memory is low when camera opens
Open Issues	What if user doesn't want to take a new photo but rather wants to use a photo that already exists?

Reasonable Test Cases:
-User takes and attaches photo to a task requiring a photo. The photo is now attached.

Requirements Specification

USE CASE:

6.As a user who defines a task I want to receive the results of users fulfilling a task. (jason)

Use Case Name	ReceiveTaskCompleteReport
Participating Actors	Task Creator, App User
Goal	Task Creator receives a completed task report
Trigger	The App User sends a completed task report
Precondition	
Postcondition	

Basic Flow 1	The system sends the completed task report to the Task Creator

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	related to case 14 (sending a report)
Open Issues	

Reasonable Test Cases:
-Creator's task is completed by another user. Creator receives completion report.

Requirements Specification

USE CASE: Slides 35-43

 7.As a user I want to be able to fulfill my own tasks. (Katherine)

Use Case Name	FulfillOwnTasks
Participating Actors	App User
Goal	App User fulfills their own task
Trigger	App User selects fulfilled option on their task
Precondition	Unfulfilled tasks are available from their own task list
Postcondition	The task is marked as fulfilled

Basic Flow 1	The task displays 'Complete Task' screen
2	The App User selects 'Completed'
3	The task is marked as fulfilled

Exceptions 2	Requirements not met for fulfilled task.
2.1	System informs user not all requirements have been met
2.2	User is returned to task screen

Qualities	
Constraints	
Includes	
Extends	3. FulfillATask
Related Artifacts	
Notes	
Open Issues	

Reasonable Test Cases:
- User creates task. User marks their task as fulfilled. Task is marked as fulfilled.
- User marks own task with all requirements met as fulfilled. Task is marked as fulfilled.
- User marks own task as fulfilled which is missing a requirement (ex. Photo). Appropriate Error handling occurs.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

8. As a user fulfilling a task I want my actions time stamped. (Jason)

Use Case Name	TimeStampActions
Participating Actors	App User
Goal	A timestamp is associated an actions fulfilling a task
Trigger	User selects an option when fulfilling a task
Precondition	Task fulfillment screen currently open
Postcondition	A new photo is added to the task

Basic Flow 1	System records time when user selected option
2	Task is updated with timestamp for action

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	
Open Issues	

Reasonable Test Cases:
-User marks task as fulfilled. Timestamp is added show when task was marked as fulfilled.
-User adds required text. Timestamp is added show when text was added.
-User adds required photo. Timestamp is added show when photo was added.
-User adds retakes required photo. Timestamp is added show when photo was changed.

Requirements Specification

USE CASE:

9. As a user, I want tasks to be stored so I can view them offline. (Katherine- edited by Jason)

Use Case Name	ViewingTasksOffline
Participating Actors	App User
Goal	Tasks stored by App User can be viewed offline
Trigger	App User chooses to view tasks offline
Precondition	App User has tasks
Postcondition	Stored tasks are viewed offline

Basic Flow 1	System displays local task data

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	Stored tasks are viewable offline by creator. Whenever a user is online, their tasks should be saved locally automatically. They can therefore view tasks offline.
Open Issues	

Reasonable Test Cases:

-User has tasks to store. User checks confirms option. Tasks can now be viewed by user offline.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

10. As a user, I want to fulfill tasks that require text by entering text. (Jason)

Use Case Name	EnterText
Participating Actors	App User
Goal	Enter text a task to fulfill a task
Trigger	User selects Enter Text option
Precondition	User has selected a task to which requires text
Postcondition	Text has been attached to task

Basic Flow 1	The system prompts the user to enter text for the task
2	The user enters text
3	The user selects 'done'
4	System hs attached text to task

Qualities	
Constraints	
Includes	
Extends	FulfillATask
Related Artifacts	
Notes	Should users be able to add text to tasks which don't require it?
Open Issues	

Reasonable Test Cases:
-User attaches text to task which requires it. Text is attached.
-User attaches text to task which does not require it. Text is attached.
-User attaches text to task which already has text. The new text is attached.

Requirements Specification
USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

11. As a user fulfilling a task, I want to be able to attach multiple photos. (jason)

Use Case Name	AttachMultiplePhotos
Participating Actors	App User
Goal	Take multiple photos and attach each to the task being fulfilled
Trigger	User selects Take Photo option
Precondition	Task already exists and user knows of what to take a picture; Task is currently open
Postcondition	A new photo is added to the task

Basic Flow 1	System opens camera and prompts user to take a photo
2	User takes a photo
3	System displays captured photo
4	User confirms photo
5	System saves photo
6	System returns to Task with photo displayed
7	User may select Take Photo option, returning to step 1

Qualities	
Constraints	
Includes	
Extends	5.AttachPhoto
Related Artifacts	
Notes	
Open Issues	

Reasonable Test Cases:
-User attaches photo to task. User attaches another photo to task. Both photos are attached.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

12. As a user, I should be able to retake photos I am taking, if I fail to take the photo I want to correct, so that I don't have erroneous photos. (Jeanine)

Use Case Name	RetakePhoto
Participating Actors	App User
Goal	Retake a photo in the event of capturing an unwanted image
Trigger	User selects Retake option
Precondition	Photo has been taken
Postcondition	Retaken photo is displayed

Basic Flow 1	System opens camera screen
2	User takes a photo

Qualities	
Constraints	
Includes	5 (TakePhoto)
Extends	
Related Artifacts	
Notes	
Open Issues	

Reasonable Test Cases:

-User retakes photo. New photo is now attached to the task.

Requirements Specification

USE CASE: https://eclass.srv.ualberta.ca/mod/resource/view.php?id=326383 Slides 35-43

13. As a user I should be able to get tasks from other users somehow.

Use Case Name	GetTasksFromOthers
Participating Actors	App User, Other users
Goal	To see the most relevant and/or requested tasks, be able to grab tasks and work on them.
Trigger	User visits a task browsing page, or app suggests user is near a relevant location.
Precondition	User checks the list of tasks, checks for tasks relevant to their location, or allows active location checking.
Postcondition	User has had opportunity to select new tasks to watch or fulfill.

Basic Flow 1	A) User views task list. B) User searches for tasks relevant to location. C) User allows automatic task finding based on location.
2	User sees a task they're interested in.
3	A) User opts to complete task. B) Add task to To-Be-Completed list. C) Or watch for results of task.

Qualities	
Constraints	Must not significantly increase battery use, must warn user when battery use is increased and make opting out easy.
Includes	User stories 3, 9
Extends	
Related Artifacts	
Notes	For location cue tasks, we can have the app register as a service so that it runs in the background, then runs periodic searches for surrounding places (1 search in 5 minutes?). When a relevant location is passed by, we vibrate the phone. Location checking: http://developer.android.com/guide/topics/location/index.html GPS wastes battery, passive network checking is better: http://developer.android.com/guide/topics/location/strategies.html Querying for place info, based on location: https://developers.google.com/places/documentation/search
Open Issues	

Reasonable Test Cases:

-User is able to view list, turn on location searching, and opt to complete task, record for later, or watch it.

Requirements Specification
USE CASE:

14. **As a user fulfilling a task I should be able to send the fulfilled report back to the task writing user somehow. (Jeanine)**

Use Case Name	SendFulfilledReport
Participating Actors	App User, Task Creator
Goal	Send report of fulfilled Task to the Task Creator
Trigger	The user selects 'done'
Precondition	The App User was fulfilling a task
Postcondition	Report has been sent to Task Creator

Basic Flow 1	The system creates a task report
2	The system sends the task report to the Task Creator

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	
Notes	related to task 6
Open Issues	

Reasonable Test Cases:
-User completes a task. Completed task report is sent.

Requirements Specification

USE CASE: Slides 35-43

15. **As a user creating a task I want some tasks to be local only to myself. (Jeanine)**

Use Case Name	TogglePrivatization
Participating Actors	Task Creator
Goal	Toggles whether a task is private to User
Trigger	User selects Private option
Precondition	User is in Edit Task mode, Task
Postcondition	Task is set to be private

Basic Flow 1	The system prompts the user to save changes
2	The user clicks confirm
3	The system updates visibility of task

Exceptions 2	The task has already been shared
2.1	The system informs the user shared tasks cannot be made private
2.2	The user is returned to the task screen

Qualities	
Constraints	
Includes	
Extends	
Related Artifacts	Check box to indicate if Task is private
Notes	User will not be able to privatize a shared task, Only creator/owner can change setting
Open Issues	

Reasonable Test Cases:

-User sets an unshared task to be private. The task is now private

-User tries to set a shared task to be private, appropriate error handling occurs.