

Elicitation -

Using the below series of questions, our group conducted interviews with individuals that fit into the criteria of people who currently use tools like Memes or plan to and received the following responses:

Name: Sai Sriman Tadepalli

Email Address: mastershifuxy@gmail.com

Name: Dexter

Email Address: z5349775@unsw.edu.au

Name: Natalie

Email Address: nataliedeng123@gmail.com

1. What is your perspective on the extent of language censorship in your communication tool?

Sai: It exists for a purpose and its purpose is met most of the time. Censorship is difficult to deal with when texting friends with colloquial language where conversational language can be misinterpreted by the censorship program into more formal text, detracting from the value of the conversation being had.

Dexter: I dislike any form of censorship in my communication tool.

Natalie: Overall I would prefer not to have any language censorship but it really depends if it is public or private.

Scenario 1: Private messaging - Here I would hate the use of language censorship as censorship can occur for words that are usually sarcastically or even casually such as 'I hate food' which in some cases on social media platforms, the user is returned with 'hate speech' when it isn't.

Scenario 2: Public messaging/forums? - Language censorship should be applied to maintain order on platforms as racist, discriminatory, defamatory and these can be sent around casually which is just morally wrong. Also nsfw content may be sent around too, it is very difficult to restrict certain age groups from an online platform so language censorship is necessary.

2. What options would you like to be made available to you to deal with users that are using the communication tool inappropriately?

Sai: A direct report function that would allow immediate communication with a professional who can act within a short time frame to rectify or limit the actions of those using the communication tool inappropriately.

Dexter: I would love to have an option to prevent me from seeing those inappropriate messages ever again.

Natalie: To be able to report these messages immediately and get it taken down.(there is no use in interacting with people who argue for the sake of winning)

3. Would you find the ability to add files to a channel useful in your everyday activity and, if so, which file formats would you use the most?

Sai: Yes. .png, .jpeg/jpg, .pdf, .docx

Dexter: Yes. Picture would be used the most.

Natalie: On phone platforms definitely images but on laptop definitely docx and images too.

4. When planning a standup, would you prefer to start it at the planned time or schedule the standup beforehand instead?

Sai: Schedule the standup beforehand.

Dexter: At a planned time.

Natalie: I would prefer to be able to start a standup at a planned time or even scheduled beforehand depending on different situations.

5. Would you, as either the original poster or commenter on a post, want to view the individuals who reacted to a post or comment?

Sai: No. There would be no point as the poster or commenter have already made their mark and any knowledge of their being is redundant outside of knowing for its own sake.

Dexter: Yes.

Natalie: Yes because I would like to see who agrees with my perspective, against it, etc. It's also helpful for decision making (voting).

From the received responses, it can be seen that target users find that there is a need for some function to regulate the activity of other users who are acting inappropriately on teamwork-driven communication tools like Memes.

To resolve this need, which is currently unaddressed apart from completely removing the user from Memes, we propose that a reporting function be added in place. In the function, if a user reports another user and they are found to have been disruptive, they will be issued a warning. Cases of a user being disruptive could be if they were spamming messages in a channel or DM or using inappropriate language, which would have to be checked over by a moderator. The reporting user would be required to provide some explanation behind why they believe the reported user is behaving inappropriately before being allowed to submit their report. Once a user has been reported three times, they will involuntarily be removed from Memes.

Another need of target users is the ability to add files to channels they are part of which would include being able to add in particular .jpeg and .png formats for pictures but could also include other file formats such as .pdf and .docx for documents. We propose adding a function that allows files to be added to a channel that the user is part of, specified by channelId, which would store it in the channel object, given the file is in a supported format.

Finally, target users have expressed a desire for a function to be able to schedule standups beforehand to reserve times and prevent other users from starting standups during their planned time since only one active standup can take place in each channel. Currently, Memes is only able to immediately start a standup in a channel which could be inconvenient for the above reasons. We propose implementing a function in Memes that would reserve a start time and length for a standup such that it will automatically become active from the specified start time.

Analysis & Specification -

User stories:

1. As an individual who uses or is planning to use communication tools, I want to be able to report users so I can prevent inappropriate behavior on a public digital platform.

User acceptance criteria:

- A 'more' button is placed at the top left corner at a relevant message
- A 'report user' button is placed in a list to be selected after the 'more' button is activated
- The user who click the buttons will be redirected to a form to report the user who send that message
- The form will include a range of options on potential inappropriate behavior to be chosen and a text field below prompting the user to input relevant details and explanation towards their report.
- A submit button is placed at the bottom of the page
- Both parts must not be left empty and upon successful submission, the form will be sent directly to the moderator

Use case: Report other users

Goal in Context: A user can report other users they believe are behaving inappropriately through their own initiative

Scope: Users, channels and dm, messages

Preconditions: The reporting user and the reported user are both registered, the reporting user is logged in

Success End Condition: A report is sent to the moderator for view

Failed End Condition: No report can be made when there is a potential inappropriate behavior, no report is sent to the moderator for view

Primary Actor: Reporting User

Trigger: Reporting user selects option to report another user

2. As an individual who uses or is planning to use communication tools, I want to be able to add files to a channel/dm so I can share important information to other members in the channel/dm.

User acceptance criteria:

- The user must be a channel/dm member
- The file must be in formats .png, .jpeg, .pdf or .docx
- An attach button is placed to the right side of the message text edit section
- The button changes color and a small description box appears above the button upon mouse-over

- The user will be able to select files with multiple options in terms of formats after activating the button
- Multiple files can be selected at a time

Use case: Add files

Goal in Context: A user can add files in formats .png, .jpg, .pdf or .docx to a channel which can then, in turn, be accessed by other channel/dm members

Scope: Channel, dm

Preconditions: The user adding the file and any users attempting to access the file must be logged in and a member of the channel/dm they are adding/accessing the file from

Success End Condition: The file is added to the channel/dm or the user is able to access the file

Failed End Condition: Only text message in the channel/dm

Primary Actor: User Adding File, User Accessing File

Trigger: User adding file selects option to add file to channel/dm or user accessing file selects option to access file from channel

3. As an individual who uses or is planning to use communication tools, I want to schedule standups in a channel beforehand so members are able to participate in the standup on time.

User acceptance criteria:

- The user who start the standup must be a member of the channel
- Only one standup is allowed in a channel at a time
- A green 'standup' button is placed at the top beside the channel name, the user will be able to select 'start now' or 'schedule later' after activating the button
- The user will be able to select a scheduled time and duration for the standup
- Upon a successful schedule, a notification will be sent to all channel members to notify them of a upcoming standup
- When a schedule standup reaches its start time, a notification 'standup for [channel name] starts now!' will be sent to all channel members
- During the standup, the green 'standup' button will turn into a red timer indicating time left for the current active standup, and will revert back to the green button at the end of the standup

Use case: Schedule standups

Goal in Context:

Scope: Channels, messages, users

Preconditions: The user who starts standup must be channel member, only one standup at a channel at a time

Success End Condition: User is able to schedule a standup and members will be notified of a upcoming standup

Failed End Condition: User starts a standup that begins right away

Primary Actor: User who initiates a standup

Trigger: User initiating the standup selects option to schedule a future standup

Validation -

Natalie Deng:

Your cases have fulfilled most of my when I was answering the questions. I like how you have made the features easily accessible, simple and also giving user's a chance to customize as well. However it does prevent age groups from viewing content well above their age. Case 2 and Case 3 have met all my requirements.

Sai:

You've identified the main elements of each goal and made a structured response plan to modify the system.

Dexter:

It has what I want. In particular, I like the details you put in the design for the reporting and standups scheduling system.

Interface Design

(with the requirements in user stories, give the necessary capabilities and specify as HTTP endpoints)

Name & Description	HTTP Method	Data Types	Exceptions
reportBehaviourV1 Given a selection of options to report on all options can be -1 other than Other, Photo and HandleStr. If successful, return with <i>reply</i> . Add this to <i>reportList</i> .	POST	Body Parameters: {HateSpeechSymbol, ScamFraud, FalseInfo, bullyingNharassment, Violence, AgeRestrictContent Other, Photo, HandleStr}; Return type if no error: { reply, reportId } 'Your complaint has been successfully lodged, a moderator will investigate within 7 days.'	400 Error when any of: - all options are '-1' so none of the options are chosen and the photo is undefined. - other's length is more than 200 characters. - The user has chosen to only insert a photo - if HandleStr refers to a valid user. 403 Error when any of: - token is invalid
reportWhoV1 Given channelId, dmId, messageId find the author of messageId. If channelId is -1, then the message should be in dmId and vice versa.	GET	Body Parameters: {ChannelId, DmId messageId}; Return type if no error: { HandleStr }	400 Error when any of: - channelId and dmId are both invalid - msgId does not exist in channelId/dmId - channelId + dmId + messageId is -1' 403 Error when any of: - token is invalid - user is not a member of channelId/dmId of the messageId they're reporting on.
reportRemoveV1 Cancel a report given HandleStr and reportId.	POST	Body Parameters: {HandleStr, ReportId}; Return type if no error:	400 Error when any of: - HandleStr does not refer to valid user - ReportId is invalid

		<code>{ reply } 'Your report has successfully been canceled.'</code>	403 Error when any of: - token is invalid - HandleStr does not exist in a valid ReportId
reportUpdateV1: Update information given in reportBehaviour	'PUT'	Body Parametres: <code>{HandleStr, ReportId, ScamFraud, FalseInfo, bullyingNharassment, Violence, AgeRestrictContent Other, Photo};</code> Return type if no error: <code>{ reply } 'Your report has successfully been updated'</code>	400 Error when any of: - HandleStr does not refer to valid user - ReportId is invalid - all options are '-1' so none of the options are chosen and the photo is undefined. - other's length is more than 200 characters. - The user has chosen to only insert a photo - if HandleStr refers to a valid user. 403 Error when any of: - token is invalid - HandleStr does not exist in a valid ReportId
insertReportCommentV1: User can add additional information/comments to the report	'POST'	Body Parametres: <code>{reportId, comment}</code> Return type if no error: <code>{ reply } 'Your comment has been successfully posted'</code>	400 Error if: - reportId is not valid - comment is less than 1 character or more than 1000 characters 403 Error when any of: - token is invalid
userFileAddV1 (note that fileURL needs to be non-https) User can add file of type jpg, png, pdf or docx to channel they are member of	'POST'	Body Parameters: <code>{ChannelId, fileURL};</code> Return type if no error: <code>{ reply } 'Your file has successfully been added'</code>	400 Error if: - ChannelId is not valid - file uploaded is not a JPG, PNG, PDF or DOCX - fileURL returns HTTP status other than 200, or any other errors occur when attempting to retrieve the message 403 Error if: - ChannelId is valid but authorised user is not member of channel - token is invalid
userFileDownloadV1	'GET'	Body Parameters: <code>{ChannelId, fileURL};</code>	400 Error if: - ChannelId is not valid

User can download files from a channel they are a member of		Return type if no error: {file}	- fileURL returns HTTP status other than 200, or any other errors occur when attempting to retrieve the message 403 Error if: - ChannelId is valid but authorised user is not member of channel - token is invalid
userFileDeleteV1 User can delete a file from a channel they are a member of	'DELETE'	Body Parameters: {ChannelId, fileURL}; Return type if no error: { reply } 'The file has been successfully deleted'	400 Error if: - ChannelId is not valid - fileURL returns HTTP status other than 200, or any other errors occur when attempting to retrieve the message 403 Error if: - ChannelId is valid but authorised user is not member of channel
closeReportV1: After a report has been resolved or has failed, a user can close the report	'DELETE';	Body Parameters: {HandleStr, ReportId} Return type if no error: { reply } 'The report has been successfully closed'	400 Error if: - reportId is not valid 403 Error if: - HandleStr does not exist in a valid ReportId - token is invalid
standupScheduleV1 Authorised user can schedule standup in advance in a channel. Notification will be sent when start time passes.	'POST'	Body Parameters: {ChannelId, start, length} Return type if no error: { finishTime }	400 Error if: - ChannelId is not valid - start is time in the past - length is non-positive - Another standup will already be running in the planned time period of scheduled standup 403 Error if: - ChannelId is valid but authorised user is not member of channel - token is invalid
standupCancelV1	'DELETE'	Body Parameters: {ChannelId, start}	400 Error if: - ChannelId is not valid

User who scheduled original standup cancels it from occurring		Return type if no error: { reply } 'Scheduled standup successfully cancelled'	- No standup is starting at the start time 403 Error if: - ChannelId is valid but authorised user is not member of channel - Authorised user is not the individual who scheduled the standup originally - token is invalid
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Conceptual Modelling - State Diagrams

