# Requirements & Design for future work

## Requirements Elicitation:

**Question:**

1. What kinds of communication tools have you used in the past?
2. For what scenario would you choose to use Seams, and how can it enhance your experience
3. Are there any features you commonly use?
4. What do you think or what problems do you encounter when using Seams?
5. What new features would you like to add for these tools, and why?

### User 1:

Name: Zitao Wang Email: 2158772840@qq.com

**A1**: Messengers maybe.

**A2**: There are many clubs in my university using tools like messengers, forming a space for chatting.

**A3**: Yeah, I usually share some interesting pictures with my friends, so I could at least have some sense of human interaction during the pandemic period.

**A4**: There is always some unwanted information sended to me.

**A5**: I hope that the system could somehow block this information for me.

I have met the problem of unwanted information, and want the system to block this information and this user for me.

### User 2:

Name: Mengfei Wu Email: 1219404142@qq.com

**A1**: Wechat is in daily use and Discord is my favourite tool when I play games with my friends.

**A2**: For teamwork and get communications with other teammates

**A3**: I often use the video chat feature in WeChat, this feature almost replaces the other ways I communicate with others.

**A4:** I probably will get an invite from a channel or dm I don't want to join.

**A5**: I hope to add a new function to stop others, inviting me to enter a channel or dm directly.

# Requirements Analysis & Specification:

## User 1:

**User stories:**

As a club member, I want to join the group chat with other members in the same club, and block all the disturbing information.

**Acceptance criteria:**

1. User could join the club's group chat while the channel_id is given to the user
2. User could send message to the group chat, and send direct to message to certain user who had already registered
3. While receiving unwanted information or messages from certain users, others could block further information for that user.

**Use case:**

Goal in context: Users can block the message from certain DM or channel
Scope: UNSW Seams
Level: Primary Task
Preconditions: The user joins the channel/dm.
Success End Condition: The user can block the message form the DM and channel
Failed End Condition: The user cannot block the message fotm the DM and channel
Primary Actor: User
Trigger: User clicks the message and blocks that person.

**Success Scenario:**

1. Users received unwanted information from certain DM/Channel.
2. User choose the DM/Channel id and block them
3. Information from blocked DM/Channel will not show.

## User 2:

**User stories:**

This user use many communication tools and want stop others he don't know to invite him to channel and dm

**Acceptance criteria:**

1.user can be joined in many channels and dm to communicate with others.
2.user be added to different dm and channels which he doesn't want to enter.
3.When others invite or add a user to channel and dm, he doesn't want to be operated directly.

**Use case:**
Goal in context: Users can set the permission to be invited by others in dm and channels.
Scope: UNSW Seams
Level: Primary Task
Preconditions: The user is registered and is not to be removed.
Success End Condition: The User can change the permission of invitations of dm and channel.
Failed End Condition: The User can not change the permission of invitations of dm and channel.
Primary Actor: User
Trigger: User click the permission of invitations.
**Success Scenario:**

1. Users can join other channels and dms.
2. When others invite or add a user to channel and dm, he doesn't want to be operated directly.

# Requirements Validation

With all the complete solutions, we come back to the previous user again and interview them with the current approaches.

1. Have the user stories completely covered the problem you are concerned about? Are there any improvements needed?
2. Is the success scenario correctly describing the process you want? Is it easy to achieve?

**User1:**

1. I believe that is almost all the things that I want.
2. The approach is easy enough to conduct.

**User2**:

1. All good.
2. All good.

# Design Interface Design

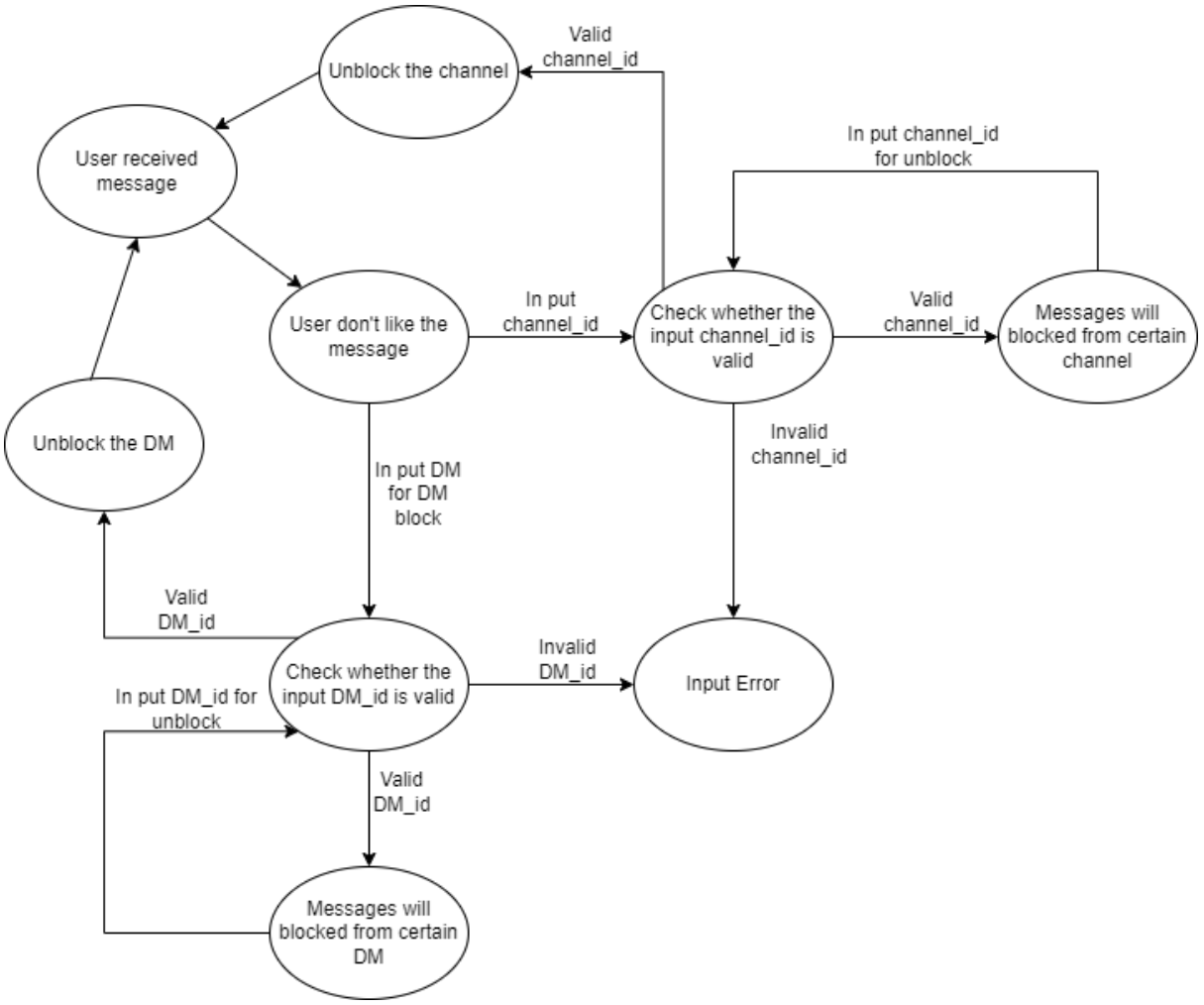
| Name & Description | HTTP Method | Data Types | Exceptions |
|---|---|---|---|
| **user/block/v1**<br><br>Messages from the blocked user with u_id will not be shown in dm/channel, but still show other messages. | POST | **Parameters:**<br>{token, u_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. u_id does not refer to a valid user.<br>2. The user has already blocked this u_id.<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **user/unblock/v1**<br><br>Unblock this user with u_id and show new messages from this user. | POST | **Parameters**:<br>{token, u_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. u_id does not refer to a valid user.<br>2. u_id does not refer to a user who is in the block list.<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **channel/block/v1**<br><br>Get a channel id and not receive any messages from this channel | POST | **Parameters:**<br>{token, channel_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. channel_id does not refer to a valid channel.<br>2. The user has already blocked this channel<br><br>**AccessError**:<br>1.token does not refer to a valid user |

| | | | |
|---|---|---|---|
| **channel/unblock/v1**<br><br>Unblock this channel with channel_id and show new messages from this channel. | POST | **Parameters:**<br>{token, channel_id}<br><br>**Return Type:**<br>{} | **InputError:**<br>1. channel_id does not refer to a valid channel.<br>2. channel_id does not refer to a user who is in the block list.<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **dm/block/v1**<br><br>Get a dm id and not receive any messages from this dm | POST | **Parameters:**<br>{token, dm_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. dm_id does not refer to a valid dm.<br>2. The user has already blocked this dm<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **dm/block/v2**<br><br>Unblock this dm with dm_id and show new messages from this dm. | POST | **Parameters**:<br>{token, dm_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. dm_id does not refer to a valid dm.<br><br>2. dm_id does not refer to a user who is in the block list.<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **channel/mute/v1**<br><br>Mute all members in the channel who can’t send message to the channel except the channel owner. | POST | **Parameters:**<br>{token, channel_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. Channel_id does not refer to a valid channel.<br>2. The channel is already muted.<br><br>**AccessError**:<br>1.Token does not refer to a valid user.<br>2. The authorised user doesn't have owner permissions in the channel. |

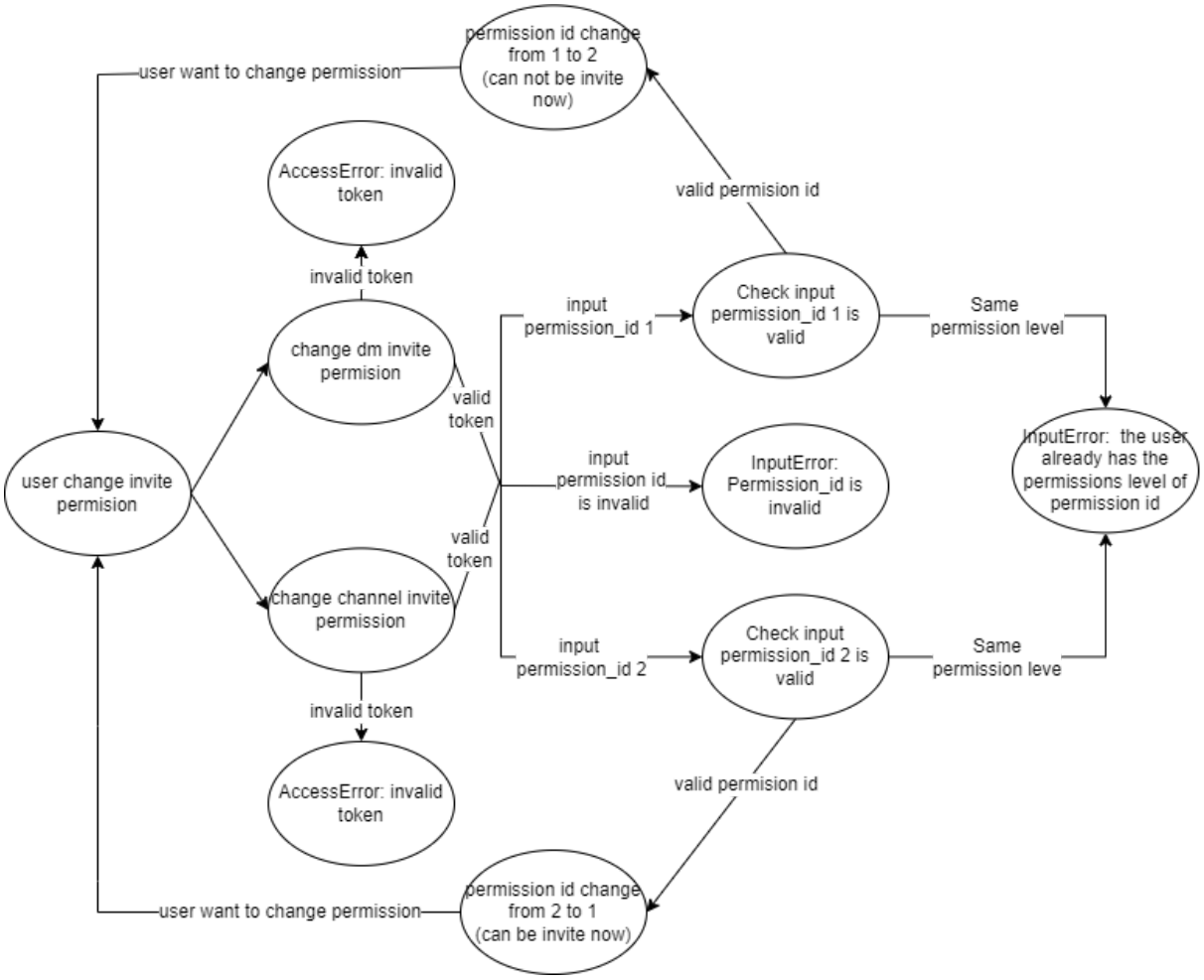
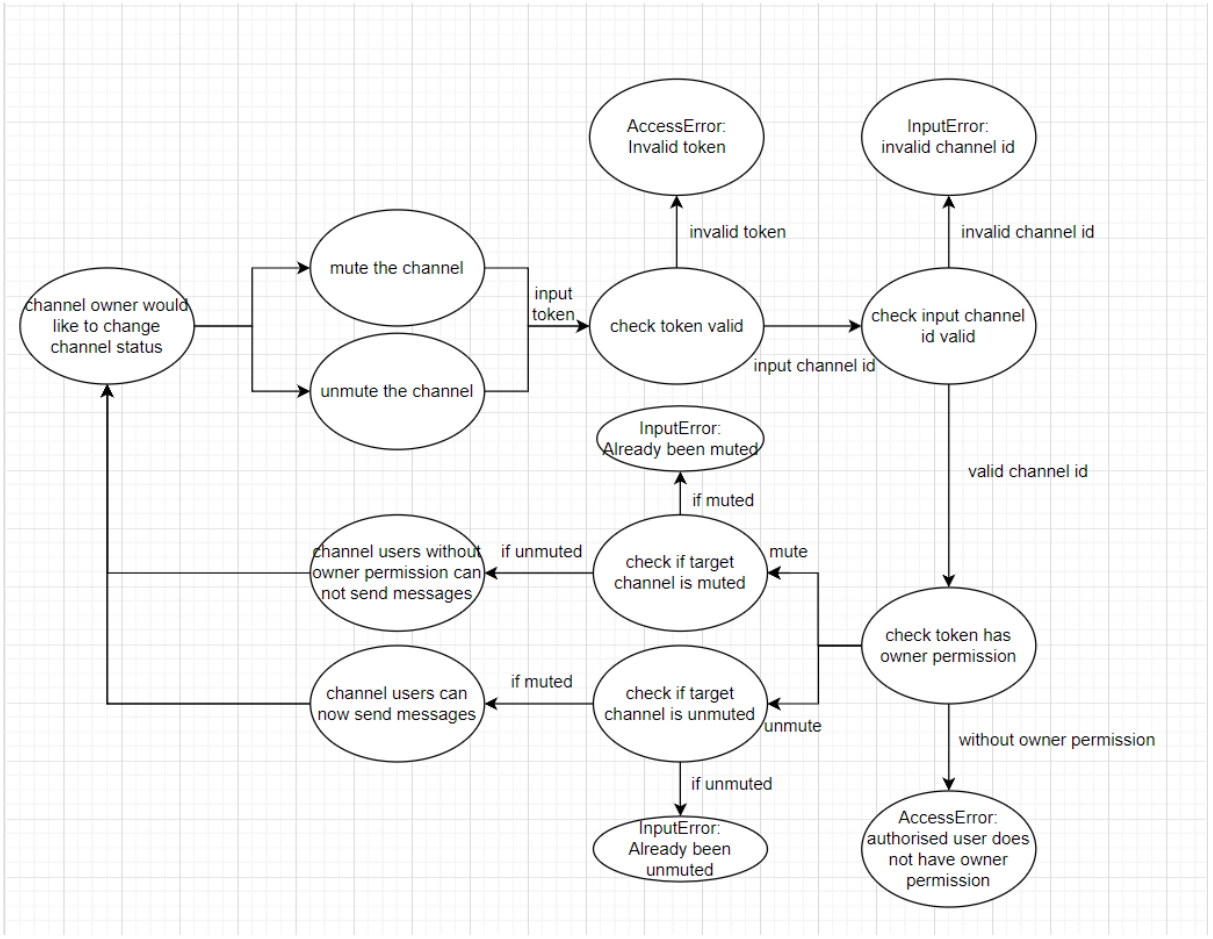
| | | | |
|---|---|---|---|
| **channel/unmute/v1**<br><br>Unmute the channel member. | POST | **Parameters:**<br>{token, channel_id}<br><br>**Return Type:**<br>{} | **InputError**:<br>1. Channel_id does not refer to a valid channel.<br>2. The channel is already unmuted.<br><br>**AccessError**:<br>1.Token does not refer to a valid user.<br>2. The authorised user doesn't have owner permissions in the channel. |
| **channel/invite/permission/v1**<br><br>set their permissions to new permissions described by permission_id.<br><br>permission_id = 1(can be invited)<br><br>permission_id = 2(can not be invited) | POST | **Parameters:**<br>{token, permission_id }<br><br>**Return Type:**<br>{} | **InputError**:<br>1. permission_id is invalid<br>2. the user already has the permissions level of permission_id<br><br>**AccessError**:<br>1.token does not refer to a valid user |
| **dm/invite/permission/v1**<br><br>set their permissions to new permissions described by permission_id.<br><br>permission_id = 1(can be invited)<br><br>permission_id = 2(can not be invited) | POST | **Parameters:**<br>{ token, permission_id }<br><br>**Return Type:**<br>{} | **InputError**:<br>1. permission_id is invalid<br>2. the user already has the permissions level of permission_id<br><br>**AccessError**:<br>1.token does not refer to a valid user |

# Design Conceptual Modelling

## Block DM and Channel message:



## Invite Permission change:



## Channel mute/unmute: