Planning

Questions List

1. Do you use any teamwork driven communication tools? If so which one/s and for what purpose.
2. If you do use any similar applications (Teams / Discord) what are some features you really like or use a lot of?
3. What is an important feature for you as a user other than messaging in a channel/dm?
4. Are there any security requirements you wish to have?
5. Are there any specific additions you would like to see within UNSW beans?

Elicitation

Name/Email	Responses
Clark Edillo (cdilz@icloud.com)	Q1). Well, some of the main communication tools I use include discord, imessage, microsoft teams. These are mainly for talking with friends and also for group communication whenever it is necessary. The reason why I like these tools is because they are very user friendly in which I can pretty much do a lot without being restricted such as being able to send gifs to react to others and also sharing funny videos. Q2). From the communication apps i listed, some of my favourite things are ❖ Being able to react ❖ Being able to see some user stats in their profile ❖ Being able to send gifs, images and videos ❖ Having the ability to change the viewing colour (dark mode) ❖ Being able to view and share screens ❖ Being able to play mini games on discord with friends ❖ Being able to play game pigeon on imessage with friends ❖ Tagging people Q3). I would like to be able to send multiple things, not just messages. This includes videos, gifs, images and even files similar to discord or imessage. Something that is very versatile and isn't really restricting my freedom as a user. Q4). Well, first of all I would like to keep my account secure where no one can hack the database and grab all my passwords, emails and everything else. Maybe even two factor authentication would be good because of all the recent hacks such as medibank and optus. Maybe include a tip to make sure that your password isn't easy to guess such as 12345678 or something. Also, add some reminders which will say something along the lines of "Remember, our server will never ask you for your information".

	Q5), Well a i said before, I would like to not be restricted. I know it's very broad in terms of what you want as you want something specific but i believe there are many things that will fulfil that criteria. An example is to be able to send images, gifs, videos, voice records. Sometimes even games or widgets such as a weather widget. As there is no share screen feature, the image sending feature will be most important to me in terms of not being restricted.
Amy Liu (thisisamyliu@gmail.com)	Q1) For most teamwork driven projects, my teammates and I tend to use Discord as our main form of communication. It's a free multimedia application that enables you to share your voice, video and text-based/visual messages with others very efficiently, and it's such an easy way to connect with people online, mitigating the troubles that arise from planning in-person meetings. We use it to do our regular standups via video call for team projects, as well as constant communication via messages regarding problems we might encounter.
	Q2) Servers can be established where channels for various purposes (categorised by weeks, assignments, or content specific to a team project) can be created enabling better streamlining of communication and access to resources. Streaming technology enables live content to be delivered instantaneously which is convenient especially in a teamwork driven environment, where others can observe your POV and help you with the highest efficiency. Some other features I like are sending gifs/stickers, reacting to messages with emojis, pinning important messages and sending notifications to users when they are pinged.
	Q3) In addition to messaging in a channel or direct message to another user, here are some other features that I think would be important to implement: ❖ Being able to video/voice call in a specific channel on the server that wouldn't disturb users not in the channel. ❖ Sending over large files and documents without converting to a file in a separate format to accommodate for the size. ❖ Sending visual messages such as gifs, stickers, images and videos via channel messages or DMs. ❖ Being able to stream screens, tabs, and windows. ❖ Making channels private which mitigates the risks large public servers have where anyone can join and start spreading suspicious links and malicious files
	Q4) The login process can maximise security and cyber safety by ensuring users initiate strong and secure passwords and that they undergo a two-factor authentication method that adds an extra layer of security through requiring two rounds of logins and confirmation of user identity. Users should also be given the option for the application to filter through incoming messages from friends and/or strangers to ensure nothing of excessively insensitive or damaging content has been sent through.
	Q5) UNSW Beans should adopt a feature Discord has already

	implemented, and one that I find incredibly useful. Users should be able to create threads within the channel, essentially establish 'conversations' where users will click onto the thread and join the relevant conversation of a specific topic. This prevents the channel from being spammed and overloaded with a series of messages regarding various topics, and also streamlines the communication between users.
Reetam Chakraborty (chakrabortyreetam281@gmail.com)	Q1). I use Discord and Microsoft teams both as communication tools. I mainly use discord to communicate with my friends, classmates, join servers and to play games. Whereas Microsoft teams is a bit more formal and mainly used to communicate with tutors, classmates and ask any questions. Q2). Some of my favourite features from the above tools include; ❖ Being able to send GIFs, stickers and emojis ❖ Being able to send relatively large files through the chat ❖ Being able to pin message for future reference ❖ Being able to start voice calls and video calls relatively quickly ❖ Being able to share and view screens ❖ Being able to explore and join servers Q3). I think one of the most important features for me is the call feature. Being able to quickly start and join calls with a large group of people is especially useful for group projects or meetings. Also being able to share screens, send images and messages while on call is a useful feature that allows for better communication between users when working on projects. Q4). Some security requirements I can think of include the user being able to set their status to whatever they like. Also being able to change your profile to private where only users who are your friends will be able to thoroughly view your profile. Also being able to have private channels/servers that can be joined through invite only. Q5). Based on the current specification of UNSW beans I would like to see a feature that allows users to send files on channels, this could include .txt, .jpg, .png files etc. I believe this is a useful feature that can essentially improve how teams interact. Instead of having to email images separately to users, with this feature users will be able to efficiently send images directly to a group of users. This could improve the workflow and collaboration between the team/group.

User Stories

Name	User Story	Acceptance Criteria
Clark Edillo (cdilz@icloud.com)	As a **User of UNSW Beans**, I want to **send images** so that **I can communicate better.**	❖ The image button is near the message button ❖ Can import an image in ❖ Button image is a folder ❖ Cannot post an image greater than 8mb ❖ Image is posted when a user hits send
Amy Liu (thisisamyliu@gmail.com)	As a **User of UNSW Beans**, I want to **click a video/voice call button** so that **I can talk and see others in real time.**	❖ Button is placed in the top right ❖ Starts a video/voice call when button is clicked ❖ During a call, the button will be replaced by a end call button ❖ The call notifies everyone in the channel ❖ If a call is active, you can join through the same to right button
Reetam Chakraborty (chakrabortyreetam281@ gmail.com)	As a **User of UNSW Beans**, I want to **use a share button** so that **I can send files to channels/dms.**	❖ The share button will in the bottom right, next to message send ❖ Prompts user to import a file ❖ File cannot be larger than 8mb ❖ Sends file after clicking 'send' ❖ Share button image is of a folder ❖ Can send multiple files/images in one message

After consulting with our target users we have developed a singular user story that aims to encapsulate all their user stories within one.

Main User(s) Story

User Case :
1. As a User of UNSW beans, I want send attachments so that others can see files and/or images in channels and Dms
2. Acceptance Criteria:
    a. Attachment button is in on the bottom right next to typing bar
    b. Image of attachment button is a folder
    c. Attachments cannot be larger than 8mb
    d. Prompts the user to select an attachment.
    e. Attachments are sent when the 'send' button is clicked
    f. Multiple attachments can be sent at once
    g. Multimodal messages can be sent. Eg text and images

We then asked our users to react to our main user story and comment on how effectively it was able to incorporate their user story and provide a solution to their problem.

Validation

Name/Email	Comments
Clark Edillo (cdilz@icloud.com)	Yea this is exactly what i would have said myself! This describes my problems pretty much perfectly but it doesn't encapsulate everything such as gifs and maybe even voice messages. However, this is a great start. This gives the user a lot more freedom which I think everyone wants when using a communication tool because the main point is to 'communicate'.
Amy Liu (thisisamyliu@gmail.com)	This does solve my problem partially as I want to see others in real time. Images of them or their progress is good enough to start but I would like to see implementation of a video/voice call button in the future because I just think that it would be more convenient to call them rather than send attachments and then message. A lot more efficient in my opinion but this is a great start nonetheless.
Reetam Chakraborty (chakrabortyreetam281@gmail.com)	I'm really big on the fact whether the user of a communication app can send attachments because that's a big part of how I communicate either when i'm talking to friends or when i'm working. I really like how you thought to implement this which would make it a lot more user friendly. Really good job!

Interface design

Name and description	HTTP Method	Data types	Exceptions
message/attachment/v1 Allows the user to include an attachment inside a message. ChannelId is the channel that the attachment is being shared to, and is -1 if it is being sent to a DM. DmId is the DM that the message is being shared to, and is -1 if it is being sent to a channel. message is the optional message in addition to the attachment, and will be an empty string "" if no message is given. Returns a messageID when the message is sent.	POST	**Body Parameters**: { file location, ChannelId, DmId, message } **Return type if no error**: { messageID }	**400 Error** when any of: ● Invalid Attachment Url ● DmId does not refer to a valid DmId ● ChannelId does not refer to a valid ChannelId ● Either DmId or channelId is not -1 ● Length of message is more than 1000 characters **403 Error** when any of: ● File is larger than 8 mbs ● File extension is not supported ● User is not a member of the specified channel or Dm.

Conceptual modelling - state designs