NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES

Group Members:

Nehal Safdar L16-4195

Taimur Aslam L16-4170

Syed Shaharyar L16-6301

Usman Noor L16-4379

Rameen Ahsan L16-4339

What is Slack?

Slack is essentially a messaging App for teams and workplaces to build and collaborate via technology and the world wide web. The platform provides a workspace for individuals who are part of a team to multi-task, keep organized and collaborate with other team members. The platform is available to be used on all mainstream devices including PCs and mobile phones.

A **workspace** is created by a user of the platform, who can add other users to that workspace after it is successfully created. For example, I opened a workspace called “Ooad Project” and added 5 of my team members to it.

There are 3 types of **chats**:

A **Channel** can be called a group chat which is further divided into two categories, namely **Private Channel** and **Public Channel**. When someone in the workspace opens a public channel, all members of that workspace are automatically added to it and can see and take part in it. However, if a user opens a private channel, only members who are added to that channel will be privy to what is inside i.e members and/or messages.

A **Direct Message** is a one-to-one chat between two users.

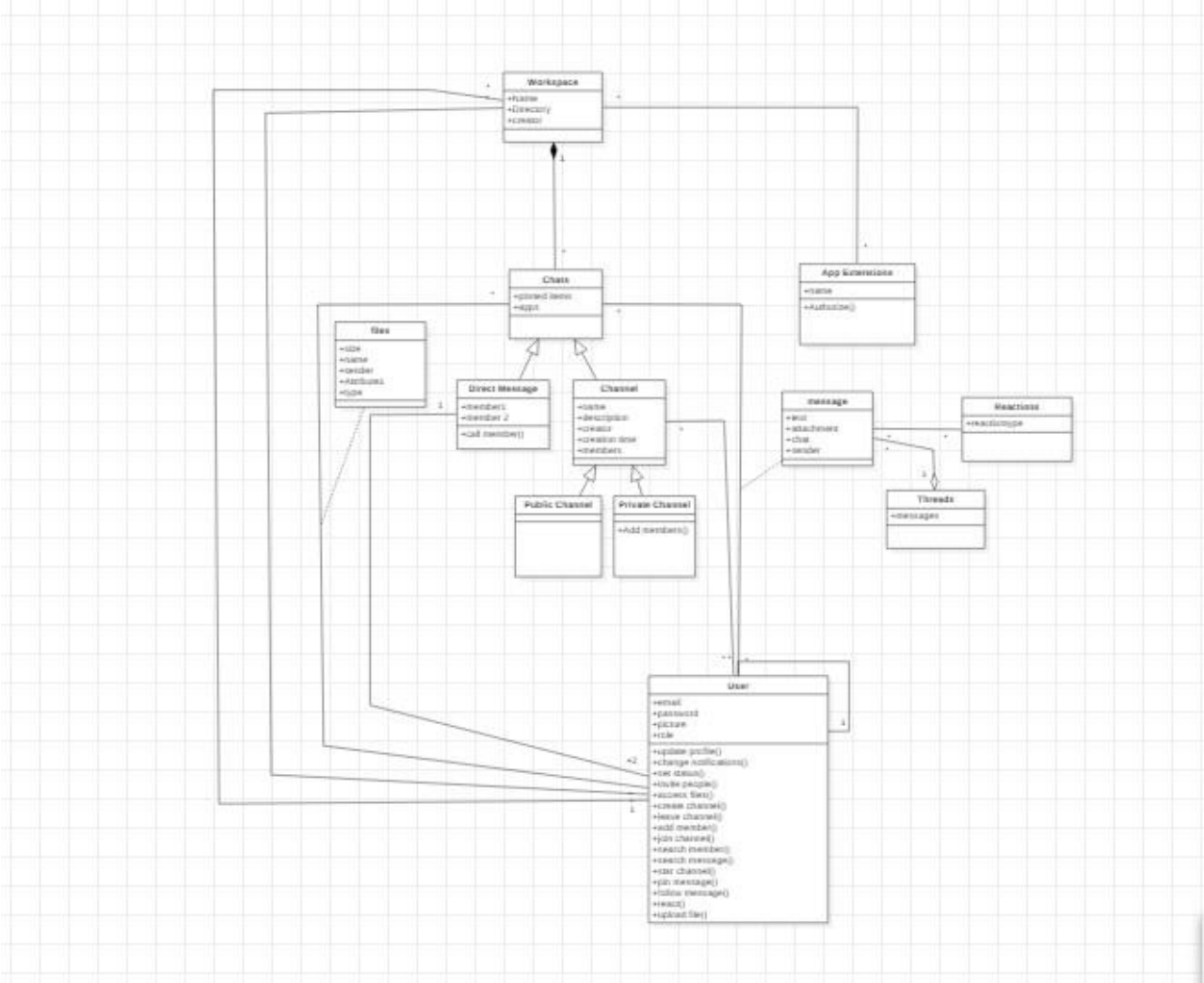
A **Thread** is not a chat but a section where replies to specific comments that you are a part of are saved. For example, I see a message in any chat that I want to reply specifically to. I will click and hold the message, and then I can reply to it. This will start a new thread. Each user has a section of saved threads that they are a part of.

You can do a number of things with a message including **Reactions** to message. You can pin a message to mark it important, star a channel to mark the group chat important or even follow a message if you wish to see important conversations.

Slack has directory of application extensions that can be added to the workspace to enhance the experience of collaboration and task management. These may include applications like Drop-Box, Adobe Creative Cloud, Google Calendar, Skype and a range of bots to seek help from.

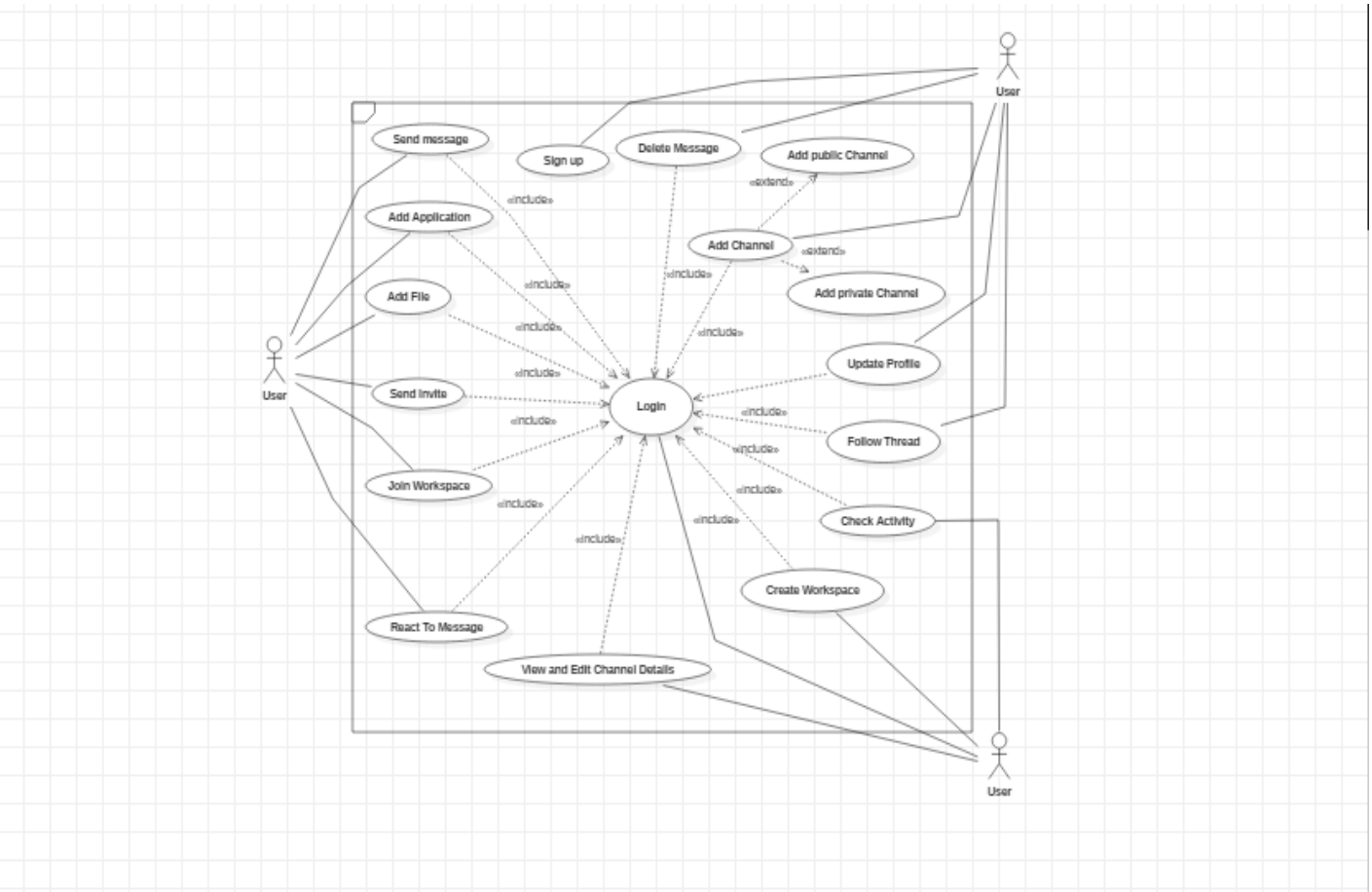
Apart from messaging, Slack is useful tool for **File** sharing as well. The user’s list of files contains all files sent in a chat.

Class Diagram



Use-Case Diagram

Note: In Slack, only one type of user is capable of executing every functionality. This user is capable of being a member of a workspace and being a creator of a workspace at the same time



Activity Diagrams

Done by: Syed shaharyar.

Login:

Summary: The use case basically allows the user to login his or her slack account.

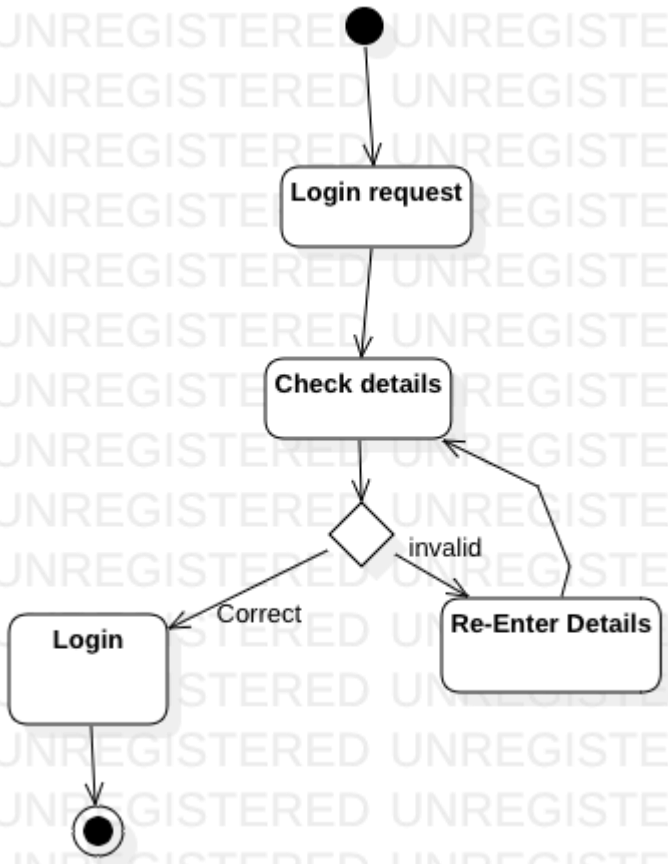
Actors: User

Preconditions: User must have his or her own account otherwise user must create one.

Description: User enters his/her id and correct password.

Exceptions: If the password is wrong/forgotten then the user can ask for assistance.

Post Conditions: Needs to always enter a valid ID and password



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Signup:

Summary: The use case basically allows the user to sign up for slack account.

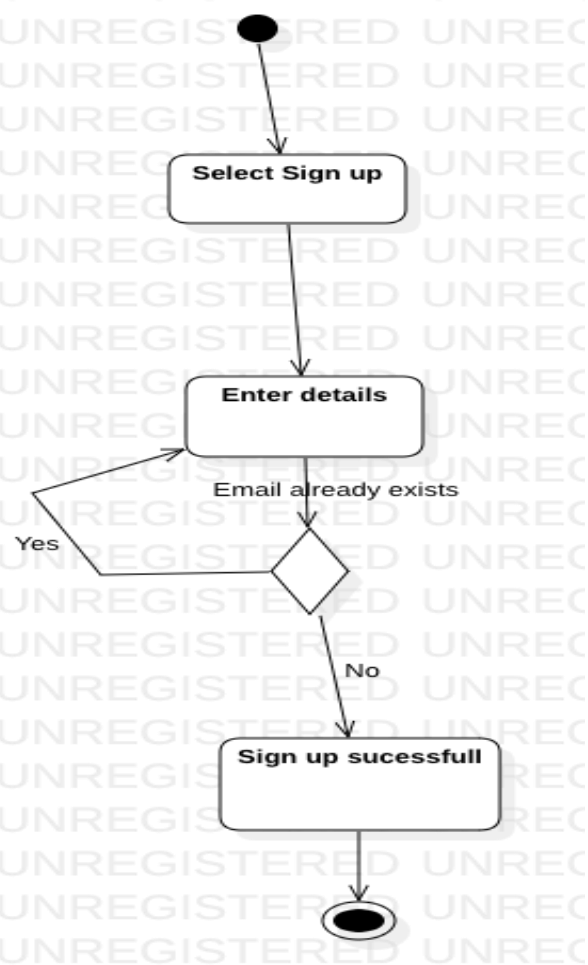
Actors: User

Preconditions: User must have valid email and know its password. User must be above 12 to create an account. User must fulfil all the details required from the user and skips none.

Description: User enters his/her email id and correct details and then confirms the account activation and verifies account through an email sent by slack.

Exceptions: Email must be in specific format, email must be unique, password must contain special characters and must be of at least length 8.

Post Conditions: Use account as long as it is active.



Send Invite:

Summary: The use case basically allows the user to invite more members to its work station.

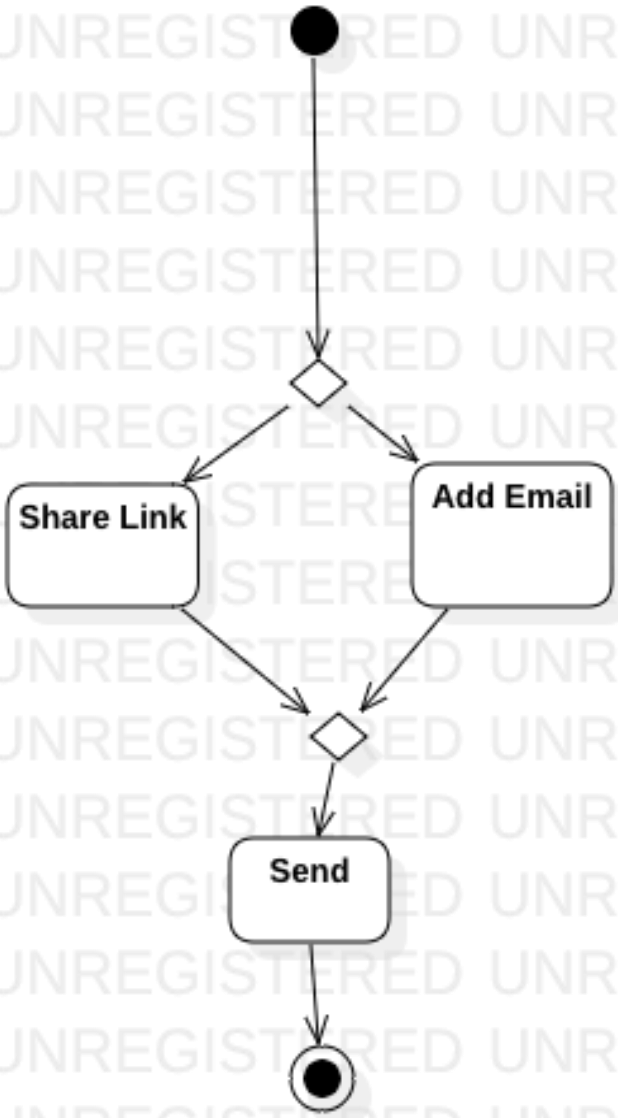
Actors: User/Admin

Preconditions: User must have an active workstation to which he/she invites the members.

Description: User enters name and emails of the members he/she wants to add. The users who are added then confirm the invitation through clicking on the shareable link.

Exceptions: Email must be added in a specific format, emails should be unique and accurate.

Post Conditions: Invite must notify if received by the user who was invited.



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Done by: Rameen Ahsan.

Add applications:

Summary: The use case basically allows the user to add its specific application files on his slack account so that he can share those files whenever required.

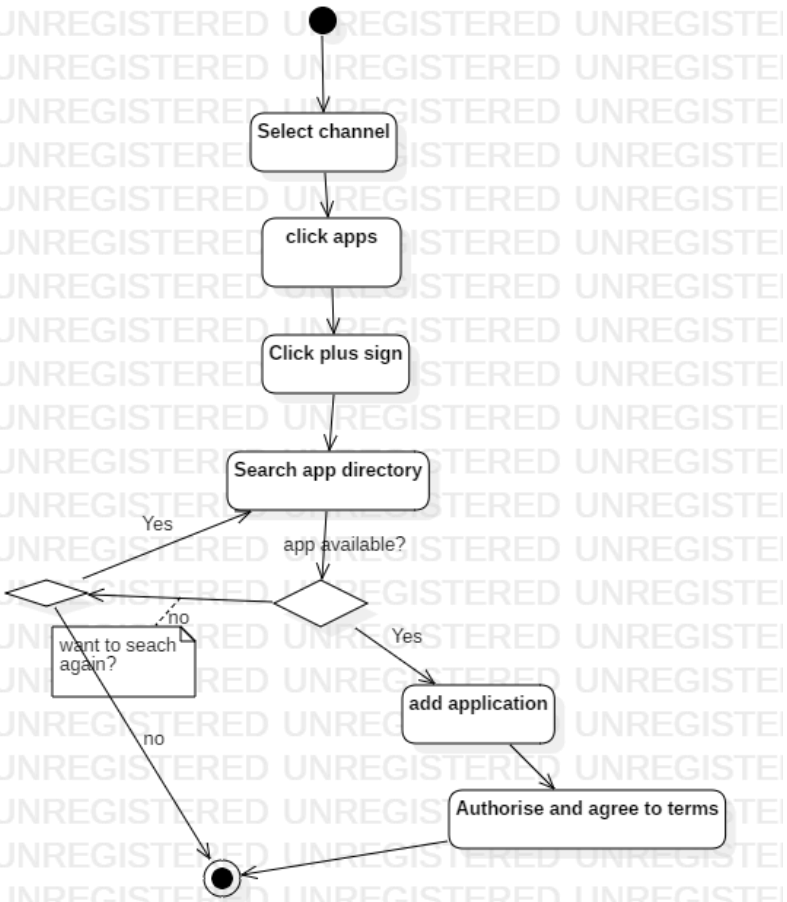
Actors: User

Preconditions: App should be existing in the market.

Description: We can add app by clicking one button and then all the files are transferred in the slack system. This way we can have all our files in the slack system and control what to send and when. We can also add or remove the application specific files with just one click instead of looking into the apps separately.

Exceptions: App should be available online. It should also have a download option available. If the user does not agree to the terms and conditions, then the app should fail to be added.

Post Conditions: If the app becomes unavailable then slack will disallow its use.



Add reaction/React to message:

Summary: The use case basically allows the user to react or express the feeling towards a specific thread or message by selecting a bit emoji.

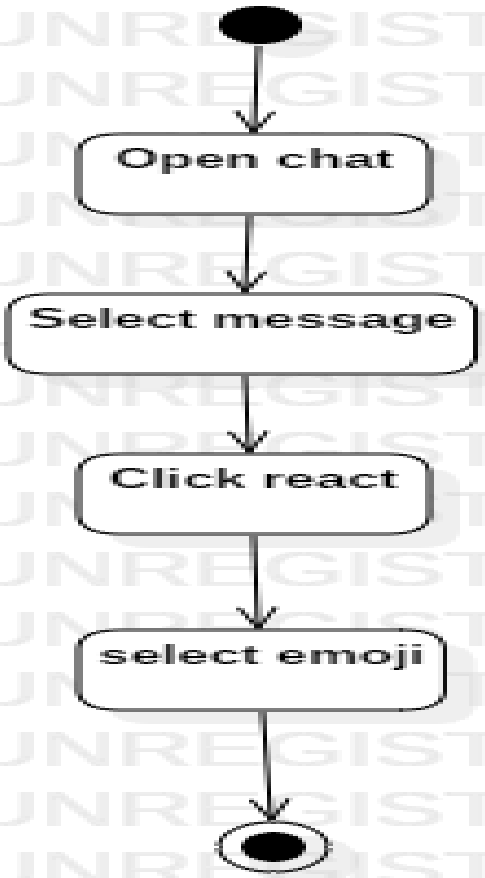
Actors: User

Preconditions: Message should be active and not deleted.

Description: We can add reaction by clicking on the message and then selecting the desired bit emoji.

Exceptions: Message should be available in the thread and if the message is deleted then the reaction is deleted too.

Post Conditions: No post conditions



Update profile:

Summary: The use case basically allows the user to change or modify his/her contact number, display picture, username, add a status and define role.

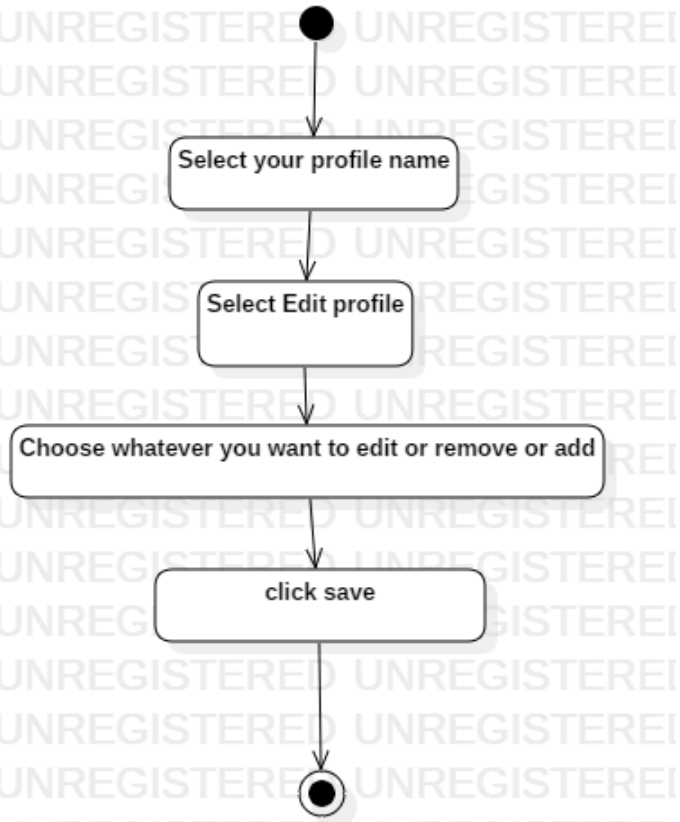
Actors: User

Preconditions: Account should be created and valid.

Description: A user can basically edit his/her profile whatever way he/she wants to.

Exceptions: phone number must contain numeric only, must be resized and role should have a specific length description.

Post Conditions: No post conditions.



Done by: Taimur Aslam.

Update settings:

Summary: The use case basically allows the user to change or modify his/her account settings. He/she can basically control all the app features from this specific use case. It has a lot of features.

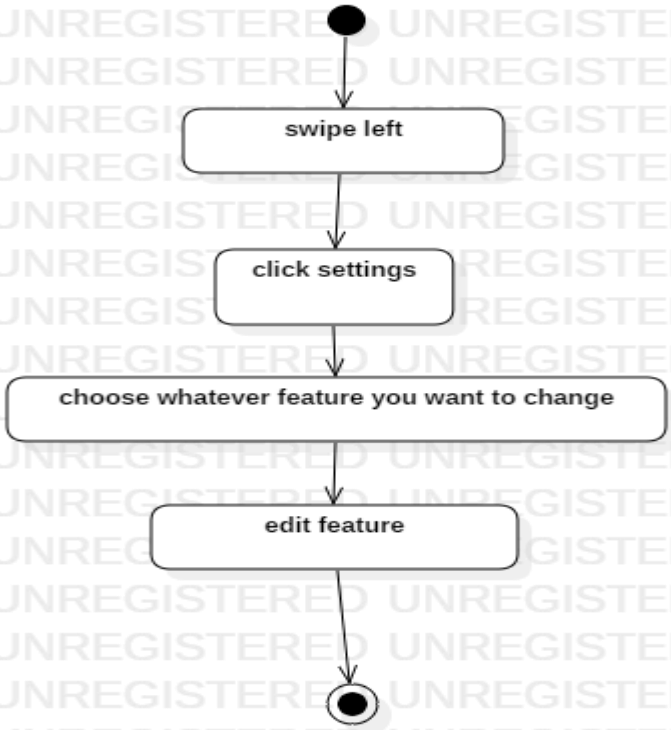
Actors: User

Preconditions: Account should be created and valid.

Description: A user can basically go offline or online, pause notifications, turn the do not disturb mode, change text setting, change language settings, edit advanced settings, invite members, view and apply analytics, rate slack, send feedback to the slack, report an issue at help centre and sign out.

Exceptions: No language can be added which is not installed in the phone, account should be valid and active, select timings if the notifications or do not disturb mode needs to be activated and send authentic feedback.

Post Conditions: If an issue is reported, wait for the response of slack.



Delete message:

Summary: The use case basically allows the user to delete his/her sent message

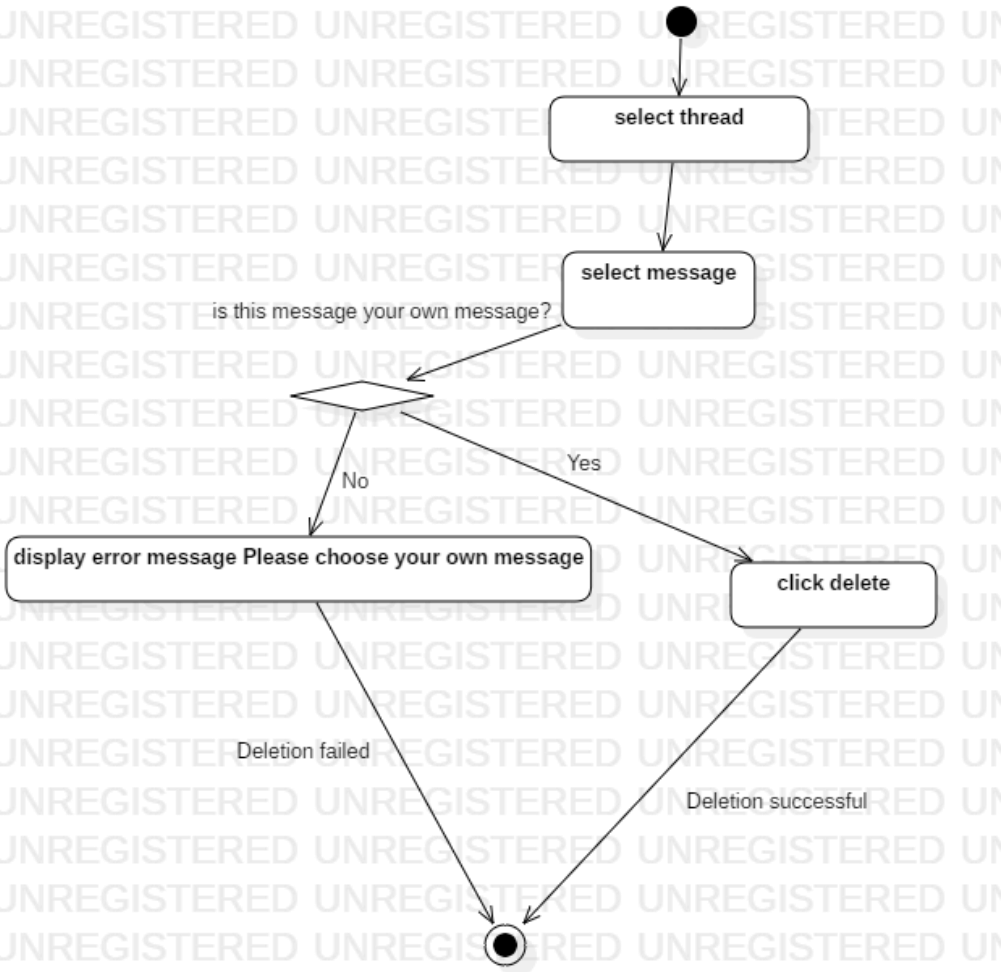
Actors: User

Preconditions: Message must be sent and not deleted earlier.

Description: Any message which was sent earlier can be deleted by the user anytime if he/she thinks that it is not appropriate/useful anymore.

Exceptions: Message should be available in the thread and if the message is deleted then it cannot be deleted again. You can only delete your message.

Post Conditions: The message must not show if it is once deleted.



Check activity

Summary: The use case basically allows the user to check for different threads and activities performed by the different users and friends on your message. For example, if friends reacted to your thread or message then it will be shown in this section and hence user can reply to them here. It works as an inbox tool.

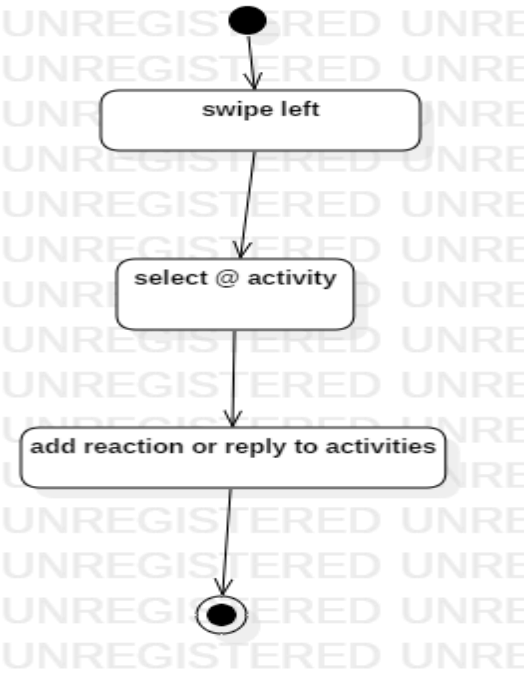
Actors: User

Preconditions: There must be at least one activity performed

Description: Any activity, thread or channel can be viewed through this feature and then user can add reaction or comment to that specific activity. It shows all activities performed by friends and members.

Exceptions: There must at least one activity and it must be performed by a member/friend.

Post Conditions: Notifications will be sent to the user if there is any reply to user's comment or reactions.



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Done by: Nehal Safdar.

Send message

Summary: Send a message to a thread, a channel or to a member of the workspace directly.

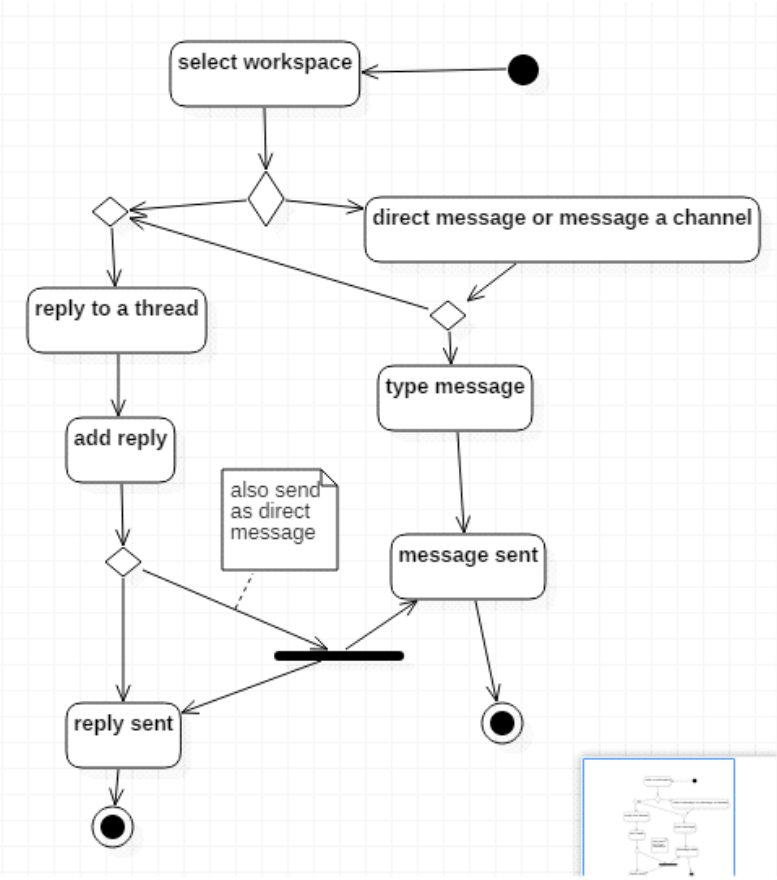
Actors: Slack user **precondition:** App is connected to internet and the user is a member of at

least one workspace.

Description: the user selects a workspace then select whether he wants to reply to a thread or send a message in a channel or to a member in direct messages. then he types the message, if he is replying to a thread, he can also send same text as a message to the member or channel by checking the checkbox "also send as direct message" and the message will be sent.

Exceptions: In case of internet connection loss, the message is not sent.

Postconditions: Message is sent and user can perform another function in app.



Add channel

Summary: The user adds a channel to hi dashboard, he either joins one or create a new one.

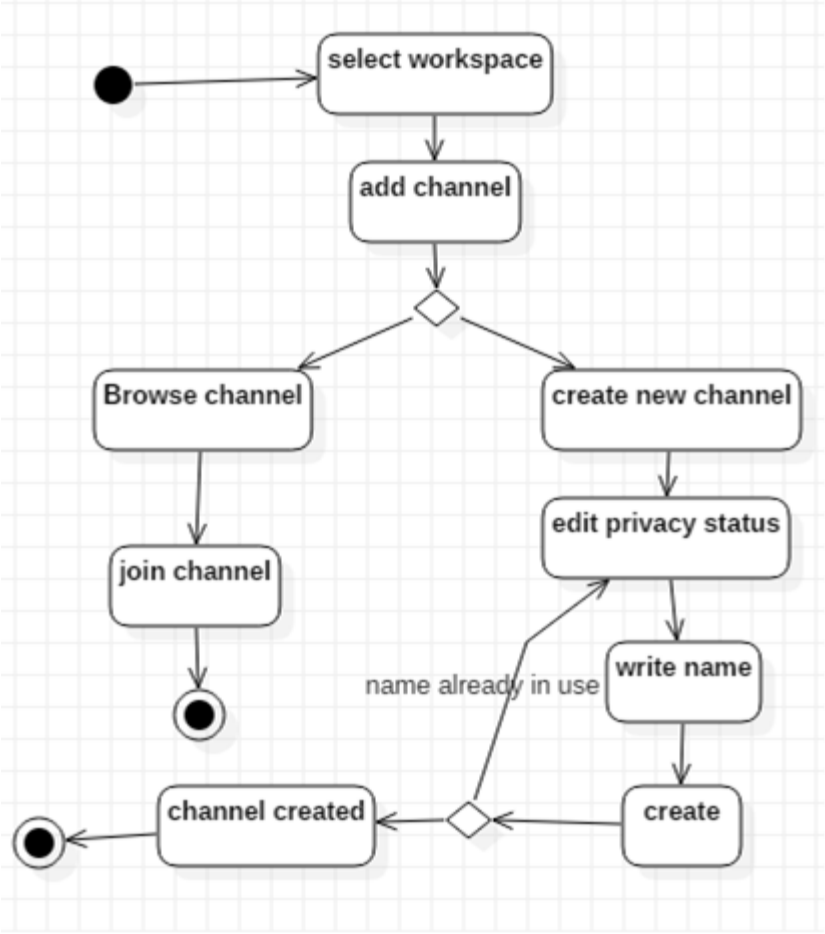
Actors: Slack user **precondition:** App is connected to internet and the user is a member of at

least one workspace.

Description: The user selects a workspace then selects to add a new channel. Now either he can browse an already existing channel then join it or he can create a new one. For creating a new one, he needs to set privacy status as private or public. Then type a name for channel and select create channel. Now an error will occur if the name is already taken by a member or a channel and the user will be asked to set privacy status and to type name again. Otherwise the channel will be created.

Exceptions: The machine will wait for a valid name if the entered name is not available.

Postconditions: Channel is added and user can perform another function in app.


select workspace
add channel
Browse channel
create new channel
edit privacy status
join channel
write name
name already in use
channel created
create

View/Edit Channel Details

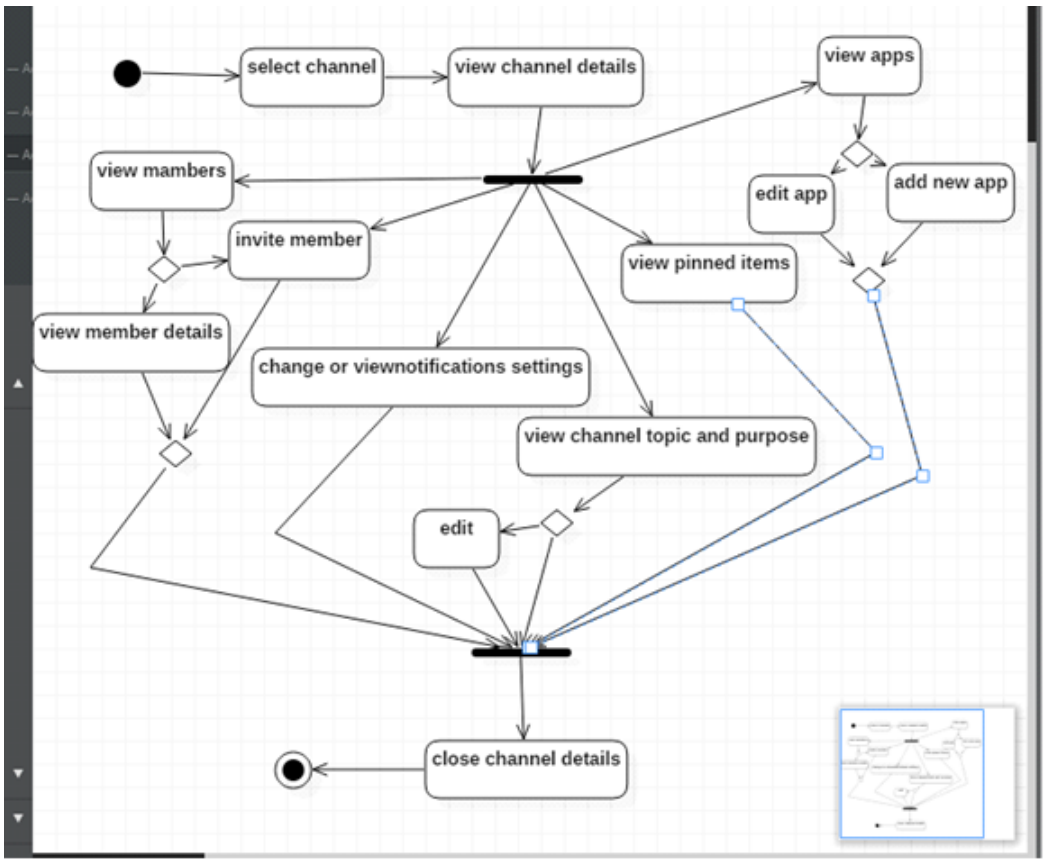
Summary: User can view and edit channel details including notification and apps settings. user can add members to a channel as well. **Actors:** Slack user

Preconditions: slack is connected to an internet source and is a member of atleast one workspace.

Description: User selects the channel he wants to view or edit details about then opens the details. Now user can view or edit channel topic and purpose details, can change notification settings, can view or add members of that channel, can view channel apps and edit them or add a new app to the channel, can view pinned items and can invite a member to the channel as well.

Exception: No exceptions.

Postcondition: Channel details have been updated and the user can perform another function in app.



Done by: Usman Noor.

Add File

Summary: In any chat, the user has the option to add a file to the conversation, may it be from the local device or from a cloud storage. Then the user's list of files in his/her profile will have all files sent in all chats.

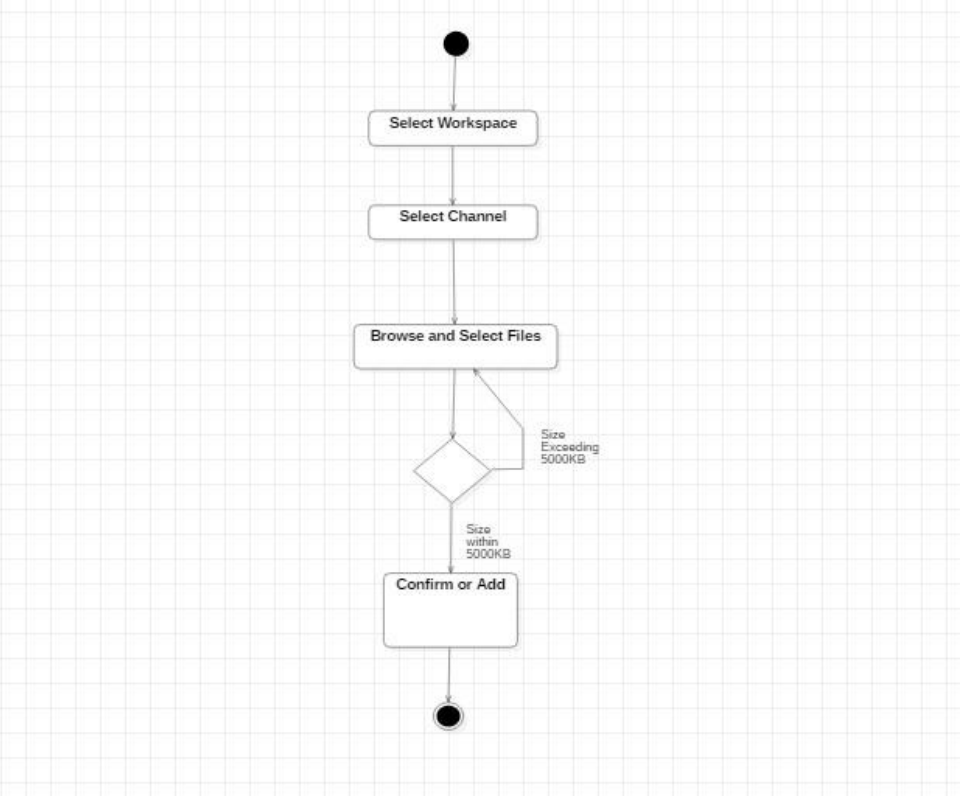
Actors: User

Preconditions: Size of file must not exceed 5000 kBs.

Description: A user can send a file in any chat, direct or channel, by clicking the file icon and choosing the file from the device. If the size is within limits, the users confirms and sends the file.

Exceptions: In case the file format is not supported, the user cannot send it in the chat. In case file size exceeds limit, file is not sent. In case of internet connection loss, file is not sent.

Post Conditions: Every user has a list of files that have been sent in all chats. This particular file will be added to that list.



Create workspace:

Summary: The use case basically allows the user to create a workspace and become the admin it. It sets up a password protection and then once created, other users are invited to join this workspace. it is a form of a group created where everyone can communicate with everyone.

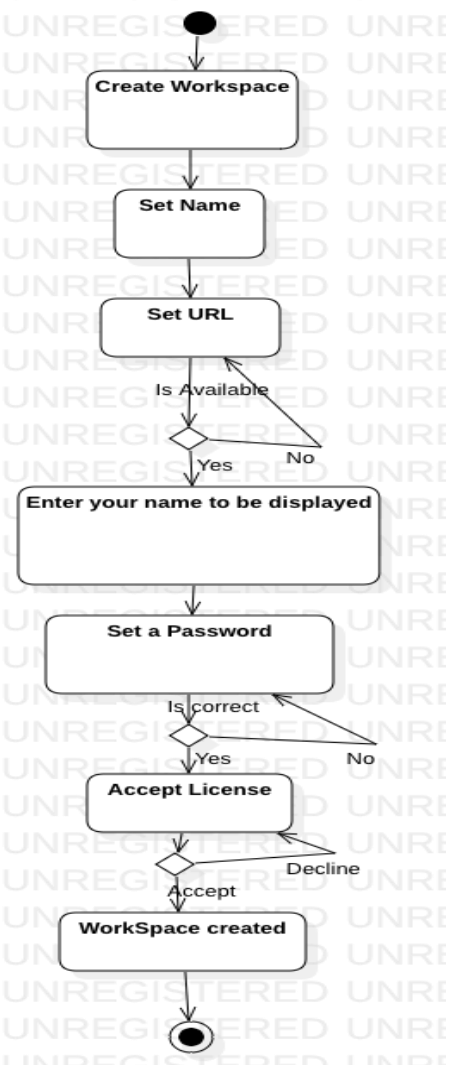
Actors: Admin/User

Preconditions: Admin's account must be valid and working properly.

Description: Admin is allowed to create a workspace. he/she gives it a name, identity, generates a password, license acceptation and then finally invite members.

Exceptions: Only valid users can be invited to join the workspace.

Post Conditions: workspace active as long as one member is a part of it.



Join a workspace:

Summary: The use case basically allows the user to join/accept the invitation of a workspace and enables user to join it.

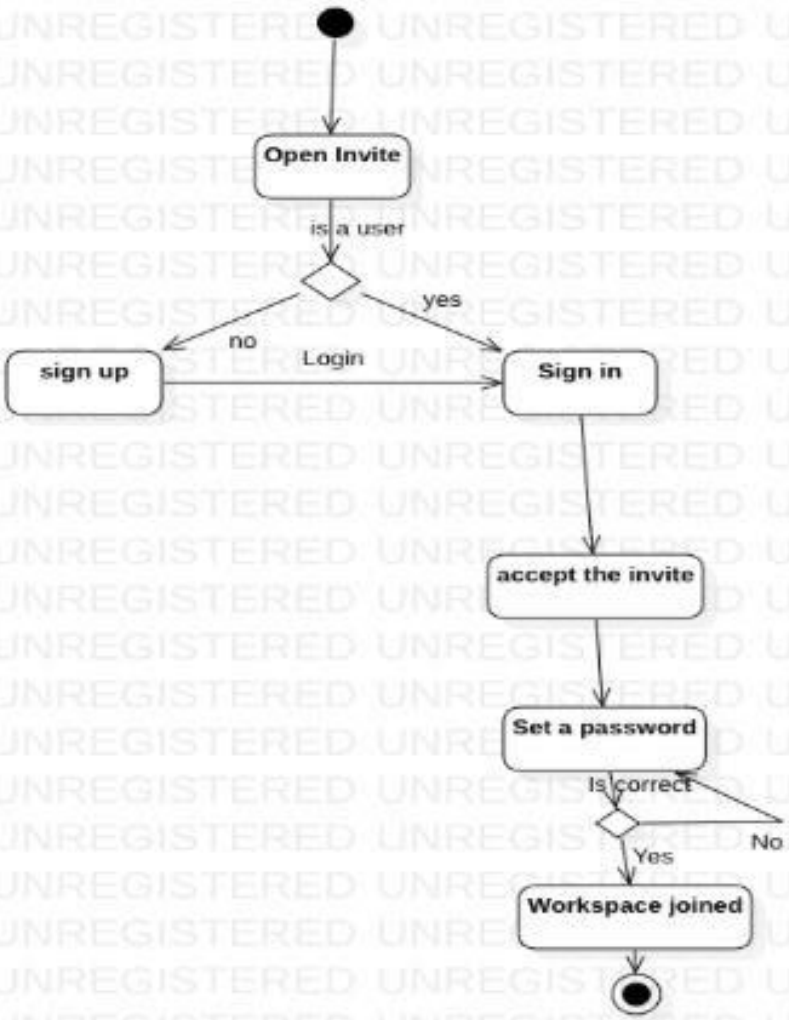
Actors: User

Preconditions: User must have his or her own account otherwise user must create one.

Description: User accepts the invitation and sets up a password for that workstation and then continues working there.

Exceptions: If the workstation is deleted then the user is automatically eliminated from the work station. A user can accept invitation from many users of different workstation however cannot receive for the same workspace he/she is part of, already.

Post Conditions: User can leave the workstation by his/her own will if needed. However, any user can contribute in the workstation as long as he/she is a member of the workstation.


Open Invite
is a user
yes
no
Login
sign up
Sign in
accept the invite
Set a password
Is correct
No
Yes
Workspace joined