COMP1531 Major Project - Grape 4

Flockr Planning

[Requirements] Elicitation

People Interviewed

Alec Check, aleccheck@hotmail.com
A UNSW chemical engineering student who has been a part of multiple university, high school and casual work team group chats.

Questions Asked

A semi-structured interview was undertaken and hence these questions were used to start discussion and were followed by other unscripted questions.

Have you used teamwork based communication tools before? If so, what tools and how did you choose what tool you used? - (gives you an idea how experience they are with using the tools)

Why did you use the tools? (ie what did they want to achieve by using the tools and in what circumstances did they use the tools)

Could you talk me through, in as much detail as you can, how you've used teamwork based communication tools (get them to discuss the process and how the team used the tool)

What were the biggest benefits your team gained from using a teamwork based communication tool?

What were the things you disliked the most, or found the most painful in using the tool (this includes not only by yourself, but also between team members or the overall process)

What do you think could be added to the tools to help you to better achieve what you wanted to do?

Interview summary

The interview was recorded and is included in the files of the final submission, here is a summary of the insights from the interview.

Note: TCT = Teamwork communication tools

What the user has liked about the TCT they have used:

- They keep things simple, anything too complicated becomes too much of an effort to use
- They allow their users to easily reach their team members through notifications, hence why messenger was primarily used
- Sending videos and images for troubleshooting certain issues or showing designs
- Reacting to messages to demonstrate acknowledgement

What the user didn't like about the TCT they have used:

- Messages going unacknowledged, possibly due to ineffective notifications
- Overly complicated time management tools or a complete lack thereof

Features that the user would like in their TCT:

- Calendar feature for upcoming meetings and due dates
- Simple issue board such as the in Gitlab

[Requirements] Analysis & Specification - Use cases

User Stories

As a project manager, I want to access a shared calendar in my communication tool so that I can visualise a time plan and improve my team's time management.

Acceptance criteria

- Be able to view a calendar based on month and year, default's to the current month
- Be able to add/remove events
- Receive a notification a certain amount of time before the event is going to happen

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As a member of a team, I want to be able to send videos and images into my team's chat so that I can illustrate what I am working on or the issues I am facing.

Acceptance criteria

- Be able to send and view images/videos into the chat
- The images can be saved onto the users computer
- Videos can be played/paused and have a time scroller

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As a student in a group project, I want my communication tool to notify my team members more effectively so that issues do not go unseen.

Acceptance criteria

- Users receive notifications through email and through web push notifications
- Notifications to be tailored through turning off certain options, such as: event notifications, message notifications, pinned message notifications and channel invites. All on by default

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As a project manager, I want to be able to list the tasks to be done so that I can easily see what needs to be worked on and to improve productivity.

Acceptance criteria:

- Users in a channel can add and remove issues from a task board specific to that channel
- Tasks can be assigned to a member of a channel and given a due date which then adds it to the calendar (see user story 1)

Use Cases

We have made use cases for the first two user stories: the shared calendar tool and sending images.

Note: following each step in the use case is a response by the system (R)

Scheduling a meeting and viewing it on the calendar

1. Accesses registration page and registers a new account
R: System adds their account information into the database and logs them in
2. User creates a new private channel for them and their project team
R: System creates the channel with the user as the owner and sets it to private
3. User invites each of their team members to the channel
R: System adds each of the team members accounts to the channel's members
4. The user sends some messages into the chat announcing the creation of the chat
R: System adds each message to the channel's message data
5. User navigates to the calendar tab and opens the shared calendar
R: System fetches calendar information for that channel and displays an empty calendar for the current month
6. User selects the ‘add new event’ option and names it ‘group meeting 1’ with a date and time.
R: System creates the event and adds it to the channel events information, displaying it on the calendar for the user and sending a message into the channel stating that an event, with the event name given, has been created for that date/time.
7. User then logs off
R: System removes user from list of active users

Sending an image into the chat

1. Accesses logging in page and logs in existing account
R: System add the user to the list of active users and displays the home page of the application
2. User selects the channel for their current group project
R: System checks that they are a member of the channel and then displays the channel
3. User, who is having an issue with their group work, screenshots their issue and copies and pastes it into the message bar and sends it into the chat
R: System recognises an image has been sent and displays it in the chat appropriately resized, adding it to the channel's image storage
4. User pins the message with the image in it
R: System adds message to list of pinned messages and displays it at the top of the page

[Requirements] Validation

Calendar tool

I like that the calendar has its own tab since accessibility is very important, and that it notes changes to the calendar in the chat. I would like it if also there was a reminder that will notify the group a specified time before the meeting

Image sending

This does the job well, I like that it keeps it simple and I feel that it will fulfil the need of illustrating troubleshooting to my team effectively. I would like it if videos can also be sent the same way as that is something my team uses in our process.

[Design] Interface Design

Since there isn't much interface design needed for sending images, we've decided to design the interface for the calendar feature.

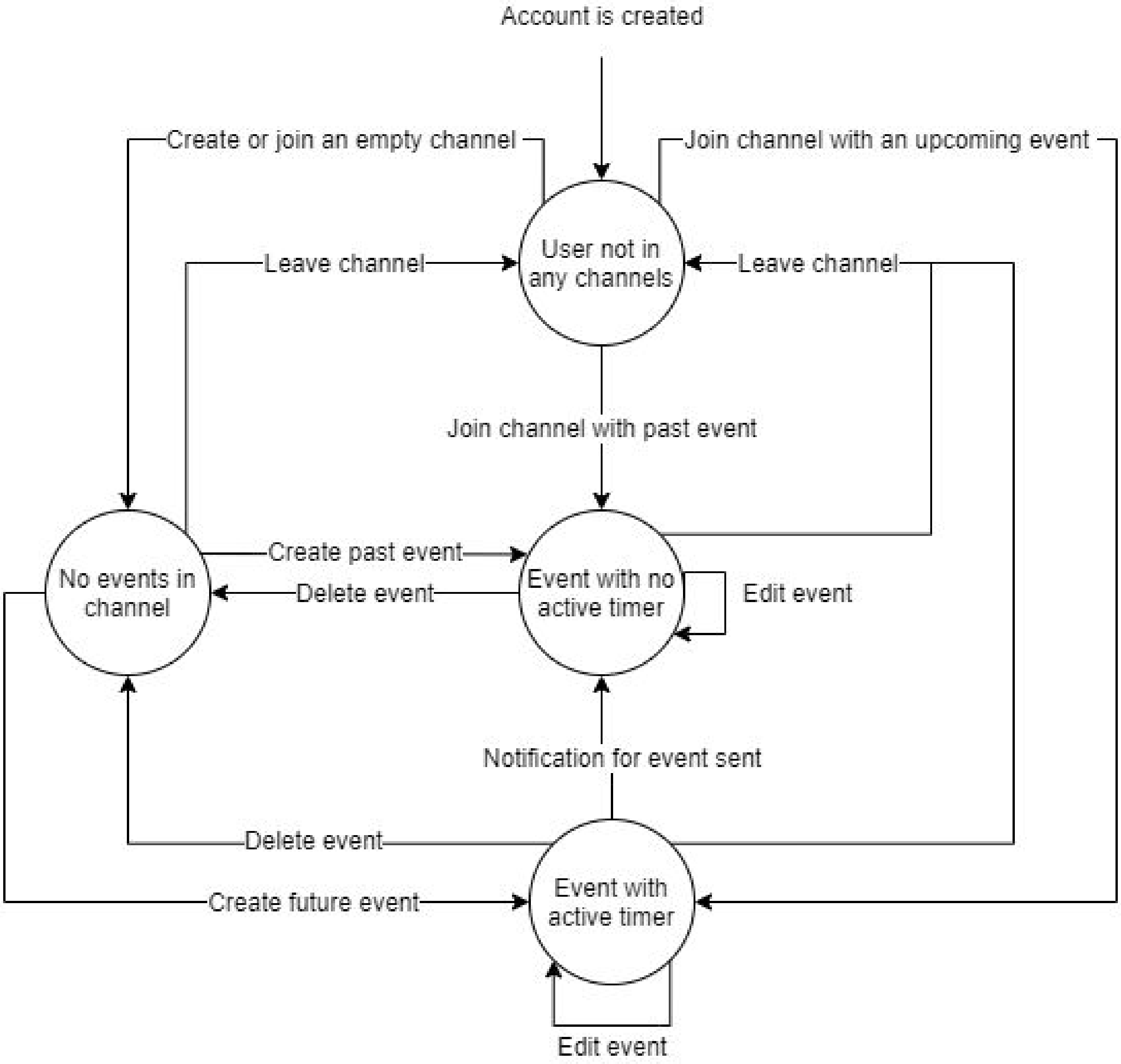
Function name	HTTP Method	Parameters	Return Type	Exceptions	Description
calendar/events	GET	(token, channel_id, month)	{events}	**InputError** when ● Channel ID is not a valid channel **AccessError** when ● The	Returns a list of all events in the channel within the month - used to be displayed on the calendar tab

				authorised user is not a member of the channel	
calendar/event/create	POST	(token, channel_id, event_name, date)	{event_id}	**InputError** when ● Channel ID is not a valid channel ● Event_name is more than 150 characters **AccessError** when ● The authorised user is not a member of the channel	Creates a new event with that event_name and date. Also sends a message into the channel with channel_id announcing the creation of the event and starts the timer for a reminder.
calendar/event/remove	DELETE	(token, event_id)	{}	**InputError** when ● Event_ID is not a valid event **AccessError** when ● The authorised user is not a member of the channel	Given an event_id for an event, this event is removed from the channel.
calendar/event/edit	PUT	(token, event_id, event_name)	{}	**InputError** when ● Event_ID is not a valid event ● Event_name is more than 150 characters **AccessError** when ● The	Given an event, update it's name with the new name.

				authorised user is not a member of the channel	

[Design] Conceptual Modelling

For the purpose of simplicity we have chosen to model the state of a single event within a calendar, in the fully implemented calendar feature multiple events will be able to exist within a single channel with multiple timers running concurrently.


Account is created
Create or join an empty channel
Join channel with an upcoming event
Leave channel
User not in any channels
Leave channel
Join channel with past event
Create past event
No events in channel
Delete event
Event with no active timer
Edit event
Notification for event sent
Delete event
Create future event
Event with active timer
Edit event