Requirement 1

Elicitation:

Target user1: 2822309062@qq.com, ZiJie Wei

Engineer:

So, based on the current state of our Seams project, which is a basic team-communication tool, what is a feature you think we need in the future to improve or enhance the user experience?

Target user1:

I feel like its quite odd that users only leave a channel when they decide to, in reality people sometimes get kicked from channels so I think that's a new feature that can be a useful of feature for admins

Engineer:

Hmmm, so who do you think should have the permission of kicking other users?

Target user1:

I guess the owners of channel and the ones with global permission, just like the add and remove owner feature, it should be an owner 's function

Engineer:

Sounds good, so who do you think should get kicked, like do you think there is an automatic trigger for user to just get kicked right away?

Target user1:

I think it should be of channel owner's arbitrary decision, like there shouldn't be an automatic way to just kick people out of nowhere. Actually, maybe if someone spams in a channel or being racist or sexist, there should be an automatic way to detect it and warn them? I don't know but that sounds like another function though.

Engineer:

True, warn someone automatically based on their message can be a function we do in the further future but for now I just want to focus on the kicking user, don't what to drag things too far and wide and end up in a huge mess.

Target user1:

Fair.

Engineer:

So I guess for now, a user can be kicked at any time from owner's arbitrary decision, do you think their records in this channel should also be removed?

Target user1:

I think not? Like how would we trace back to the message if some are actually important? Or its just caused by one of the owner being rude and impulsive and abused his power.

Engineer:

Alright so a user can be kicked from a channel but his message should remain in the channel? So it would basically behavior like when user leaves his own, but in this case the user is kicked

Target user1:

I guess so.

Engineer:

So who should be able to get kicked? Only members or members and owners as well?

Target user1:

Don't think this feature should be able to just kick owners as well? But again you can just remove other's owner permission as an owner, and this is where I get a little confused.

Engineer:

Yeah owner can just demote other owners, it is a little odd, maybe in the future we would improve this structure by having a highest owner in a channel and he would be the only one to demote and promote other owners?

Target user1:

Sounds about right.

Engineer:

Alright, lets get back to the topic, who do you think this function should kick?

Target user1:

I think only kicking members will do for now.

Engineer:

In terms of UI, where do you think this function should be represented? Like a button next to the name in the member list? Like next to the add owner, remove owner icons?

Target user1:

That sounds fair.

Engineer:

Alright that will do for now, we will get back to you after we do some analysis with this new feature. Thanks for your time

Target User1:

Just one last thing, since kicking is quite arbitrary to owners, maybe add a pop up window so it confirms the kicking with owner before actually kicking someone just to avoid owner misclick or kicked wrong people.

Engineer:

Alright, a pop-up window to reassures the kicking action, thanks for the recommendation.

Target User1:

No worries.

Analysis & Specification:

User stories:

1. As a channel owner, I want to kick members so that I can stop misbehaviour within channel
2. As a channel owner, I want to find the kick button next to user's name in the channel member list so that I can easily find and kick a member
3. As a channel owner, I want to have a pop-up confirmation window before I kick a member so that I don't misclick and avoid kicking the wrong member
4. As a channel member, I want to keep my message when I get kicked so that kicking caused by mistake or abuse of power is not too destructive

User Story Acceptance Criteria (Rule based):

User Story 1 Acceptance Criteria:

- A channel owner or member with owner permission should be able to kick a member whenever he wants to
- The kicked member should no longer be shown in the member list
- The kicked member can no longer react or see anything within the channel he is kicked from

User Story 2 Acceptance Criteria:

- The kick member button should be next to members' name in the channel member list, which is also where the add and remove owner buttons are
- The kick button should not show next for channel owners' name
- The kick button should appear next to all members, including the ones with global owner permission but not yet a channel owner
- The kick button should only appear for channel owners or users with global owner permission

User Story 3 Acceptance Criteria:

- A pop-up confirmation window should appear after channel owner clicks the kick member button
- The confirmation window should contain basic information about the member getting kicked
- The channel owner must click confirm in the confirmation window for a selected member to be kicked from a channel

User Story 4 Acceptance Criteria:

- The kicked member should retain all messages he sent in the channel he was kicked from
- The kicked member should be able to re-join or be re-invited back to a channel

User Cases:

<u>Main Success Scenario:</u>

A global member user joins a public channel

User now has member permission within the channel

User's name now displays in channel member list

User sends an inappropriate message to the channel

A channel owner clicks the kick button next to the user's name in member list

Channel owner confirms the kicking action in a pop-up window

Selected user no longer has member permission within the channel and is removed from the channel

<u>Main Failure Scenarios:</u>

A global member user joins a public channel

User now has member permission within the channel

User's name now displays in channel member list

User sends a normal message to the channel

A channel member clicks the kick button next to the user's name in member list

Error display and deny the kicking action

A global member user joins a public channel

User now has member permission within the channel

User's name now displays in channel member list

User is promoted to a channel owner

User sends a normal message to the channel

User clicks the kick button next to his own name in member list

Error display and deny the kicking action

A global member user joins a public channel

User now has member permission within the channel

User's name now displays in channel member list

User sends a normal message to the channel

A channel owner clicks the kick button next to the user's name in member list

Channel owner cancelled the kicking action in a pop-up window

User case background:

Use Case: Kick member from channel

Goal in Context: Channel owner/member with global permission need to kick a member from a channel

Scope: Seams, channel system

Level: Primary

Preconditions: A registered user joins a channel as a member

Success End Condition: The selected member is kicked from the channel

Failed End Condition: User with no channel owner or global owner permission triggers this action; A user is kicking himself; User cancelled the kicking action in the confirmation window

Primary Actor: Channel owner and users with global owner permission

Trigger: Auth user clicks the kick button next to a member's name in the member list
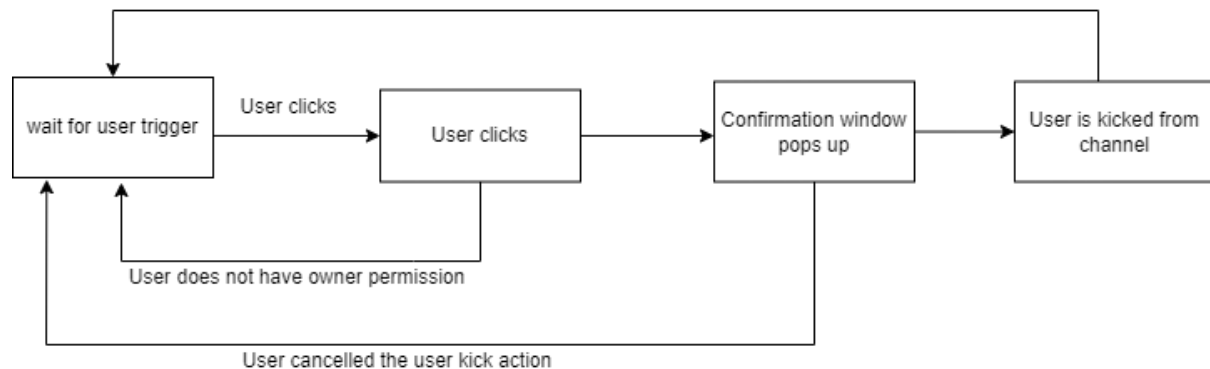
Validation:

The User case captures what I envision the kick function should be quite nicely, it is has the confirmation window which I think will be useful in real life practices and it will only be shown for users with owner permission so it can already filter out the users only got member permission from abusing this function. I think this function will be sufficient for the kicking feature.

Interface Design:

Name & Description	HTTP Method	Data Types	Exceptions
channel/kick/v1 Given a channel id, remove an existing member from the channel. The removed user's messages should remain within the channel. A user cannot kick himself	POST	Parameters: {token, channel_id, u_id} Return Type: {}	Input Error when any of: - channel_id does not refer to a valid channel - u_id does not refer to a member already in the channel - u_id refer to an owner in the channel

			Access Error when: - channel_id is valid and the authorised user does not have owner permission in the channel

Conceptual Modelling:

Requirement 2

Elicitation

A: Seams Engineer

B: Jake Parker, jakeparker@gmail.com

- A: Hello, I'd like to interview you about some more requirements for Seams UNSW. Is there a feature you would like to add to seams?
- B: Hi, I do have an idea, basically, about sending the attachment.
- A: Wow, that is a great idea. Can you expand on what specific requirements you have for the sending attachment?
- B: OK, let me give an example. One day the teacher arranged a group assignment, and I needed to send an attachment to my group so that they could download it, view it, and make changes.
- A: I see what you mean, so do you want to send attachments by button or drag?
- B: I think these two methods are excellent so that I can easily send attachments through these two methods.
- A: If that's the case, we'll create a button that looks like a paperclip so that new users can quickly identify what the different buttons do. What do you think?

- B: It's great, but I hope seam can upload attachments from local and Cloud to upload attachments in different channels more efficiently.
- A: Understand, I appreciate your new perspective, and we will try to update this feature in the latest iteration.
- B: At the same time, I also wish I had the option to deselect the files in the selection since sometimes people might choose the wrong attachment.
- A: Alright, we'll create a preview so you can see the details of the file ahead of time before sending it to your team. Do you have any other needs?
- B: There are no other needs for now, and maybe there will be some in the future.
- A: OK, thank you very much for your suggestion. I hope our seam can be continuously optimized and become mainstream communication software!

User Story：

- As a student on Seams UNSW, I want to be able to send an attachment from local so that my partner can receive a file or picture.
- As a student on Seams UNSW, I want to be able to send an attachment from Cloud so that my partner can receive a file or picture.

User Story Acceptance Criteria (Rule-based or Scenario-based):

As a student on Seams UNSW, I want to be able to send attachment from local to channel, so that my teammate can received a file or picture.

1. The picture is uploaded to the channel by clicking a toggle next to the message entry box and selecting the "Upload from my computer."

2. An interface should pop up that contains the list of a file folder or document in different routes in the local computer, followed by a selectable button with "cancel" and an un-selectable button "open".

3. The list of a file folder or document should let users select. Once the user selects an option file, the button "open" should be selectable.

1. If the users click the button "cancel", the interface will be closed and return to the page at the beginning. If the users click the button "open", the file will be uploading the file.

2. The attachment should be uploaded and sent to the chat entry box after the user uploads the file within a "preview", followed by a click cross button at the right to cancel.

3. The user could send it to the channel.

4. The attachment that was sent should appear with a file frame within a detail in the chat interface.

5. The attachment that was sent should be a downloadable file that teammates can download.

6. The attachment that was sent should occupy less space in storage than the original attachment.

As a student on Seams UNSW, I want to be able to send an attachment from Cloud, so that my partner can received a file or picture.

2. The picture is uploaded to the channel by clicking a toggle next to the message entry box and selecting the "Upload from Cloud."

3. An interface should pop up that contains the list of a file folder or document in different routes in the cloud database, followed by a selectable button with "cancel" and an unselectable button "open".

4. The list of a file folder or document should let users select. Once the user selects an option file, the button "open" should be selectable.

1. If the users click the button "cancel", the interface will be closed and return to the page at the beginning. If the users click the button "open", the file will be uploading the file from Cloud.

2. The attachment should be uploaded and sent to the chat entry box after the user uploads the file within a "preview", followed by a click cross button at the right to cancel.

3. The user could send it to the channel.

4. The attachment that was sent should appear with a file frame within a detail in the chat interface.

5. The attachment that was sent should be a downloadable file that teammates can download.

6. The attachment that was sent should occupy less space in storage than the original attachment.
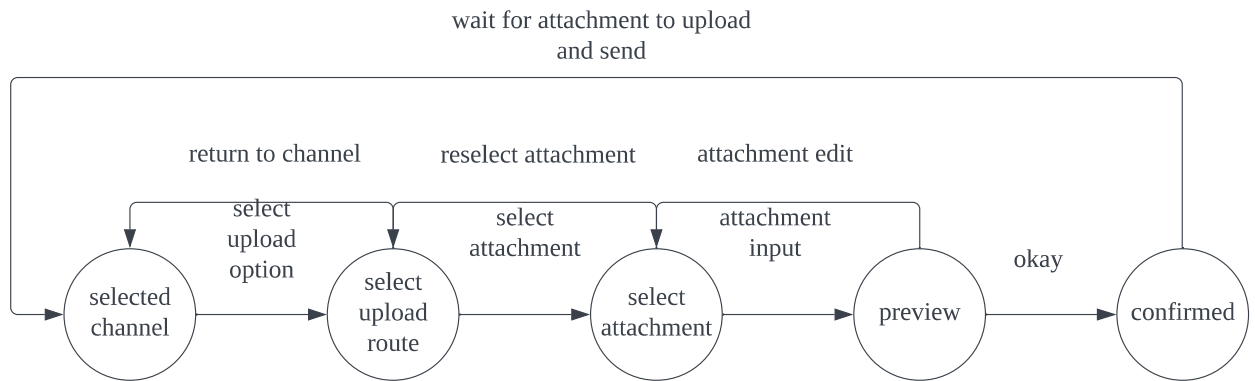
Validation

The user case accurately describes how I might want to upload the attachment either from the local or Cloud. The button "open" will help me in assessing if the chosen attachment is correct. A Cross button in the chat entry box would be useful since I might regret uploading the wrong file or prefer to send a message. Attachment size reduction is also very handy as it would ensure that less storage space would get taken up on the mobile terminal.

Interface design

Function name	HTTP method	parameters	Return type	Exceptions	description
Message/ upload_a ttachmen t	post	{token, is_channel, image_url, channel_id, all_msg: [{ message_id u_id message time_sent } }	{message_id}	**InputError** **Any type of:** • img_url returns an HTTP status other than 200 • uploaded attachment is not a not a file type. **AccessError** • User is not a part of	Given attachment url with detail and upload the file into the database

				the channel they are uploading the attachement	

wait for attachment to upload and send

return to channel   reselect attachment   attachment edit

select upload option   select attachment   attachment input   okay

selected channel → select upload route → select attachment → preview → confirmed

Requirement 3

Name: mushuang
Email: 2337278881@qq.com

Elicitation

A: Hello, I'd like to interview you about some more requirements for seams. Is there a feature you would really like to add to seams?

B: Hi, I do have an idea, mainly about the favorite messages feature.

A: Wow, that is a great idea. can you expand on what specific requirements you have for the collection of messages?

B: Let me give you an example. One day the teacher posted an important message in class about the key contents of the final exam, and I want to bookmark it so that I can quickly find the important contents when I'm revising.

A: Great, I see what you mean, so do you want the Favorites feature to be implemented on the right side of the message with a click or a long press on Favorites?

B: I think on the right side is a good choice, because it will be more convenient for me to check whether I have favorited the message or not.

A: If so, would it be better for us to mark favorites for messages that have been favorited so that users can view them more clearly?

B: This is very good, but in order to find out the full content of the favorite message, I also want to be able to find the details of the message in the user's favorites.

A: I totally agree with you, and I'm sure we'll implement it in future iterations.

B: Oh! By the way, I also wish I could see who sent this message, when it was sent. And if it was the latest version.

A: I understand who sent this message and when it was sent, but I don't understand what it means if it's the latest version.

B: Let me think about how to explain, for example, a message "Next week's exam on Monday", but I have bookmarked this message in my favorites, but the teacher finds out that the exam is next Wednesday and the teacher changes the next message to "Next week's exam on Wednesday ", then, in my favorites, he will automatically change it to "Next Wednesday Exam" instead of me having to bookmark it again.

A: I totally understand your needs and thoughts. Can the favorite messages be viewed by all the people in the channel?

B: I want it to be viewed by everyone, because I think only important and useful messages will be bookmarked.

A: Thanks for the interview, I'm happy with it, and please believe we'll implement it in future iterations of seams!

Analysis & Specification - Use Cases

User Stories:
1) As a student, I want to favorite the message so that I can quickly review the important messages such as tutor send a notification
2) As a student, I want to favorite the message so that even if you delete or edit some messages you can continue to find and view them in "Favorites".
3) As a student, I want to favorite the message so that Save this message or picture forever, and let my classmates read the message faster when sharing it later.

Acceptance Criteria:

1.As a student, I want to favorite the message so that I can quickly review the important messages such as tutor send a notification.
- A student finds an important message in a public channel, such as past sample exam.
- This student clicked on Favorite this message command on the left side of this message.
- When the favorite message is clicked, the message will show that it has been favorited and an additional message will be added to the favorites
- When you go back to Favorites, you will see who sent this message at what time you favorited it.
- When you open a message in your favorites, you will see the exact same message content directly, so you will quickly find the past sample exam

2.As a student, I want to favorite the message so that even if you delete or edit some messages you can continue to find and view them in "Favorites".

- A student finds an important message in a public channel, such as "Final exam is next Monday".
- This student clicked on Favorite this message command on the left side of this message.

- When the favorite message is clicked, the message will show that it has been favorited and an additional message will be added to the favorites
- When you go back to Favorites, you will see who sent this message at what time you favorited it.
- The message "Final exam is next week Monday" was found to be wrong by tutor, and this message was changed by tutor to say that final exam is next week Wednesday.
- When you check your favorites, you can still see " Final exam is next Wednesday" in your favorites, and this message has been updated.

3.As a student, I want to favorite the message so that Save this message or picture forever, and let my classmates read the message faster when sharing it later.

- A student finds an important message in a public channel, such as "Final exam is next Monday".
- This student clicked on Favorite this message command on the left side of this message.
- When the favorite message is clicked, the message will show that it has been favorited and an additional message will be added to the favorites
- When you go back to Favorites, you will see who sent this message at what time you favorited it.
- When you click on the message, you will see "Final exams are next week on Monday".
- You can share this message to let your classmates quickly see "Next week's exam is next Monday"

Validation

This use case describes exactly how I might want to favorite useful messages. I can keep track of exactly who sent the message and when, and even if the sender deletes or edits the message, I can check the latest version can be accurately viewed in the favorites. At the same time, if my classmates need, they can view this important news as favorites at any time.

Interface Design

Function Name	HTTP Method	Parameters	Return type	Exceptions

message/favorite
Any user can bookmark messages (including messages, pictures, files) in the channel
	POST	(token, message_id)	{
			
			}
				InputError when any of:
				 • message_id is not a valid message within a channel that the authorised user has joined
				 • the message is already favorited.
				AccessError when:
				 • channel_id is valid and the authorised user is not a member of the channel

User/favorite	GET	(token)	{
			
			}
				NA

Conceptual Modelling (State)