

COMP1531 Project Report (DODO T09A)

Chloe Toh, Grace Kan, Rohan Agarwal, Tom Greenhill, Dharam Arora

Elicitation

Interview Participants:

1. Patrick Vane-Tempest (pat.vanetempest@gmail.com)
2. Alexandria Lombard (alexandria.lombard@gmail.com)
3. Robert Huang (roberthuang2003@gmail.com)

Interview Questions:

1. What is your name and email address?
2. How often do you use Streams?
3. Which purposes would you use Streams for?
4. While using Streams, are there any issues that you run into?
5. While using Streams, are there any features that could be added to improve your experience?

Interview Transcripts:

- See appendix

Potential Issues:

- Too many channels makes it difficult to navigate.
- Not all notifications can be read by the user, only the latest 20 are provided. This can cause some important messages to be missed by the user.
- You want to be able to see in the notifications whether if someone has changed your permissions recently (currently this cannot be seen).
- You want to be able to see if a channel is private before you even click on it (for work purposes you don't want to constantly misclick channels)
- Admin status is not displayed
- No ability to replace user names in channels/dms with nicknames
- No ability to unsend messages
- Standups do not have the capability to send recurring messages
- Limited variety of react types

Proposed Solutions:

- Implement a function that will enable users to delete channels when they are unwanted
- Store the entire list of notifications that are 'unread' and implement a way to 'read' notifications
- Add a notification type that tells the user their permissions have been updated/changed
- Allocate a symbol or label that enables users to tell if the channel is private or public
- Allocate a symbol or label that enables users to tell if the user is the admin of the channel/dm
- Implement a way to rename channels/dms and users in a channel/dm
- Enhance the standup functions to enable for recurring timed message sending
- Add more reaction types such as angry, sad, laughing to the possible reacts

Analysis & Specification

User Stories:

1. As a moderator I want other users to be able to see my permissions so that they know that they can ask me for help if they encounter problems with other users.
 - a. Display admin status
 - b. Use simple, recognisable icon
 - c. Make visible to all members
2. As a worker, I want to be able to navigate my dms and channels in an efficient way by being able to search for specific dms or channels
 - a. Take input as a string
 - b. Compare the string to channel/dm names
 - c. Display channel/dms with names that include the search prompt
3. As a project manager, I want to be able to delete any channels that are unused
 - a. Delete channel permanently for all users
4. As someone who rarely checks Streams, I want to be able to see all my notifications so I don't miss anything
 - a. Store all notifications
 - b. Make stored notifications accessible to user
 - c. Mark notifications as read/unread
5. As a teacher, I may have too many channels which I am in, so I will want to be able to mute unimportant channels so that my notifications do not become too difficult to navigate.
 - a. Provide users with mute option for dm/channel
 - b. Don't add notifications when these dms/channels tag/invite/react to the user
6. As someone who makes a lot of typos I want to be able to rename my channels and dms so that I do not make embarrassing mistakes at work.
 - a. Allow admin permissions to rename channels/dms when needed
7. As a busy project leader, I would like to be able to send recurring timed messages to the channels I am part of.
 - a. Enable users to set up messages to send at a specific time every day/week
8. As someone who appreciates human interaction, I would prefer if there were more reaction types such as angry, sad and laughing.
 - a. Add additional reaction types to possible reacts
 - b. Allow users to choose what type of reaction they want
9. As someone who is in a lot of channels and only wants to see important notifications, I would like to be able to mute my notifications for a specific channel / dm such that I am able to choose the notifications that I see.

Use Cases:

Use Case One

- Step 1. User sees a channel they would like to delete as it is not used anymore
- Step 2. User clicks on the delete button for the particular channel
- Step 3. User is prompted with a confirmation button
- Step 4. User clicks on the confirm button and the channel is deleted
- Step 5. The channel is now deleted and cannot be seen or accessed by anyone on Streams

Use Case Two

- Step 1. User creates a channel with a generic name
- Step 2. User adds members to the channel
- Step 3. User realises that these members have one thing in common, and would like to differentiate this channel from his other channels
- Step 4. User decides to change the name of the channel
- Step 5. User clicks the 'change channel name' button
- Step 6. User is prompted with a text bar to rename their channel with character limitations
- Step 7. User changes the name of the channel to something more distinct and appropriate for its use
- Step 8. User saves the name and the channel's name is updated for all users of streams

Use Case Three

- Step 1. User decides the notifications sent by a particular channel they are a part of is distracting
- Step 2. User clicks on the button that mutes notifications for the particular channel
- Step 3. The user doesn't receive notifications from that particular channel anymore
- Step 4. After finishing their work, the user decides that they would like notifications for the particular channel again
- Step 5. User clicks on the button that unmutes notifications for the particular muted channel
- Step 6. Notifications are now sent to the user for the particular channel that is now unmuted

Validation

Additional comments:

Interview 1

I am quite happy with the solutions, it encompasses most of what I was looking to add to Streams.

Interview 2

I guess because there are limited options for improving the interface aesthetically using the backend, the use case satisfies my suggestion for adding more reaction types.

Interview 3

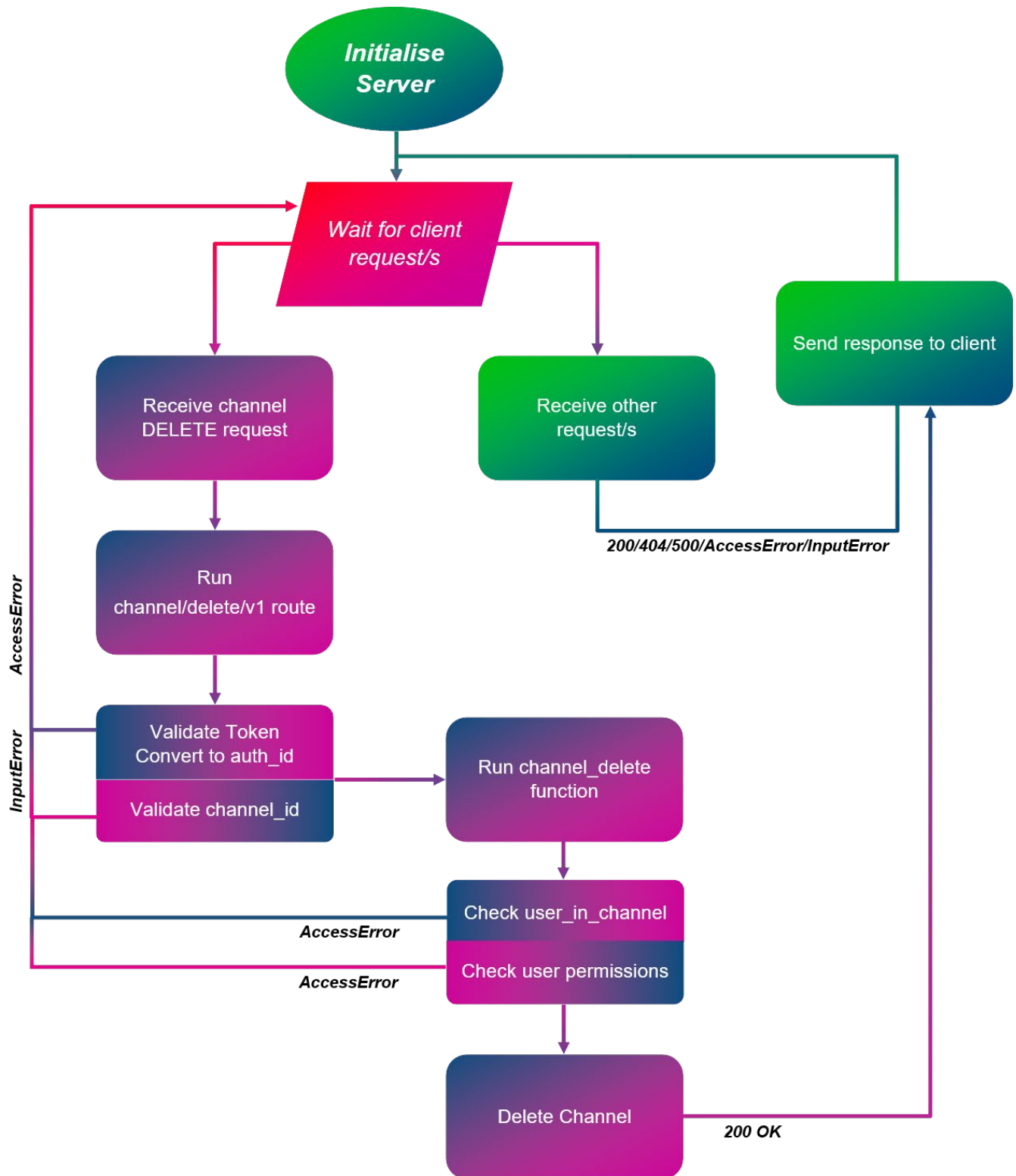
Most of my issues are solved using this use case, as the overwhelming amount of channels/dms/notifications will lessen and are easier to deal with. It makes teams easier to navigate. I would still prefer a way to archive channels and dms so deletion is not permanent.

Interface Design

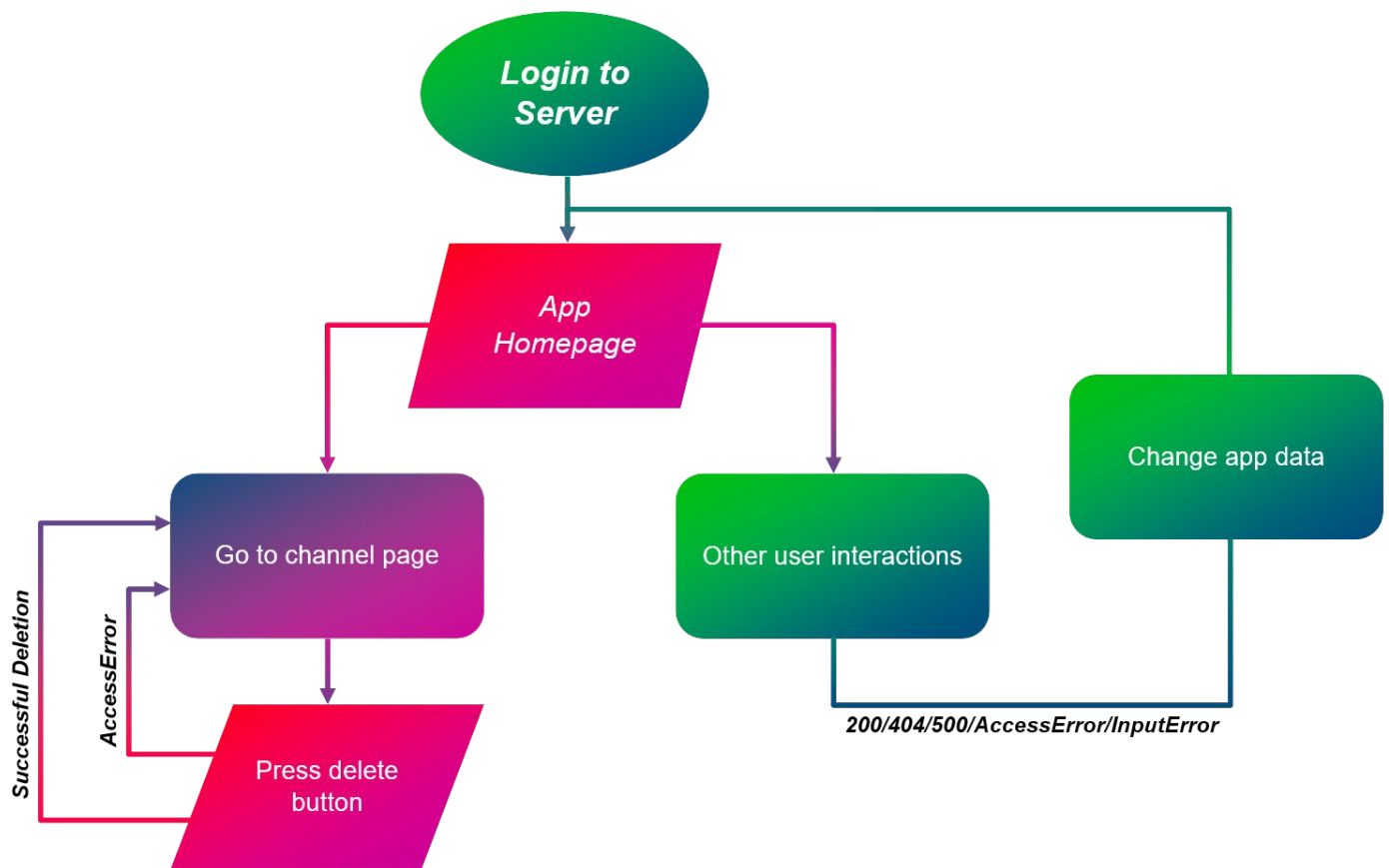
Name and Description	HTTP Method	Data Types	Exceptions
channel/delete/v1	DELETE	Parameters: { token, channel_id } Return Type: { }	InputError when: <ul style="list-style-type: none">- channel_id does not refer to a valid channel AccessError when: <ul style="list-style-type: none">- channel_id is valid and the authorised user is not a member of the channel
channel/rename/v1	POST	Parameters: { token, channel_id, new_name } Return Type: { }	InputError when any of: <ul style="list-style-type: none">- channel_id does not refer to a valid channel- length of new_name is less than 1 or more than 20 characters AccessError: <ul style="list-style-type: none">- channel_id is valid and the authorised user is not a member of the channel
notifications/mute/v1	POST	Parameters: { token, channel_id, dm_id } Return Type: { }	InputError when: <ul style="list-style-type: none">- channel_id/dm_id does not refer to a valid channel/dm AccessError when: <ul style="list-style-type: none">- channel_id/dm_id is valid and the authorised user is not a member of the channel/dm

Conceptual Modelling (State Diagrams)

Server-Side State Diagram for Channel Delete Feature



Client Side State Diagram for Channel Delete Feature



Appendix

Interview 1: Patrick Vane-Tempest

What is your name and email address?

My name is Patrick Vane-Tempest, and my email is pat.vanetempest@gmail.com

How often do you use Streams or a similar messaging platform?

I use messaging platforms multiple times a day. I would say that the accumulated time spent online is not that long because generally when I log onto any sort of messaging service I do it for a particular purpose, such as if I need to send someone a specific text. Streams isn't a platform that I would stay on for very long but I would for sure use it multiple times throughout the day.

Which purposes would you use Streams for?

So with messenger, generally, your groups that you're contacting as a whole are people that you know or people that you are specifically affiliated with. Streams, I can imagine, insert the user into open kind of space - an open community, if you will - where there's the conversations that continue.

I can see myself using Streams in a similar way to how Reddit is used, except with maybe more actual interaction.

While using Streams, are there any issues that you ran into?

I wouldn't say that there was anything in particular in terms of issues, but there were a few features that I would like to see.

While using Streams, are there any features that could be added to improve your experience?

If you could have nicknames within specific channels, that can add a lot of character and personality to the channel as a whole. In terms of the channel department, that's pretty much all I would improve, though some other messages stuff I would like to see is perhaps unsend – I would imagine doing that would be similar to the edit stuff you've got – and the ability to send photos and other media.

I like the queuing messages (Standups) because if you're an admin and you need to make an announcement to a group on a regular basis – such as a streamer who has many announcements to make to a community – I can see how that would be useful.

Would that be another feature you're keen on seeing?

Yes, I think, in addition to being able to queue messages to send at a certain time - the addition of being able to set a message to send recurringly at calendar dates would be useful for the purpose I mentioned before.

Interview 2: Alexandria Lombard

What is your name and email address?

Alexandria Lombard and my email address is alexandria.lombard@gmail.com

How often do you use Streams or a similar messaging platform?

I use messenger every day.

Would you say streams are similar to messenger?

Not really - I mean in the sense that you can send, deliver, and receive messages - but Messenger doesn't really have channels, but rather group chats and that's why I think it's a good chatting app. I also use things like Snapchat and Instagram, though I wouldn't go as far to say that those are similar, as they kind of serve different purposes.

Which purposes would you use Streams for?

I think I would use it for schoolwork, like full class messaging instead of using group chats on messenger – which I currently use for my courses. I think having something like this that is dedicated solely to academic use would be good. That being said, I might not use it because I already have Microsoft Teams.

While using Streams, are there any issues that you ran into?

It was really ugly to look at. I'm not sure what else, but it just was not appealing to the eye at all.

So would you say you wouldn't use it just because of that?

Yes, and I think that a large part of your audience will not be familiar with 'techie things'. For them, aesthetics is important, and I am one of them.

What exactly about the interface do you not like?

I think in its current state it is too simple - almost too simple. It needs something unique if it's going to compete with anything, so in my opinion the interface needs a lot of improving.

So with your time using streams were there any features that you think could be added to improve your experience?

Yes, being able to react to things with different emojis. I don't think just the thumbs up is enough.

So what emoji is potentially what you would like to see?

Maybe a happy face, an angry face and also, I'd like to be able to react to things with pictures. Also, being able to send pictures and GIFs would be great.

So I hear your complaints about the interface, how would you suggest improving it?

Maybe use a better font or a logo. The colours are quite plain so maybe some more eye-catching themes or even just a darker background, similar to what discord has - a nice grey background. That makes things a lot easier on the eyes, which is great if you're going to be using something like that for an extended period of time. You don't want it to be like blinding you! Honestly, the major problem I have with it is just how it looks. It looks like Evernote if I'm being honest. It doesn't look like a messaging app at all. Perhaps take some inspiration from something similar, like discord, without ripping it off. That's all!

Interview 2: Robert Huang

What is your name and email address?

My name is Robert Huang and my email is roberthuang2003@gmail.com

How often do you use Streams or a similar messaging platform?

I use apps like messenger, teams, discord, instagram and snapchat everyday.

Which purposes would you use Streams for?

Mostly for academic purposes, like group projects or for interacting with classmates from my tutorials and labs. It's more formal than most other communication tools, so I think it would be suitable for those purposes

While using Streams, are there any issues that you run into?

I think after using it for long periods of time, there are too many channels and dms I am part of, which makes it difficult to navigate. A way to delete or archive these would be useful. Additionally, not all notifications can be read by the user, only the latest 20 are provided. This can cause some important messages to be missed.

While using Streams, are there any features that could be added to improve your experience?

I would also prefer if we were able to see in the notifications whether someone has changed your permissions recently. I want to also be able to see if a channel is private before I even click on it, for work purposes you don't want to constantly misclick channels and waste time. Additionally, I would like to be able to mute notifications for a particular channel/dm to avoid distractions.