# **Planning**

## Elicitation

- 1. Please provide your name
  - a. Abhi
  - b. Lovleen
  - c. Badi
- 2. Please provide your email
  - a. abhiramiviju@gmail.com
  - b. <a href="mailto:loveen001@yahoo.com">lovleen001@yahoo.com</a>
  - c. badi.ahmed999@gmail.com
- 3. Do you use any communication platforms to work on projects with a team?
  - a. Abhi: yes
  - b. Lovleen: yes
  - c. Badi: yes
- 4. If yes, what platforms?
  - a. Abhi: slack, discord, monday, facebook
  - b. Lovleen: Messenger and discord
  - c. Badi: Messenger
- 5. Why did you choose the platforms listed above?
  - Abhi: monday for the planning and task allocation, discord for ability to talk and call, facebook for accessibility. stopped using slack
  - b. Lovleen: Because most people already have accounts on these platforms anyway. There is no hassle in getting team members familiar with the system as they are commonly used in most group members personal life. Both of these platforms are versatile in their communication options, offering both direct messaging (individual) and groupchat options. The availability of both of these options enables work to be delegated effectively between individuals (so through dm's), and the opportunity for discussion and collaboration in open environments such as groupchats. In addition to this, the ability to video call on both of these platforms allows for remote teamwork action, and offers a personal and real life element to projects that may not allow for as much in-person collaboration. In general, it is easier to discuss things in person, and video call serves as a good substitute for this.
  - c. Badi: Convenience. Everyone has Facebook and it makes it soo much easier to add everyone to a platform where everyone is familiar
- 6. When choosing a platform what do you look for?

- a. Abhi: functionality (how many different things can you do on the one platform) + accessibility & ease of use
- b. Lovleen: Ideally, the platform should offer video call, groupchats and direct messaging. It would also be helpful if the platform supported including group members into a chat without having to send them a 'friend request' or establish permission to to join. Sometimes group projects involve individuals who we may not stay in contact with afterwards, and so it is preferable to not have to friend them (such as on facebook/messengers). The platform should also allow for access to groupchats and direct messages, while on video call, as often projects require accessing information and documentation inside these chats.
- c. Badi: Easy to use interface, features that enable easy connectivity such as reply features or buttons, the ability to send and save photos, videos, documents etc
- 7. Have you faced any issues or restrictions you are unhappy with on these types of platforms?
  - a. Abhi: lack of customisability or clunky/overcomplicated to use steep learning curve
  - b. Lovleen: Messenger chat is inconvenient for large groups (groupchats), as often when too many people are talking at once, the app often crashes. In addition to this, I feel that messenger is not good for the different things that need to be communicated in a group project. For example, if you want to send administrative or instructional messages, these are said in the same chat (where other chit chat can overwhelm the message or make it difficult to track down). This 2 dimensional design of groupchats does not, therefore, allow for instructional/admin messages to be clearly understood and accessible.
  - c. Badi: Usability is restricted for people who don't have Facebook. For example, often I can't see shared content, download content or open content right away as I am using messenger via mobile.
- 8. When using these platforms in a team environment, have you had any issues with communication and/or collaboration?
  - a. Abhi: lack of "read" notifications
  - b. Lovleen: Not really for the purposes that the apps/platforms are supposed to serve
  - c. Badi: Not really. Messenger is highly interactive and user friendly for a team setting. Phone calls and video called being an excellent feature
- 9. What features of these platforms are most appealing to you?
  - a. Abhi: team planning features like gantt charts
  - b. Lovleen: Discord is very good for the issues that messenger has in regards to instructional messages. The creation of 'channels' allows different messages to be sent in different chats. This helps make communication clean and understandable. On top of this, discord has other

auxiliary features that make the platform dynamic and fun to use . Groupchats can have members of varying admin levels and other powers that can be assigned to group members. Individuals can therefore fully embody their role in the group online (such as giving admin power to the group leader and renaming each individuals 'nickname' to their tasks) . Discord is also good because there is a screenshare option on videocall. Overall, the cleanliness that channels and admin powers provide makes this a very good platform to use for group projects

- c. Badi: Reply button features, the ability to react to a message to display ur emotion towards certain individuals feedback etc. Moreover free calls and video chatting abilities make it cheap, reliable and effective for group communication
- 10. What features of these platforms make working in a team more efficient?
  - a. Abhi: integration with already existing platforms
  - b. Lovleen: -Video calling each other from remote locations so that individuals do not need to meet each other in person ( as often group members live far from each other)
     -Active statuses that allow individuals to be accessible to other group members and
    - demonstrate that group members are online and present
    - -Ability to share documents, photos and voice memos in both dms and groupchats
    - -Direct messaging to individuals makes communication of personal, sensitive or inconsequential topics easy and not distraction to the groupchat discussion
  - c. Badi: As listed above

## Analysis & Specification - Use Cases

### **User Stories:**

- As Abhi, I want to know when other members of my team have received the information shared, so that we are always on the same page.
  - Scenario: Abhi wants to be notified when her message is received by the person/s the message was sent to:

"Given that I am a registered and logged-in user When I open a channel or dm that I am a part of. A notification is sent to other users, who are a part of the channel or dm and have also sent a message into the respective chat, informing them I have read the message. This notification is only sent once per message."

 As Lovleen, I want admin messages to be easily accessed, so that the important information is not lost and hard to find in group chats.  Scenario: Lovleen wants to easily access the information shared by admins of a group chat:

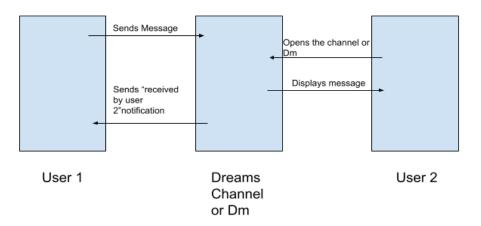
"Given that I am a registered and logged-in user When I open a channel or dm that I am apart of If a message as been sent my an owner member the message will be displayed with light yellow highlight around it"

- As Badi, I want to be able to select the previous message that I want to reply to, so that when
  replying I don't have to clarify which message I was replying to.
  - Scenario: Badi wants to select the message he wants to reply to:

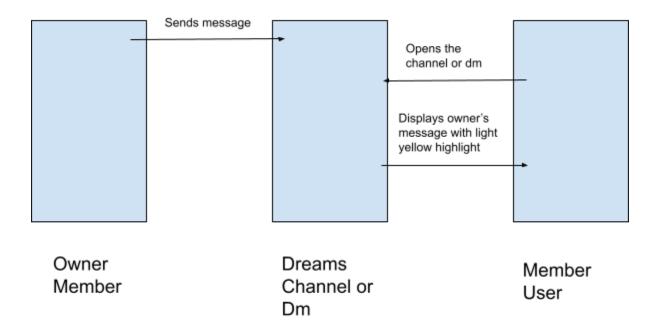
"Given that I am a registered and logged-in user When I open a channel or dm that I am apart of I can select a message that I want to reply to The selected message will appear above my reply when sent"

#### Use cases:

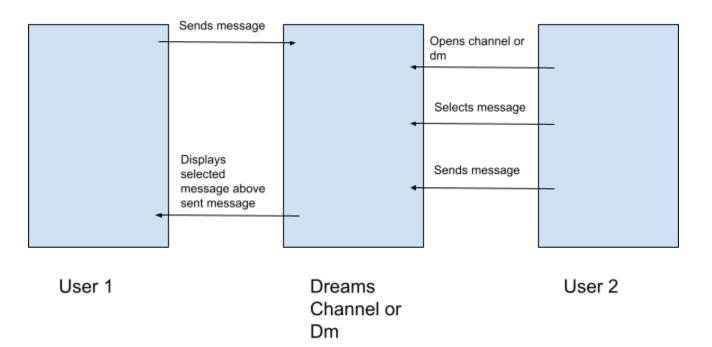
 Scenario: Abhi wants to be notified when her message is received by the person/s the message was sent to:



• Scenario: Lovleen wants to easily access the information shared by admins of a group chat:



• Scenario: Badi wants to select the message he wants to reply to:



## Validation:

We then asked everyone on the to what extent did these solutions fit your requirements?

- A. Abhi: Yes, that satisfies it, because now I am able to know when information has been delivered to others.
- B. Lovleen: The requirements are met perfectly, as the highlight allows me to easily differentiate between admin messages and the other common messages, making them easier to find while scrolling through a chat.
- C. Badi: To a large extent, as I am able to simultaneously see my old message, and it's reply in the form of a new message. Thus I can understand an answer and it's context relatively easily.

## Interface Design

- Scenario: Abhi wants to be notified when her message is received by the person/s the message was sent to:
  - Name & Description:
    - notifications/read/v1:

Given a user with u\_id and a channel\_id of the channel the user is accessing and is -1 if the user is accessing a DM. dm\_id is the DM the user is accessing and is -1 if the user is accessing a channel, sends a notification to every user who has sent a new message, that u id has read their message.

- HTTP method:
  - PUT
- Data types:
  - Parameters:

{token,channel\_id,dm\_id}

Return Type: {}

- Exceptions:
  - Input Error:
    - channel\_id does not refer to valid channel
    - dm id does not refer to valid DM
  - Access Error:
    - N/A

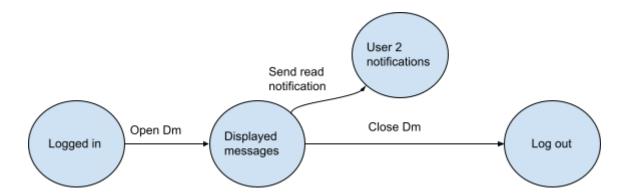
- Scenario: Lovleen wants to easily access the information shared by admins of a group chat:
  - Name & Description:
    - channel/owner/message/highlight/v1:
       Send a highlighted message from an authorised user to a channel specified by channel id. This can only be done if the user is an owner of the channel.
  - HTTP method:
    - POST
  - Data types:
    - Parameters:
      - {token,channel id,message}
    - Return Type:
      - {owner message id}
  - Exceptions:
    - InputError:
      - channel id does not refer to valid channel
      - Message is more than 1000 characters
    - AccessError:
      - User is not an owner of the channel
- Scenario: Badi wants to select the message he wants to reply to:
  - Name & Description:
    - message/reply/v1:

Selected\_message\_id is the message being replied to. channel\_id is the channel that the user is replying to the message in, and is -1 if the user is replying in a DM. dm\_id is the DM that the user is replying to the message in, and is -1 if the user is replying in a channel. message is the message sent by the user and can not be empty.

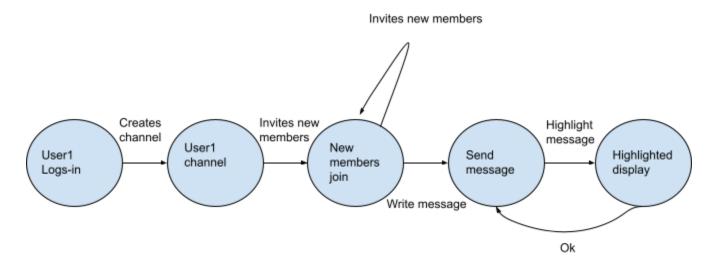
- HTTP method:
  - POST
- Data types:
  - Parameters:
    - {token,selected\_message\_id,message,channel\_id,dm\_id}
  - Return type:
    - {replied message id}
- Exceptions:
  - InputError:
    - channel id does not refer to valid channel
    - dm\_id does not refer to valid DM
    - message is empty
  - AccessError:
    - N/A

# Conceptual modelling (state)

 Scenario: Abhi wants to be notified when her message is received by the person/s the message was sent to:



• Scenario:Lovleen wants to easily access the information shared by admins of a group chat:



Scenario: Badi wants to select the message he wants to reply to:

