



# SRS Report

## Prisma : For Professional Team Work

Software Engineering Project

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# Introduction

## Purpose

The purpose of this document is to present a detailed description of the Team Communication System. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the Regional Historical Society for its approval.

## Scope of Project

This software is a project management tool for teams to pull off the work smoothly. Prisma encourages communication between team members, clients through public or private channels or DMs rather than sticking to old methods like mails/calls. It strengthens client relationships to provide top-tier enterprise support and drastically decrease response time. Hence, a platform to integrate with tools like Jenkins, GitHub and more for code reviews and deployment.

## References

- [www.wikipedia.org](http://www.wikipedia.org)
- [www.bccresearch.com](http://www.bccresearch.com)
- Software Engineering Book

## Glossary

Term	Definition
User	An imaginary user using prisma and its multiple features
Channel	Teamwork and communication happen in channels. A channel is a single place for a team to share messages, tools, and files. Read on to learn all about how to create, join, and use channels to collaborate with your teammates.
Database	Collection of all the information monitored by this system.
Software Requirements Specification	A document that completely describes all of the functions of a proposed system and the constraints under which it must operate. For example, this document.
Stakeholder	Any person with an interest in the project who is not a developer.

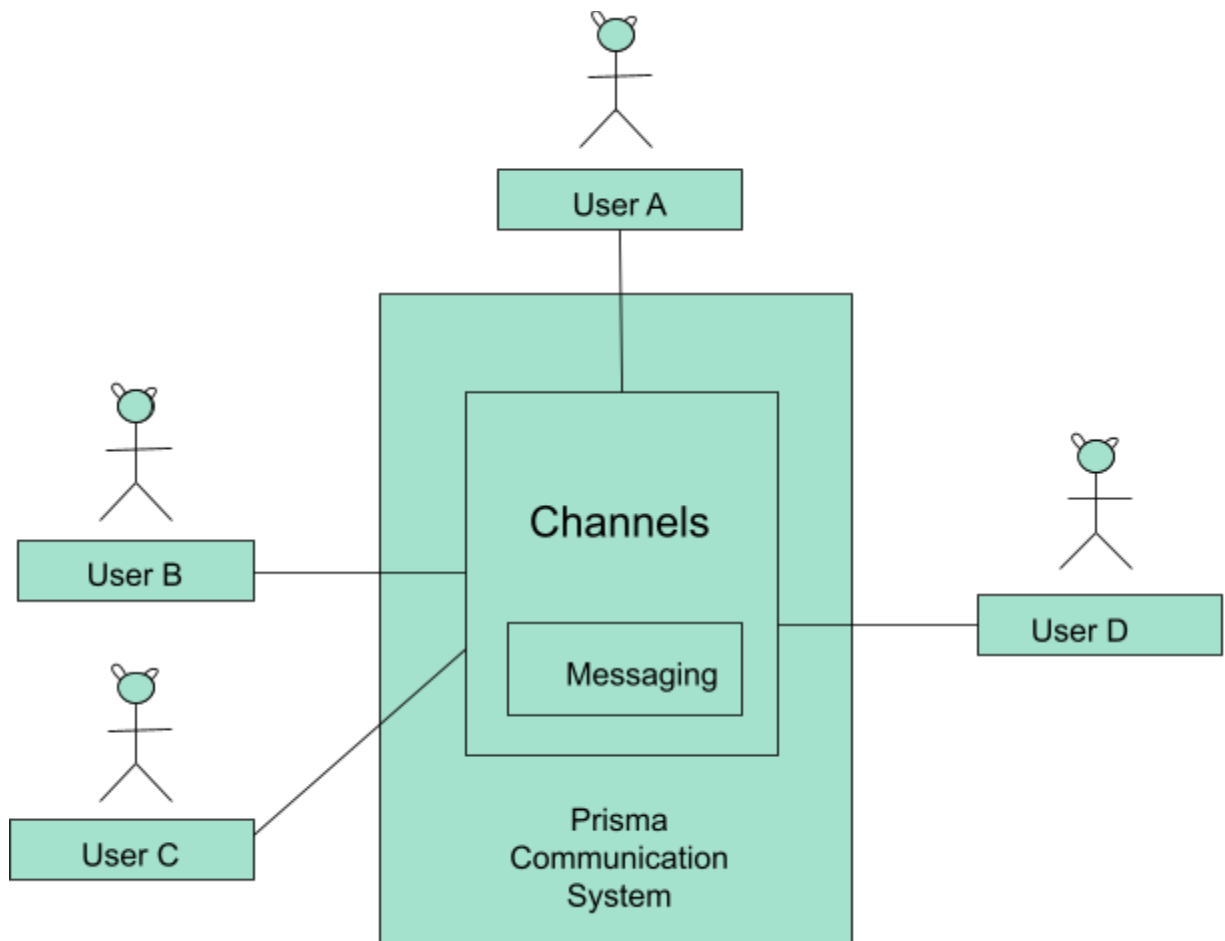
## Overview of Document

In this project, we propose to build a communication software named, “Prisma” for official groups of the corporate sector. Users can experience direct interaction through calls and meetings and provide a searchable record of all documentation and interactions. A reliable customer relationship is built across channels to deliver best business support and massively reduce response times. For different modules, various channels may be generated such that the emphasis is on discussions and works that matter the most. This helps to streamline the workflow, improve productivity and speed up the task.

# Overall Description

## System Environment

The Prisma Communication System has four active actors and one cooperating system. The Sender, Receiver, Admin or Viewer access Prisma through the Internet. Any User (Admin or Sender or Receiver) can communicate with the system through their account email . The Admin has access to the entire channel directly.



**Figure - System Environment**

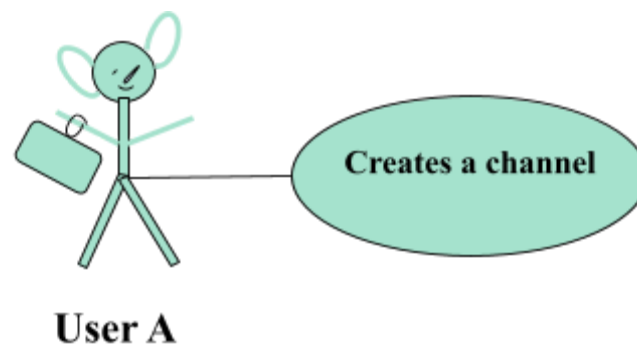
## Functional Requirement Specification

This section outlines the use cases for each of the actors separately. The admin user has special authorities to add and remove users from the channel. The senders can use various features for texting such as emoticons and formats. The Participants can use functions such as read pin messages etc. Lastly the viewers can save, download the files and so on. The use cases shall be discussed in detail below.

### Channels

#### ❖ Use case: Create Channel

Diagram:



#### Brief Description

Prisma users can create their own channels and add their colleagues to work together on various group projects and activities. The channel created has many features which help the users to communicate with ease.

#### Step-by-Step Description

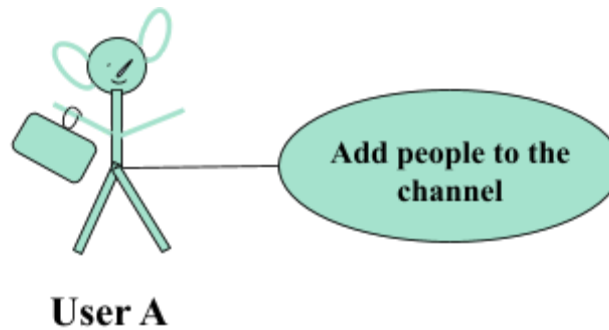
Before this use case is initiated the user has already logged in through the registered account.

- On the home page, hover towards the 'channel create' option.
- Click the option to open a dialogue box
- Here enter the name of the channel, its viewer settings and member names (whomsoever the user wants to invite)
- Click create

---

### ❖ Use case: Add More People To The Channel

Diagram:



#### Brief Description

In cases wherein a user wants to join your group after it has been created, 'Add People' function can be used. It allows more people into your channel after the group has been created. This feature will be available to you in your channel settings.

#### Step-by-Step Description

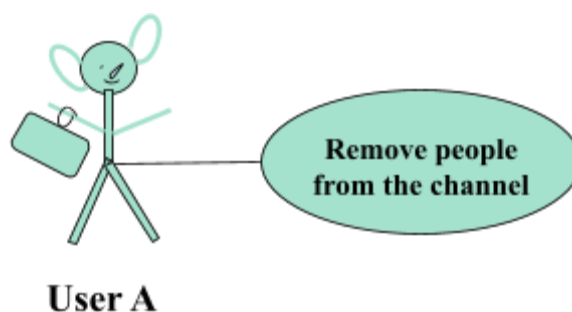
Before this use case is initiated the user has already logged in through the registered account.

- Enter the channel wherein you want to add more people
  - Hover to the channel settings option and click it
  - Scroll to the add people option and send an invite to whomsoever you want to add.
  - The users will be added once they accept the invite.
- 

### ❖ Use case: Remove People From The Channel

Diagram:





### Brief Description

In cases wherein a user wants to remove a certain person or a group of people from the channel, he/she can use the 'Remove People' function. It allows the user to remove people from your channel after the group has been created. This feature will be available to you in your channel settings.

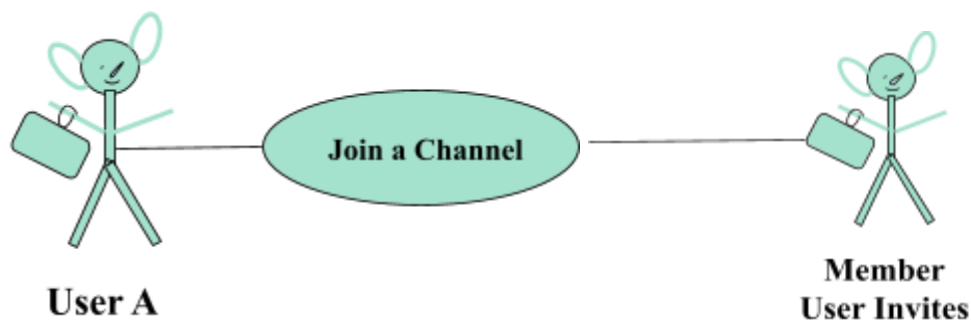
### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- Enter the channel wherein you want to remove people
- Hover to the channel settings option and click it
- Scroll to the remove people option and click on the name of the user whom you want to remove.
- The users will be removed.

### ❖ Use case: Join a Channel

#### Diagram:



### Brief Description

Prisma channels are used to organise conversations about specific projects, subjects or purposes. A user can join a channel in Prisma to be added to the member list of that channel and be able to send and read messages in that channel.

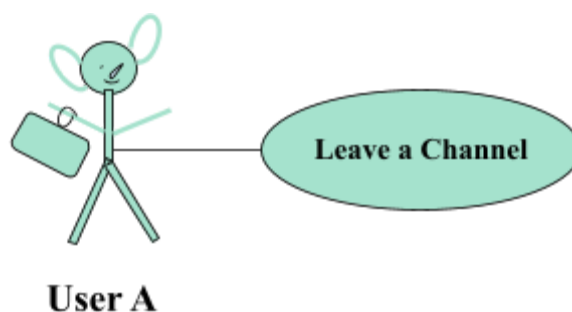
### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account. All channels are private and require an invitation by a member to be a part of a channel.

- A user needs to be added by one of the channel's members.
  - Once a user receives an invitation from a member user, he/she can click the Join Channel button to join the channel.
- 

### ❖ Use case: Leave a Channel

Diagram:



### Brief Description

If a channel is no longer relevant, members can choose to leave it at any time. They continue to be members of the workspace the channel is part of.

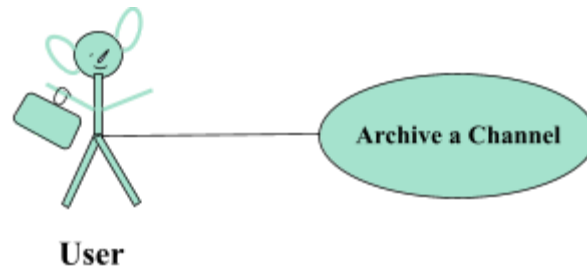
### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account and is a member of the channel he/she wants to leave.

- From the channel, the user needs to click the details icon in the top right and Click More.
  - Select Leave [channel name] from the menu to leave the channel.
-

## ❖ Use Case: Archive a Channel

### Diagram:



### Brief Description:

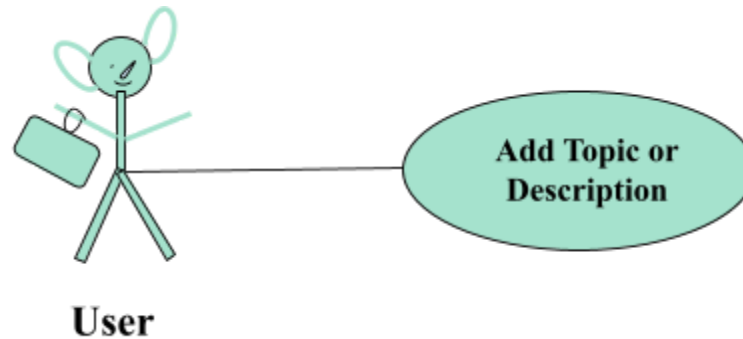
A user can have many different channels for different projects. The user can archive or hide a few channels if they are not in current use.

### Step By Step Description:

Before this use case is initiated, the user has already logged into the account.

- The user can archive many channels.
  - After opening the channel, the *Details icon* needs to be selected.
  - Then going on to the *More* option to check out the different options provided by **Prisma**.
  - '*Additional Option*' will be visible to the user and it needs to be selected.
  - And then *Archive this Channel* is to be clicked.
-

## ❖ Use Case: To Set a Channel Topic or Description



### Brief Description:

After creating a channel, the user or the maker can give a header for the channel. The user can also provide a brief about the topic so that the other participants can get an idea.

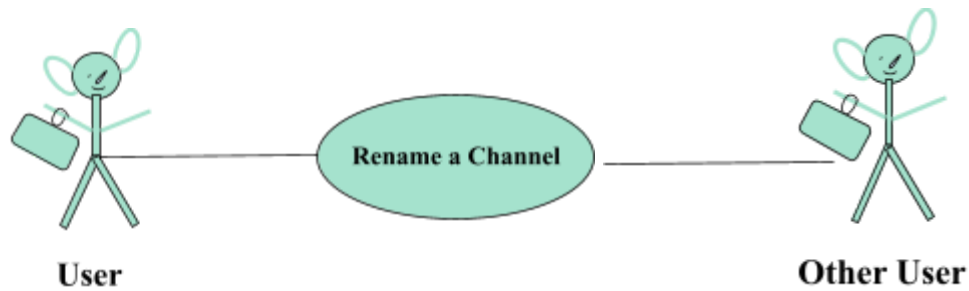
### Step-By-Step Description:

Before this use case is initiated, the user has already logged into the account and created a channel.

- Since the user has already created a channel, he/she can add a channel name.
- The channel name can include *characters, symbols, numbers and emojis*.
- Descriptions about the channel can be provided in *100 words*.
- The user has to select the *details icon* and *edit option* to enter a topic.
- Both topic and description will be visible to the other users present in the channel.
- Any one in the channel can copy or change the description.
- Channel topic can be renamed.

## ❖ Use Case: Renaming a Channel

### Diagram:



### Brief Description:

When a channel is already created and one of the participant users wants to change the topic of the channel.

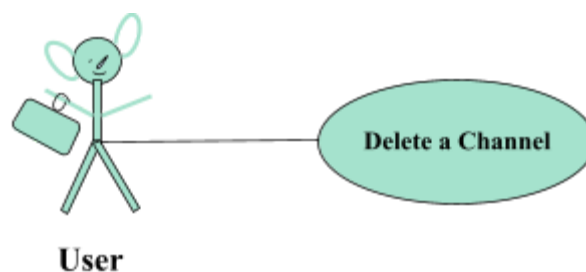
### Step By Step Description:

Before this use case is initiated, the user has already logged into the account and created a channel.

- Since the user has already created a channel, any channel member can rename it.
- The user has to first go to the channel and select the *details icon*.
- Then tap on the *Edit button* to go in the editor section.
- The *current topic field* will be visible to the user.
- If the user wishes to change the topic, he/she can enter a new topic consisting of characters, numbers, symbols and emojis.
- Remember the same channel can be renamed by other users present in the channel.

### ❖ Use Case: Delete a Channel

### Diagram:



## Brief Description:

A user can have many different channels for different projects. The user can delete channels if they are not in current use or the task has been achieved.

## Step By Step Description:

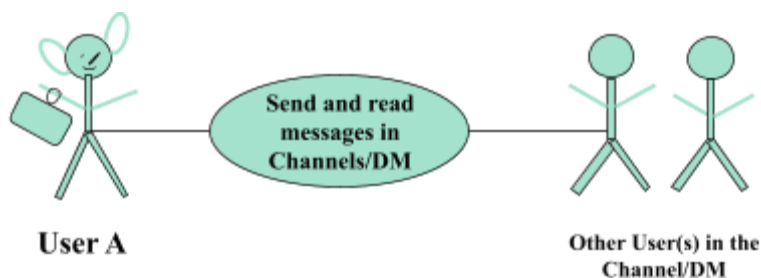
Before this use case is initiated, the user has already logged into the account.

- User has to be a part of a channel to delete it from the account.
- After opening the channel, the *Details icon* needs to be selected.
- Then going on to the *More* option to check out the different options provided by **Prisma**.
- 'Additional Option' will be visible to the user and it needs to be selected.

## Communication

### ❖ Use case: Send and Read messages

#### Diagram:



## Brief Description

In Prisma, conversations occur in channels and DMs (Direct Message). All member users can view a message in Channels while DMs are private between two people.

## Step-by-Step Description

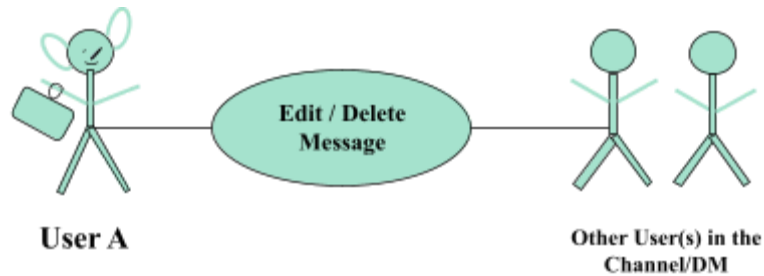
Before this use case is initiated the user has already logged in through the registered account. A user needs to be a member of a channel in order to read and send messages in the Channel. DMs can be made between people of the same workspace.

- A user can start a one to one conversation with a fellow team-mate instantly through DM
- A user should click the message field in a channel or direct message.
- Type and format your message.
- Press Enter to send it.

---

### ❖ Use case: Edit Or Delete Messages

Diagram:



#### Brief Description

Users can edit and update messages at their convenience. Once edited, other users will be notified about the changes. Users can also delete messages which they deem unnecessary. These functions are added for the ease of usage for the customers.

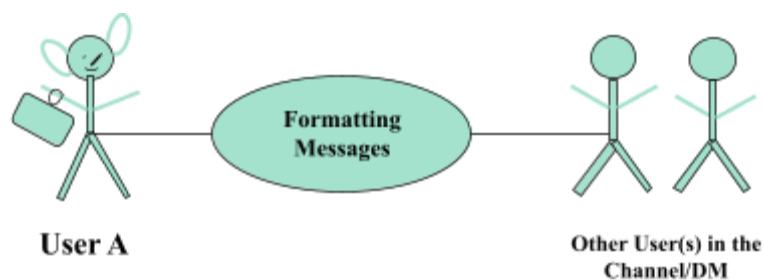
#### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- The user will hover over the chosen message.
  - System will show a dropbox with different icons.
  - The user will click on the *edit/delete* icon.
  - Edit icon allows the user to modify his/her text
  - Delete icon allows the user to delete his/her text.
- 

### ❖ Use case: Format Messages

Diagram:



### Brief Description

Users can use various format features to add special effects and make their messages more visible. Formatting includes various features like BOLD, ITALICS, STRIKETHROUGH, etc. Important messages can be highlighted using these formats.

### Step-by-Step Description

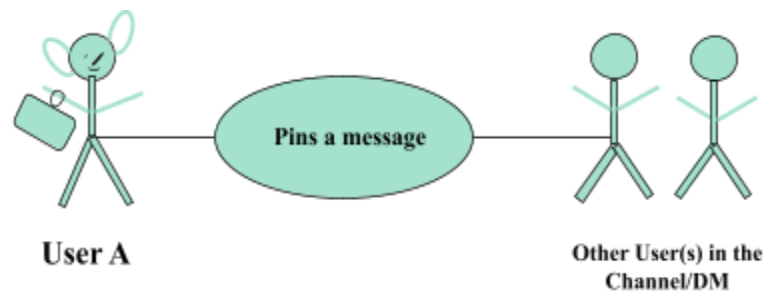
Before this use case is initiated the user has already logged in through the registered account. When the user is typing the message,

- The user will select part of the message which he wants to highlight/ format
- He/She will add the symbols according to the format they want to use
  - Italic: To italicize your message, place an underscore on both sides of the text.
  - Bold: To send text in bold, place an asterisk on both sides of the text.
  - Strikethrough: To strikethrough your message, place a tilde on both sides of the text.
- After adding the required symbols, the user can send the message.

### ◆ Use case: Pin Messages

Diagram:





### Brief Description

Users can pin important messages to any conversation for easy reference. Pinned items will be visible in the Details section and are accessible to all members of a channel or direct message.

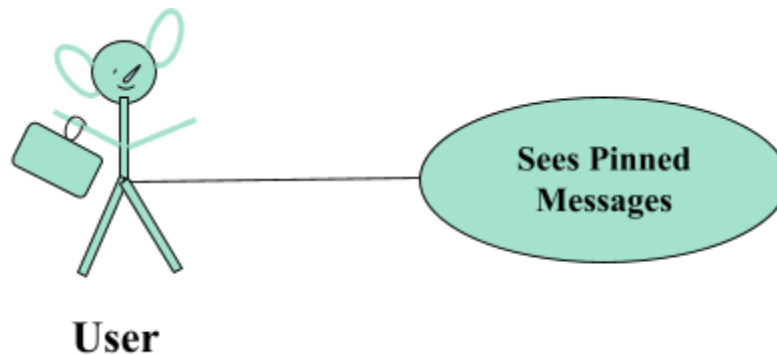
### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- The user will hover over the chosen message.
- System will show a dropdown with different icons.
- The user will click on the *pin* icon.
- The message will be pinned.
- Pin files by pinning the original message the file was shared in.

### ❖ Use case: Show Pinned Messages

Diagram:



### Brief Description:

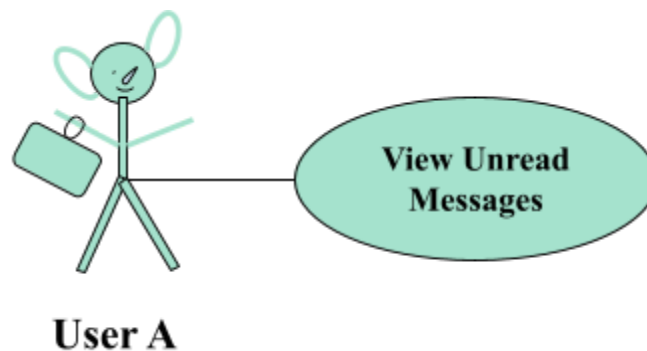
## Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- The user will open the channel/DM of whose pinned messages he wants to see
  - The user will click the *detail* option.
  - System will show all the details of the conversation.
  - The user will select the *pinned* option and all the pinned messages will be show
- 

## ❖ Use case: View Unread Messages

Diagram:



## Brief Description

Users can view the no. of unchecked messages using the above feature/function. This helps the user in keeping track of the amount of messages which still need to be given attention. It functions like a pop up notification.

## Step-by-Step Description

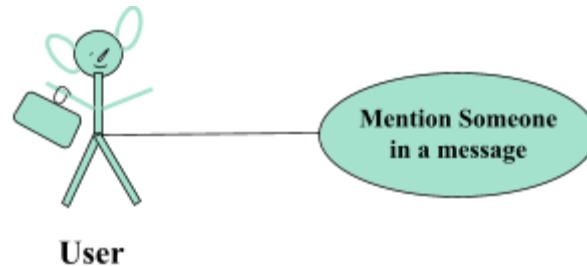
Before this use case is initiated the user has already logged in through the registered account.

- As soon as the user opens the channel list,
- He/she can check the notifications to look out for any new unread messages.
- After clicking the notification the user gets directed to the specific channel where the new message was sent.

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### ❖ Use Case: Mentioning Someone in the Message

#### Diagram:



#### Brief Description:

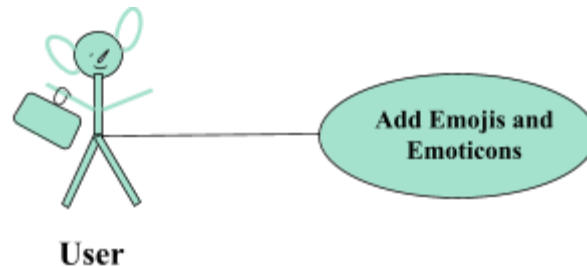
A user can have many different channels for different projects. In a particular channel, there are many participants and a user can directly tag participants in the message.

#### Step By Step Description:

Before this use case is initiated, the user has already logged into the account and opened a particular channel.

- The user writes a message in the '*Type a message*' box.
  - To tag someone, a unique symbol needs to be entered.
  - Enter a member's name, or select one from the list of members. The user can repeat this step for every person he/she likes to **mention** in the message.
  - Send the message in the Channel.
- 

### ❖ Use Case: Use Emojis and Emoticons:

**Diagram:****Brief Description:**

When a channel is created for formal communication, the users can add on some eye catchy emojis to express their message.

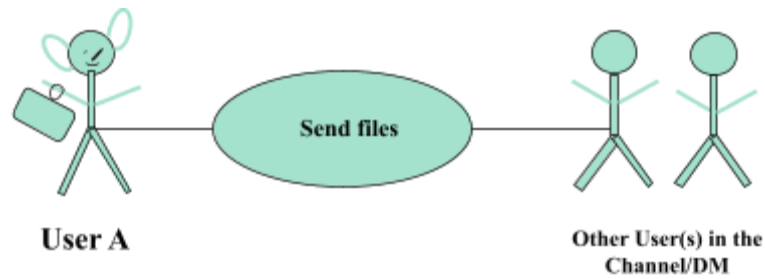
**Step By Step Description:**

Before this use case is initiated, the user has already logged into the account and created a channel.

- Normal text messages are possible by clicking on '*Type a message*'.
  - To add on the emojis, the user has to open the emoji menu by clicking on the smiley face icon.
  - Use the icon on top of the menu to browse the categories of emoji.
  - The user can also search for the emoji he/ she is looking for.
  - Click on the particular emoji to add it in the message.
  - Then select Delete this channel.
  - Check the box next to Yes, permanently **delete** this **channel**, then click **Delete Channel**.
- 

## ❖ Use case: Send Files in the workspace

**Diagram:**



### Brief Description

Users can add files to the workspace to share and discuss them in Prisma.

### Step-by-Step Description

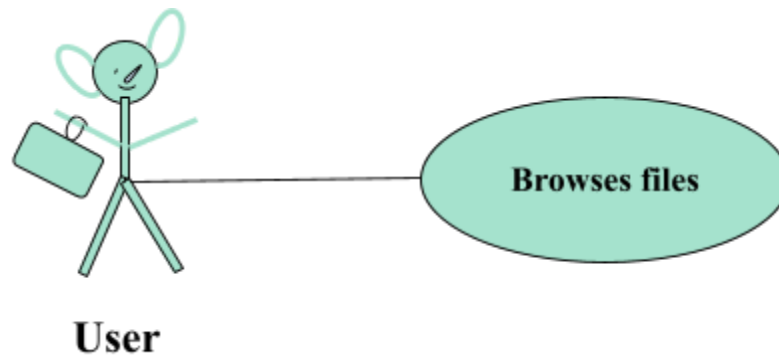
Before this use case is initiated the user has already logged in the account and gained access to the channel (if required).

- The user will go to the *message box* in the channel/DM
- The user will then click the *attach* icon shown on the system.
- System will provide the user the option to choose the file from the device.
- The user can choose any file and browse through the storage in the device.
- After the file is chosen, the system will return to the workspace and display the progress bar showing the percentage of the file uploaded.
- After upload is complete the user will click on the *send* option and the message along with the file will be sent in the chat.

---

### ❖ Use case: Browse files

**Diagram:**



### Brief Description

Users can browse files that have been added to the workspace.

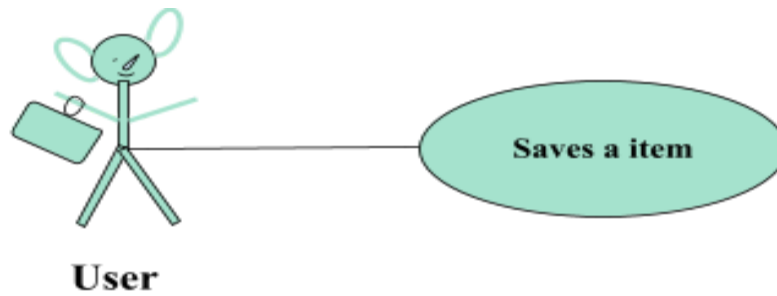
### Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- The user will click on the *File browser*.
  - The system will show a *search box*.
  - The user will write the file name in the search box and click search.
  - The system will search through the saved and downloaded files and will display the matching result.
  - To find a specific file, users can click on *Filter* on the right side of the search bar and select an option.
- 

### ◆ Use case: Save Messages And Files

**Diagram:**



### Brief Description

Users can save messages and files in Prisma to bookmark them and reference them later.

### Step-by-Step Description

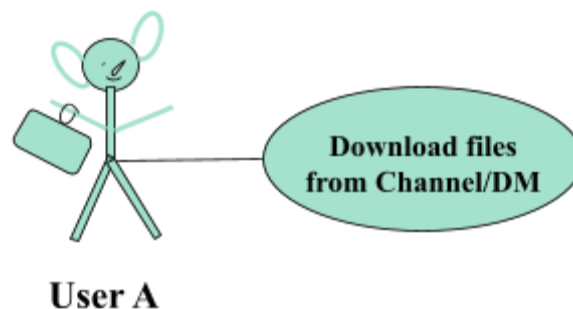
Before this use case is initiated the user has already logged in through the registered account.

- The user will choose messages to be saved in a chat.
- The user can choose to save only the file, or the file and its associated message together
- The system will show many icons in a box.
- The user will click on the *saved* icon from the options.
- The message will be saved.
- Saving a message will also include any thread replies that have been added to it.
- Saved items will be visible to the user only.

---

### Use case: Download files from Channel/DM

#### Diagram:



## Brief Description

In cases wherein a user wants to view any files in Slack offline, he/she can download them to the desktop.

## Step-by-Step Description

Before this use case is initiated the user has already logged in through the registered account.

- Enter the channel/DM where the file to be downloaded is located.
- Click on the download icon.
- When the download is finished, the file can be viewed offline in desktop

## ❖ Use case: Making Calls

### Diagram:



## Brief Description

With Prisma Calls, a user can make a voice or video call to connect with anyone in the workspace.

## Step-by-Step Description

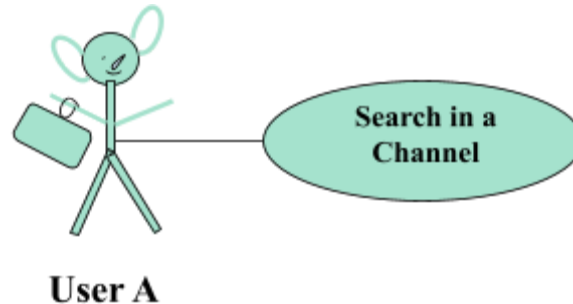
Before this use case is initiated the user has already logged in through the registered account.

- A user can start a one to one call instantly through DMs
- A member user can start a group call with other members of that channel using the Phone Call button from a channel.
- Prisma will post a message to the channel letting others know that you've started a call. People can join the call by choosing Join.



### ❖ Use case: Search in Channels

Diagram:



#### Brief Description

Accessing the right information in Prisma is key to working smarter, faster and more productively. Searching in a team's conversation history in Slack to find the relevant messages, files, channels and people that are required to get work done.

#### Step-by-Step Description

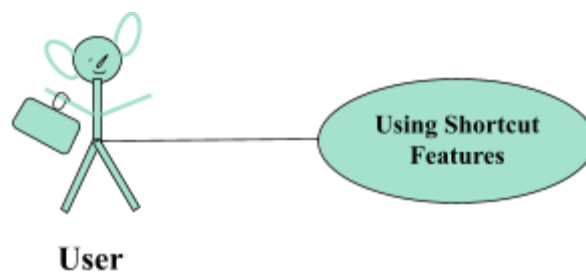
Before this use case is initiated the user has already logged in through the registered account. In order to search in channels a user needs to follow :

- Click on the search field at the top of Slack.
- Type the search parameters into the search field
- Click on a suggested option in the list to open it in Slack, or press ENTER to view the search results.

---

### ❖ Use Case: Using Shortcut Menu

Diagram:



### Brief Description:

Many shortcut features are provided to the users for easy use of Prisma.

### Step By Step Description:

Before this use case is initiated, the user has already logged into the account and opened a particular channel.

- The user has to click on the *lightning bolt icon* to the left of the message field OR
  - A type a / *forward slash* to open the **shortcuts menu**.
  - Search for and select the slash command user will like to **use** from the **menu**.
  - Following the slash command in the message field, users can add any other text needed to **use** the command.
  - Send the message in the channel.
- 

## Requirement Specifications

### External Interface requirements

The only link to an external system is the link to the Prisma Database to verify the membership of a Solicitant. The Login use case sends the User ID to the Prisma Database and a Boolean is returned denoting membership status. User Operations that require membership of a particular channel in Prisma solicits this boolean value for membership status.

#### ❖ Hardware Interfaces

This requires a PC/ Mobile with proper internet connection

#### ❖ Software Interfaces

There are no external software interface requirements

#### ❖ Communication Interfaces

Any web browser can be used to access the website

## Functional Requirements

### ❖ Create a channel

<b>Use Case Name</b>	Create Channel
<b>XRef</b>	
<b>Trigger</b>	The user has selected the ' <i>channel create</i> ' option on the home page.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• On the home page, hover towards the 'channel create' option.</li> <li>• Click the option to open a dialogue box</li> <li>• Here enter the name of the channel, its viewer settings and member names (whomsoever the user wants to invite)</li> <li>• Click create</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will create the channel using entered data.
<b>Exception Paths</b>	The user can go back to the homepage by clicking the <i>cross option</i> .
<b>Other</b>	None

### ❖ Add More People to channel

<b>Use Case Name</b>	Add People to Channel
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>settings</i> option in the channel.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Enter the channel wherein you want to add more people</li> <li>• Hover to the channel settings option and click it</li> </ul>

	<ul style="list-style-type: none"> <li>• Scroll to the add people option and send an invite to whomsoever you want to add.</li> <li>• The users will be added once they accept the invite</li> </ul>
<b>Alternative Paths</b>	Add people while making the channel itself.
<b>Postcondition</b>	System will add people to the user's channel
<b>Exception Paths</b>	The user can go back to the channel by clicking the cross <i>option</i> .
<b>Other</b>	None

### ❖ Remove People From Channel

<b>Use Case Name</b>	Remove People from Channel
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>settings</i> option in the channel.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Enter the channel wherein you want to remove people</li> <li>• Hover to the channel settings option and click it</li> <li>• Scroll to the remove people option and click on the name of the user whom you want to remove.</li> <li>• The users will be removed.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will remove people from user's channel
<b>Exception Paths</b>	The user can go back to the channel by clicking the cross <i>option</i> .
<b>Other</b>	None

### ❖ Join a Channel

<b>Use Case Name</b>	Join a Channel
<b>XRef</b>	

<b>Trigger</b>	The user has clicked the <i>Join Channel</i> option in the Invitation
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• A user needs to be added by one of the channel's members.</li> <li>• Once a user receives an invitation from a member user, he/she can click the Join Channel button to join the channel.</li> </ul>
<b>Alternative Paths</b>	
<b>Postcondition</b>	System will join the user to the channel
<b>Exception Paths</b>	
<b>Other</b>	None

### ❖ Leave a Channel

<b>Use Case Name</b>	Leave a Channel
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>settings-&gt;Leave Channel</i> option in the channel.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• From the channel, Click the details icon in the top right and Click More.</li> <li>• Select Leave [channel name] from the menu to leave the channel.</li> </ul>
<b>Alternative Paths</b>	
<b>Postcondition</b>	System will remove the user from the channel
<b>Exception Paths</b>	
<b>Other</b>	None

### ❖ Archive a Channel

<b>Use Case Name</b>	Archive or hide a channel.
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<b>XRef</b>	
<b>Trigger</b>	Clicking on ' <i>Archive this channel</i> '.
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• After opening the channel, the <i>Details icon</i> needs to be selected.</li> <li>• Then going on to the <i>More</i> option to check out the different options provided by <b>Prisma</b>.</li> <li>• '<i>Additional Option</i>' will be visible to the user and it needs to be selected.</li> <li>• And then <i>Archive this Channel</i> is to be clicked.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The channel is no longer visible in the chat section.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ To Set a Channel Topic or Discription

<b>Use Case Name</b>	To set a channel topic or discription
<b>XRef</b>	
<b>Trigger</b>	User clicks on Channel Topic and channel description
<b>Precondition</b>	The user is already logged in through a registered account and has created a channel.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• User has to open the channel</li> <li>• Then select the details icon to open the menu</li> <li>• Then click on edit option to enter the topic of the channel</li> <li>• In same edit option user will also find the description box</li> <li>• Description should be less than 100words.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The Topic and Description will be the same for all the members of the channel.

<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Renaming a Channel

<b>Use Case Name</b>	Rename a Channel
<b>XRef</b>	
<b>Trigger</b>	User clicks on renames the Channel
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel with multiple participants.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• User has to open the channel</li> <li>• Then select the details icon to open the menu</li> <li>• Then tap on the <i>Edit button</i> to go in the editor section.</li> <li>• The <i>current topic field</i> will be visible to the user.</li> <li>• User enters a new topic consisting of characters, numbers, symbols and emojis.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The channel topic is changed for all the users present in that particular channel.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Delete a Channel

<b>Use Case Name</b>	Deleting a channel.
<b>XRef</b>	
<b>Trigger</b>	Clicking on ' <i>Delete this channel</i> '.
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel.
<b>Basic Path</b>	

	<ul style="list-style-type: none"> <li>• After opening the channel, the <i>Details icon</i> needs to be selected.</li> <li>• Then going on to the <i>More</i> option to check out the different options provided by <b>Prisma</b>.</li> <li>• '<i>Additional Option</i>' will be visible to the user and it needs to be selected.</li> <li>• And then <i>Delete this Channel</i> is to be clicked.</li> <li>• Check the box next to Yes, permanently <b>delete this channel</b>, then click <b>Delete Channel</b>.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The user is no longer a part of that channel.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Send and Read Messages

<b>Use Case Name</b>	Send and Read Messages
<b>XRef</b>	
<b>Trigger</b>	
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Click the message field in a channel or direct message.</li> <li>• Type and format your message.</li> <li>• Press Enter to send it.</li> </ul>
<b>Alternative Paths</b>	
<b>Postcondition</b>	
<b>Exception Paths</b>	
<b>Other</b>	None



### ❖ Edit Or Delete Messages

<b>Use Case Name</b>	Edit / Delete Messages
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>details</i> option.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will hover over the chosen message.</li> <li>• System will show a dropbox with different icons.</li> <li>• The user will click on the <i>edit/delete</i> icon.</li> <li>• Edit icon allows the user to modify his/her text</li> <li>• Delete icon allows the user to delete his/her text</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will change or delete the message according to the action chosen .
<b>Exception Paths</b>	The user can go back to the workspace by clicking the cross <i>option</i> .
<b>Other</b>	None

### ❖ Format Messages

<b>Use Case Name</b>	Format Messages
<b>XRef</b>	
<b>Trigger</b>	The user has selected the text which he/she wants to format.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Bas Path</b>	<ul style="list-style-type: none"> <li>• The user will select part of the message which they want to highlight/ format</li> <li>• He/She will add the symbols according to the format they want to use</li> </ul>

	<ul style="list-style-type: none"> <li>- Italic: To italicize your message, place an underscore on both sides of the text.</li> <li>- Bold: To send text in bold, place an asterisk on both sides of the text.</li> <li>- Strikethrough: To strikethrough your message, place a tilde on both sides of the text.</li> <li>• After adding the required symbols, the user can send the message..</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will show the selected text in highlight (bold/ italic/ strikethrough)
<b>Exception Paths</b>	The user can undo by editing the text and removing the added symbols.
<b>Other</b>	None

### ❖ Pin A Message

<b>Use Case Name</b>	Pin a message
<b>XRef</b>	
<b>Trigger</b>	Hovering on the message to be pinned
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will hover over the chosen message.</li> <li>• System will show a dropbox with different icons.</li> <li>• The user will click on the pin icon.</li> <li>• The message will be pinned.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The message is pinned and will be visible to all the members in the channel.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Show Pinned Messages

<b>Use Case Name</b>	Show Pinned Messages
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>details</i> option.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will open the channel/DM of whose pinned messages he wants to see.</li> <li>• The user will click the <i>detail</i> option.</li> <li>• System will show all the details of the conversation.</li> <li>• The user will click on the option <i>pinned</i>.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will show all the pinned messages of the channel/DM.
<b>Exception Paths</b>	The user can go back to the workspace by clicking the <i>cross option</i> .
<b>Other</b>	None

### ❖ View Unread Messages

<b>Use Case Name</b>	Show Pinned Messages
<b>XRef</b>	
<b>Trigger</b>	The user has entered the home page.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• As soon as the user opens the channel list,</li> <li>• He/she can check the notifications to look out for any new unread messages.</li> <li>• After clicking the notification the user gets directed to the specific channel where the new message was sent..</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	System will show all the channels with new unread messages.
<b>Exception Paths</b>	None.

Other	None
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### ❖ Mentioning Someone in The Message

<b>Use Case Name</b>	Mentioning Someone in the message
<b>XRef</b>	
<b>Trigger</b>	Using the special symbol to mention other participants of the channel.
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel with multiple participants.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user writes a message in the '<i>Type a message</i>' box.</li> <li>• A unique symbol needs to be entered.</li> <li>• Enter a member's name, or select one from the list of members.</li> <li>• The user can repeat this step for every person he/she likes to <b>mention</b> in the message.</li> <li>• Send the message in the Channel.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	The user has mentioned someone in the message.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Use Emojis and Emoticons

<b>Use Case Name</b>	Add emojis in text message
<b>XRef</b>	
<b>Trigger</b>	User can add emojis from the <b>Emoji Menu</b>
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel.
<b>Basic Path</b>	

	<ul style="list-style-type: none"> <li>• Normal text messages are by clicking on 'Type a message'.</li> <li>• Open the emoji menu by clicking on the <i>smiley face icon</i>.</li> <li>• Use the icon on top of the menu to browse the categories of emoji.</li> <li>• The user can also search for the emoji he/ she is looking for.</li> <li>• Click on the particular emoji to add it in the message.</li> <li>• Send the message.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	A message is sent which includes emojis.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Send files in the workspace

<b>Use Case Name</b>	Send files in the workspace
<b>XRef</b>	
<b>Trigger</b>	User clicks on the message box to send a file.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will go to the <i>message box</i> in the channel/DM</li> <li>• The user will then click the <i>attach</i> icon shown on the system.</li> <li>• System will provide the user the option to choose the file from the device.</li> <li>• The user can choose any file and browse through the storage in the device.</li> <li>• After the file is chosen, the system will return to the workspace and display the progress bar showing the percentage of the file uploaded.</li> <li>• After upload is complete the user will click on the <i>send</i> option.</li> </ul>

<b>Alternative Paths</b>	None
<b>Postcondition</b>	Message along with the file will be sent in the chat
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ◆ Browse files

<b>Use Case Name</b>	Browse files
<b>XRef</b>	
<b>Trigger</b>	User clicks on the option <i>File Browser</i>
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will click on the <i>File browser</i>.</li> <li>• The system will show a <i>search box</i>.</li> <li>• The user will write the file name in the search box and click search.</li> <li>• The system will search through the saved and downloaded files.</li> <li>• To find a specific file, users can click on <i>Filter</i> on the right side of the search bar and select an option.</li> </ul>
<b>Alternative Paths</b>	Users can also search for a file/message in a particular channel by clicking on the <i>search</i> button in the <i>details</i> section.
<b>Postcondition</b>	System will show the matching Result
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ◆ Save Messages/ files

<b>Use Case Name</b>	Save messages or files
<b>XRef</b>	
<b>Trigger</b>	User clicks on the message to be saved.

<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• The user will choose messages to be saved in a chat.</li> <li>• The user can choose to save only the file, or the file and its associated message together</li> <li>• The system will show many icons in a box.</li> <li>• The user will click on the <i>saved</i> icon from the options.</li> <li>• The message will be saved.</li> <li>• Saving a message will also include any thread replies that have been added to it.</li> <li>• Saved items will be visible to the user only.</li> </ul>
<b>Alternative Paths</b>	None
<b>Postcondition</b>	Messages will be saved in the database.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Download files from Prisma

<b>Use Case Name</b>	Download files from Prisma
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>download</i> button on a particular file in the channel/DM.
<b>Precondition</b>	The user is already logged in through a registered account and is a member of channel/DM
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Enter the channel/DM where the file to be downloaded is located.</li> <li>• Click on the download icon.</li> <li>• When the download is finished, the file can be viewed offline in desktop</li> </ul>
<b>Alternative Paths</b>	
<b>Postcondition</b>	System will download the required file to desktop
<b>Exception Paths</b>	

Other	None
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### ❖ Making calls in Prisma

<b>Use Case Name</b>	Making calls in Prisma
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>make a call</i> icon in the channel/DM
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Click the Phone Call button from a channel/DM.</li> <li>• Prisma will post a message to the channel letting others know that you've started a call.</li> <li>• People can join the call by choosing Join.</li> </ul>
<b>Alternative Paths</b>	
<b>Postcondition</b>	System will place a call with the selected members
<b>Exception Paths</b>	
<b>Other</b>	None

### ❖ Using Shortcut Menu

<b>Use Case Name</b>	Using the shortcut menu.
<b>XRef</b>	
<b>Trigger</b>	Clicking on the lighting bolt symbol.
<b>Precondition</b>	The user is already logged in through a registered account and is a member of a channel.
<b>Basic Path</b>	



	<ul style="list-style-type: none"> <li>• The user has to click on the <i>lightning bolt icon</i> to the left of the message field</li> <li>• Search for and select the slash command user will like to <b>use</b> from the <b>menu</b>.</li> <li>• Following the slash command in the message field, users can add any other text needed to <b>use</b> the command.</li> <li>• The user can repeat this step for every person he/she likes to <b>mention</b> in the message.</li> <li>• Send the message in the Channel.</li> </ul>
<b>Alternative Paths</b>	<ul style="list-style-type: none"> <li>• A type a / <i>forward slash</i> to open the <b>shortcuts menu</b>.</li> <li>• Search for and select the slash command user will like to <b>use</b> from the <b>menu</b>.</li> <li>• Following the slash command in the message field, users can add any other text needed to <b>use</b> the command.</li> <li>• Send the message in the channel.</li> </ul>
<b>Postcondition</b>	The user has used the shortcut menu in the message.
<b>Exception Paths</b>	The attempt may be abandoned at any time.
<b>Other</b>	None

### ❖ Search in Channels

<b>Use Case Name</b>	Search in Channels
<b>XRef</b>	
<b>Trigger</b>	The user has selected the <i>search bar</i> component in the channel.
<b>Precondition</b>	The user is already logged in through a registered account.
<b>Basic Path</b>	<ul style="list-style-type: none"> <li>• Click on the search field at the top of Slack.</li> <li>• Type the search parameters into the search field</li> <li>• Click on a suggested option in the list to open it in Prisma, or press ENTER to view the search results.</li> </ul>

<b>Alternative Paths</b>	
<b>Postcondition</b>	System will show the search results in the channel for the entered parameters in search box
<b>Exception Paths</b>	
<b>Other</b>	None

## User Characteristics

The User is expected to be Internet literate and be able to use a search engine. Users will be able to connect with other people and tools users work with everyday. Users can do real-time messaging through calls and chat, get a searchable record of all the files and conversations, and integrations with a growing number of handy bots and apps.

## Non-Functional Requirement Specifications

### Reliability

The system will consistently perform its intended function. For eg. The important information must be validated.

### Efficiency

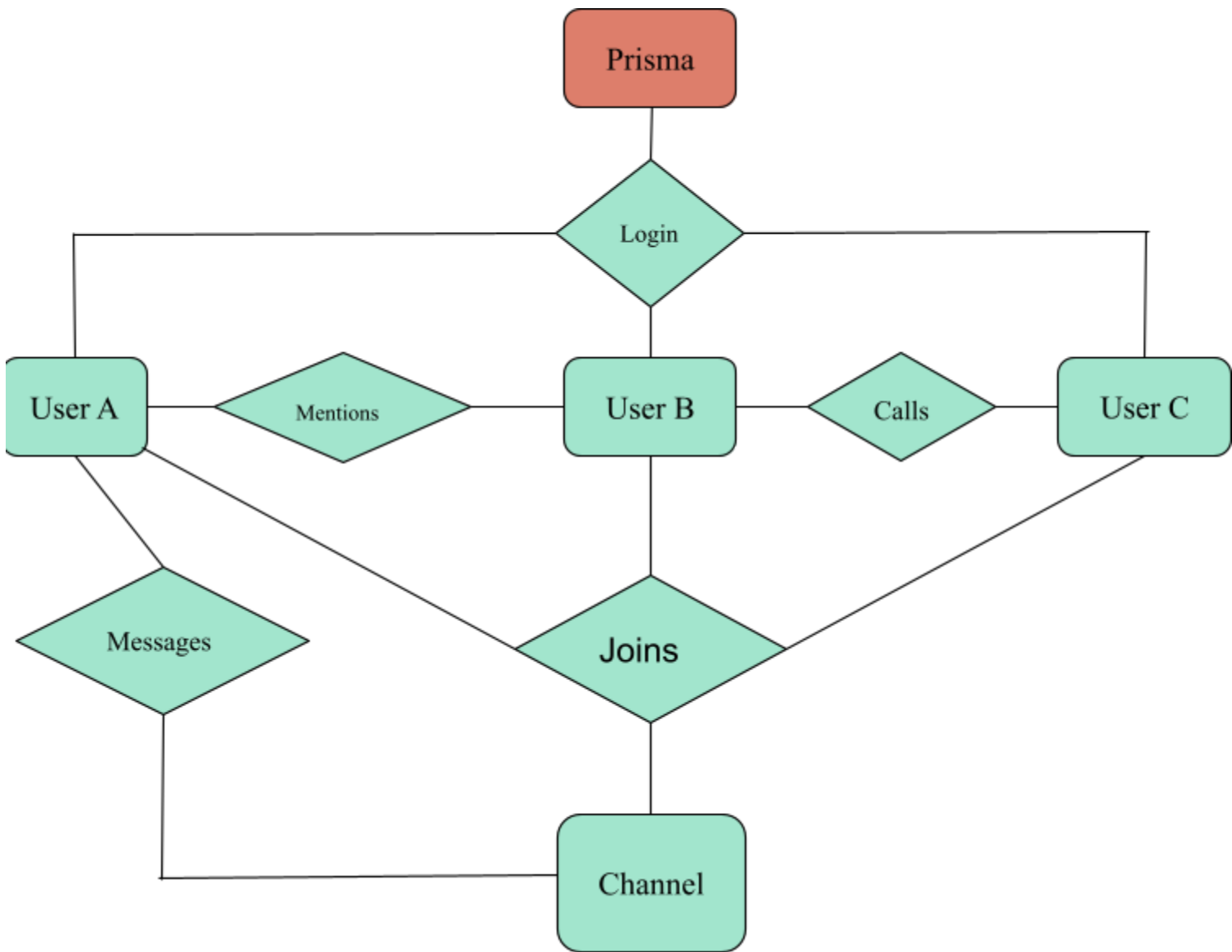
Unnecessary data will not be transmitted on the network and database server will be properly connected.

### Integrity

Only Admin has the rights to access the database, not every actor can access all the information.

## Logical Data Structure

The logical data structure is



#### ◆ User Data Entity

Data Item	Type	Description	Comment
<b>User_id</b>	varchar	Assigning id to all the Prisma users.	Always <b>Unique</b> .
<b>Name</b>	varchar	User's Name	<b>May not be Unique</b>
<b>Password</b>	varchar	Depending on the user	User depended
<b>Email</b>	varchar	Internet address	
<b>Contact</b>	varchar	Phone Number	number

### ❖ Channel Data Entity

Data Item	Type	Description	Comment
<b>User_id</b>	varchar	Assigning id to all the Prisma users.	Always <b>Unique</b> .
<b>Channel_id</b>	varchar	From Channel Description Table	Always <b>Unique</b>

### ❖ Channel Description Entity

Data Item	Type	Description	Comment
<b>Channel_id</b>	varchar	Assigning id to all the Channels.	Always <b>Unique</b> .
<b>Topic</b>	varchar	Topic for the Channel	A line or so
<b>Description</b>	varchar	Description of the Channel	Paragraph
<b>Message</b>	varchar	Total number of messages in that channel	From messages table
<b>Activity</b>	bool	If the channel is still active or not	<b>True or False</b>

### ❖ Message Data Entity

Data Item	Type	Description	Comment
<b>Message_id</b>	varchar	Assigning id to all the Messages.	Always <b>Unique</b> .
<b>Time</b>	varchar	Shows time of message	24 hrs clock
<b>Date</b>	varchar	Date on which message is sent	

### ❖ Message-Channel Data Entity

Data Item	Type	Description	Comment
<b>Message_id</b>	varchar	Assigning id to all the Messages.	Always <b>Unique</b> .
<b>Channel_id</b>	varchar	Assigning id to all the Channels.	Always <b>Unique</b> .

### ❖ File Data Entity

Data Item	Type	Description	Comment
<b>Message_id</b>	varchar	Assigning id to all the Messages.	Always <b>Unique</b> .
<b>File_id</b>	varchar	Assigning id to all the Channels.	Always <b>Unique</b> .
<b>Type</b>	varchar	Shared type of document	photos, words, etc
<b>Size</b>	varchar	Size of the file	KB/MB

### ❖ Call Data Entity

Data Item	Type	Description	Comment
<b>Caller</b>	varchar	User Id who calls	Always <b>Unique</b> .
<b>Receiver</b>	varchar	User Id who receives the call	Always <b>Unique</b> .
<b>Channel_id</b>	varchar	Assigning id to all the Channels.	Always <b>Unique</b>

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<b>Time</b>	varchar	Shows time of the call	24 hrs clock
<b>Date</b>	varchar	Date on which a call is placed	
<b>Duration</b>	varchar	Duration of the call	Minutes

## Security

- Security prompting the user for a user id and password in our application is a potential security threat. So credential information is transferred from the browser to server and is encrypted.
  - Passwords can be changed by the user.
  - So Security Features are implemented. No unauthorised access to the package, as the security is implemented through login and password.
-