1531 Iteration 3 Report

By Mango 1:
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Requirements

Elicitation

Target User 1:
Name: Joli
Email: jldoan10@gmail.com

Question 1: What tool do you use most frequently and why?
Messenger. It is the most convenient as everyone has it and it has video, voice and messaging features. Notifications are pretty good so reply times are generally short.

Question 2: What feature(s) do you look for when choosing a teamwork-driven communication tool?
Messages, Video Call, Voice Call

Question 3: How convenient is the logging in process (on a scale of 1 - 10) and why?
10, One time log-in without any need for links, codes, etc.

Question 4: How fast/responsive is your current tool (on a scale of 1 - 10)?
8

Question 5: How convenient is it to send a message (on a scale of 1 - 10) and why?
8, Very quick and easy, however requires internet connection

Question 6: How convenient it is to communicate with your team member (on a scale of 1 to 10) and why?
9, multiple ways to contact member without any extra links or anything

Question 7: Is the graphical interface user friendly?
Yes! although sometimes it's annoying to find old files/messages/when something was sent/unsending messages is a pain.

Question 8: What is your workflow like with the current tool ?
Mainly socialising! but in terms of group work, we use the chat function or do voice calls when we need to communicate spontaneously.

Question 9: Are there any new feature(s) you would like to be implemented? If yes, please explain the features.
Allow things to be unsended whenever, fix video calling quality and merge with zoom.

Target User 2:
Name: Anderson
Email: andersonpech@gmail.com

Question 1: What tool do you use most frequently and why?
Messenger. Everyone else uses it. Flexibility. Preference.

Question 2: What feature(s) do you look for when choosing a teamwork-driven communication tool?
Messages, Voice Call, Video Call, File Sharing, Collaborative Doc/Notes Editing

Question 3: How convenient is the logging in process (on a scale of 1 - 10) and why?
9, Single log in, doesn't ask to sign again. No user time out.

Question 4: How fast/responsive is your current tool (on a scale of 1 - 10)?
7

Question 5: How convenient is it to send a message (on a scale of 1 - 10) and why?
9, Gives notifications and sends without issues.

Question 6: How convenient it is to communicate with your team member (on a scale of 1 to 10) and why?
9, The team member receives the notification and can reply whenever they wish.

Question 7: Is the graphical interface user friendly?
Yes, simple and clear to use without being too cluttered.

Question 8: What is your workflow like with the current tool ?
To send messages and communicate. Send attachments if required.

Question 9: Are there any new feature(s) you would like to be implemented? If yes, please explain the features.
Screen sharing: allowing others to see what you're coding.

Target User 3:
Name: Haesun
Email: h.shim@student.unsw.edu.au

Question 1: What tool do you use most frequently and why?
Messenger. Lots of team projects.

Question 2: What feature(s) do you look for when choosing a teamwork-driven communication tool?
Messages, Voice Call, Video Call, File Sharing, Collaborative Doc/Notes Editing

Question 3: How convenient is the logging in process (on a scale of 1 - 10) and why?
10, Mostly it's fast if you have a good internet connection.

Question 4: How fast/responsive is your current tool (on a scale of 1 - 10)?
7

Question 5: How convenient is it to send a message (on a scale of 1 - 10) and why?
10, Quick instant message

Question 6: How convenient it is to communicate with your team member (on a scale of 1 to 10) and why?
10, Majority of people use messenger and so do your team members. You can privately message people so it is very convenient.

Question 7: Is the graphical interface user friendly?
Yes, it is user friendly. The interface is easy to use, messages appear in chronological order so you know who you have been talking to most recently.

Question 8: What is your workflow like with the current tool ?
Sending files and link, casual chats, group chat

Question 9: Are there any new feature(s) you would like to be implemented? If yes, please explain the features.
File editing, file sharing

Target user 4 (Physical Interview)
Name : Erisya Armani Hakimi
Email : erisyahakimi19@gmail.com

Question 1: What tool do you use most frequently and why?
Teams - formal (class), Messenger - casual (group discussion), Whatsapp - casual (chatting with friends)

Question 2: What feature(s) do you look for when choosing a teamwork-driven communication tool?
Video call & something like google docs since we're going to do the assignment at the same time

Question 3: How convenient is the logging in process (on a scale of 1 - 10) and why?
Teams   - 8/10 , since i don't have the teams app, it's quite troublesome to log into teams and also find the channel for the particular class
Messenger   - 10/10, I have the app on my phone so it's the most convenient channel/tool!
Whatsapp   - 10/10, I have the app on my phone so it's the most convenient channel/tool!

Question 4: How fast/responsive is your current tool (on a scale of 1 - 10)?
Teams - 10, Messenger - 10, Whatsapp - 10

Question 5: How convenient is it to send a message (on a scale of 1 - 10) and why?
Teams   - 8, don't have features to reply a particular person (that kind of feature would be helpful if i'm in a group discussion)
Messenger   - 10, perfeeccttt!
Ws   - 10, perfeeccttt!

Question 6: How convenient it is to communicate with your team member (on a scale of 1 to 10) and why?
Teams - 10 (especially when in a meeting)
Messenger & whatsapp - 10 (since everyone has the app in their phone. Fast response)

Question 7: Is the graphical interface user friendly?
Yes. Very convenient and friendly for a beginner (like me hehe)

Question 8: What is your workflow like with the current tool ?
Messenger/whatsapp - arrange for meeting with groupmate and once the meeting has been set up, move to Teams - start the meeting & work on the assignment (word in Teams) at the same time

Question 9: Are there any new feature(s) you would like to be implemented? If yes, please explain the features.
Teams - reply to a specific/particular msg sent by someone to avoid confusion for other team members

Analysis & Specification - Use Cases

User Stories

User Story 1:
As a user, I want to be able to call my channel members through a voice or video call with screen-sharing functionality so that we can communicate more effectively and host online meetings.

Given: The user is in a valid channel
When: The user clicks either the voice call or video call button
Then: A voice/video call with the user is opened in a new tab
Given: A notification is sent to the channel about the voice/video call
When: Other member/s of the channel click the voice/video call button
Then: The other member/s join the voice/video call
And: The user clicks the screen sharing button
Then: Their screen is shared in the video call with the other members

User Story 2:
As a user, I want to have a one-time login so that I do not need to login again when I close the server.

Given: The logged-in user has closed the server
When: The same user opens the server
Then: The user is automatically logged-in

User Story 3:
As a user I want to be able to send images, files or links through file sharing so that it is more convenient to locate the shared items after it has been sent.

Given: User is currently in a valid channel on Flockr
When: The user shared either a file, image or link through file sharing
Then: Flockr determines the nature of the shared item and sorts it accordingly: the images are placed in the 'photos' sidebar, while the files and links are placed in the 'files' section on the Flockr sidebar. These can then be easily accessed by all members in that channel.

User Story 4:
As a user I want to create a channel to privately message one other user or create a public/private channel for multiple users so that I can have different channels for various purposes.

Given: All users are members of Flockr
When: The user creates a channel
Then: The user can choose to create either a private channel for two people or a public/private channel suited for multiple users.

User Story 5:
As a user, I want to be able to choose whether I receive notifications or not because I don't want to be disturbed by constant notifications.

Scenario: User is constantly hearing the vibration from Flockr notifications
Given: User has logged in
And: User has navigated to the settings page
When: User turns off notifications for Flockr
Then: User does not hear vibrations from notifications anymore

User Story 6:
As a user, I want to be able to choose what notifications I receive

Scenario: User sees Flockr notifications but they are all from a channel they don't care about.
Given: User has logged in
And: User has navigated to settings for the channel they wants to mute
When: User turns off notifications for that channel
Then: User only sees notifications from their favourite channel

User Story 7:
As a user, I want to search for a message containing the string 'Merge conflict' in 'COMP1531' channel last month, because I want to settle an argument.

Scenario: Pipeline failed due to merge conflict, right before everyone went on a break for a month
Given: User clicked on search bar
And: User searched for 'merge conflict' and used search filters to only show results from last month in 'COMP1531' channel
When: User pressed enter/search icon
Then: User is presented with a list of messages that matched the search criteria, and user and his/her dev team got in a heated argument

User Story 8:
As a user, I want to be able to choose accent color and also the theme (light or dark), because I want to work in the dark and dark theme helps with that.

Can choose theme either light or dark
Can choose accent color from a preset of colors available

User Story 9:
As a user, I want to search for a file called 'meeting1.txt' in 'TueMango15' channel, because I wanted to review what was discussed in the meeting.

Scenario: User missed the first meeting
Given: User clicked on search bar
And: User searched for file 'meeting1.txt'
And: Used search filter to only search in 'TueMango15' channel
When: User pressed enter/search icon
Then: User is presented with the matching file from 'TueMango15' channel, and can now review what was discussed in the meeting

User Story 10:
As a user, I want to have edit my work with other team members so that we could all work at the same time and able to check on each other's work in real time

Scenario: writing a group assignment
Given: the user has started writing their part of the assignment
Given: all the users are in the same word editor
When: doing work at the same time
And: a highlight is present to differentiate the users' work
When: other users are writing their own parts
Given: there is a history section
When: after the user has stop writing their part for a certain amount of time

Use Cases

Use Case 1: Filter messages using advanced search
Goal in context: User needs to search for messages by a specified user or within a certain timeframe
Scope: Flockr
Level: Primary
Preconditions: The user has a Flockr account and is in a valid channel
Success end condition: User is able to view messages from a specified user or timeframe
Failed end condition: User is not able to see any messages
Primary actor: Flockr user
Trigger: User clicks the advanced search button

Main Success Scenario
Step 1: User tries to use advanced search for a message within the channel
Step 2: System asks user to input details to search for
Step 3: User inputs the details they want to filter
Step 4: System uses database to check if details used to search are entered correctly
Step 5: System uses database to obtain details of message searched for
Step 6: System displays message details to user

Use Case 2: Edit Collaboratively
Goal in context: User needs to be able to edit the document at the same time as others and see document history, i.e. who has edited certains parts of a file and when they edited it
Scope: Flockr
Level: Primary
Preconditions: The user has a Flockr account and is logged in
Success end condition: User is able to edit the file simultaneously with others and see who has edited a file and when they edited it
Failed end condition: User is not able to edit the file when others are editing and cannot see any information about other user's edits
Primary actor: Flockr user
Trigger: User clicks on group file to view it

Main Success Scenario:
Step 1: User views document in channel
Step 2: System uses database to obtain information about whether document exists and who edited certain parts/when they were edited
Step 3: System allows user to edit the document and updates user's changes live
Step 4: System highlights certain parts of document with corresponding user colours
Step 5: User attempts to look at document history
Step 6: System uses database to find document history
Step 7: System displays document history

Validation

Target User 1:
Name: Anderson
Email andersonpech@gmail.com

Question 1: How adequate is 'Use Case 1: Filter messages using advanced search' to your needs?
Rated 3/5, Not a feature I would use often but can be used in certain cases. It would save time scrolling through message history to find msgs.

Question 2: Is there anything you would like to add or remove in Use Case 1?
No

Question 3: How adequate is "Use Case 2: Edit Collaboratively" to your needs?
Rated 5/5, This feature would be very useful since we collaborate a lot on our work and it would be easier to edit and communicate ideas.

Question 4: Is there anything you would like to add or remove in Use Case 2?
No

Target User 2:
Name: Haesun
Email: h.shim@student.unsw.edu.au

Question 1: How adequate is 'Use Case 1: Filter messages using advanced search' to your needs?
Rated 5/5, Searching query function is pretty important because you need to find the relevant information quickly instead of digging all the way through the chunk of messages.

Question 2: Is there anything you would like to add or remove in Use Case 1?
No, it looks good.

Question 3: How adequate is "Use Case 2: Edit Collaboratively" to your needs?
Rated 5/5, It looks similar to Google Docs to me, I personally use this function a lot especially when I want to see the previous documents and who edited which line etc.

Question 4: Is there anything you would like to add or remove in Use Case 2?
It's gucci.

Target User 3:
Name: Joli
Email: jldoan10@gmail.com

Question 1: How adequate is 'Use Case 1: Filter messages using advanced search' to your needs?
Rated 4/5, Seems valid- like messenger search in chat?

Question 2: Is there anything you would like to add or remove in Use Case 1?
No.

Question 3: How adequate is "Use Case 2: Edit Collaboratively" to your needs?
Rated 4/5, Seems adequate to editing collaboratively

Question 4: Is there anything you would like to add or remove in Use Case 2?
No.

Target User 4:
Name: Erisya Armani Hakimi
Email: erisyahakimi19@gmail.com

Question 1: How adequate is 'Use Case 1: Filter messages using advanced search' to your needs?
Rated 4/5, It will be very useful whenever i need to refer to a specific message at a specific time. Especially work-related messages from group chat or individual chat.

Question 2: Is there anything you would like to add or remove in Use Case 1?
No.

Question 3: How adequate is "Use Case 2: Edit Collaboratively" to your needs?
Rated 5/5, For group assignment, it will be very useful since we can all complete the assignment in one document instead of needing to compile the file before the submission due. Other than that, by having the history feature, we can easily track the person who has edited the file if in case there is a mistake made or it needs a little correction

Question 4: Is there anything you would like to add or remove in Use Case 2?
No.

Design

Interface Design

Filter Messages with Advanced Search

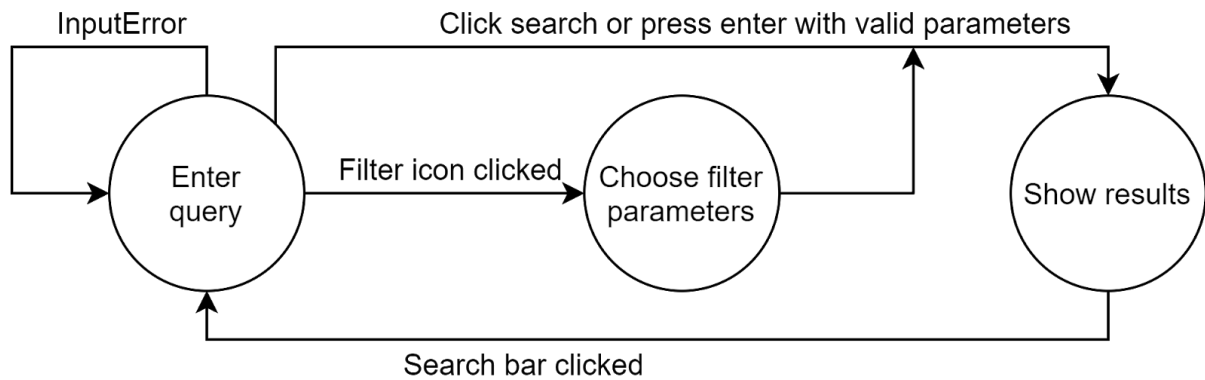| Function name	HTTP method	Parameters	Return type	Exceptions	Descriptions

search/filter	GET	token, channel_id, query_string, handle_str, date, type	{
			    messages, photos, files,
			}
				InputError:
				● Invalid date
				● Invalid channel_id,
				● Invalid type
				
				AccessError:
				● Authorised user is not a member of the channel
					Search function includes advanced search (for messages, files and photos) where the user can filter the name of user who sent the message, channel, and date range
					
					Given a query string, return a collection of messages, photos and/or files of that channel that match the query

Edit Documents Collaboratively

Function name	HTTP method	Parameters	Return type	Exceptions	Descriptions
collab/create	POST	token, channel_id, name	{document_id}	InputError: ● Invalid channel_id ● Doc name length not between 1 - 50 AccessError: ● Authorised user is not a member of the channel	Creates a new shared document with that name given. This shared document can be collaboratively edited by all members in the channel.
collab/view	GET	token, channel_id, document_id	{}	InputError: ● Invalid document_id AccessError: ● Authorised user is not a member of the channel	Allows a user to view a collaborative document. Permission is inherited from channel, public channels' documents can be viewed by anyone but only members can view documents in a private channel

collab/edit	POST	token, channel_id, document_id	{}	InputError: ● Invalid document_id AccessError: ● Authorised user is not a member of the channel	Allows a user to edit the collaborative document. Only users who are members in the channel the document was created in are allowed to edit. The document is updated/saved every time a change is made. This change will show automatically and all user's screens who are currently editing the document.
collab/history	GET	token, channel_id, document_id	{document_history}	InputError: ● Invalid document_id AccessError: ● Authorised user is not a member of the channel	Allows a user to view all older versions of the document from the given document_id. The document will be automatically saved as a revision when no one has worked on the document for an hour.

Conceptual Modelling (State)

Filtered search state diagram

Collaborative document editing state diagram