

Requirements Analysis

Use Cases:

Use Case 1: User wants to set a pomodoro cycle

User wants to set a pomodoro cycle:

1 Preconditions

Bot has a timer embedded in it

2 Main Flow

User will request a cycle and provide how many cycles they want to do, how long each break is, and how long each focus time is

3 Subflows

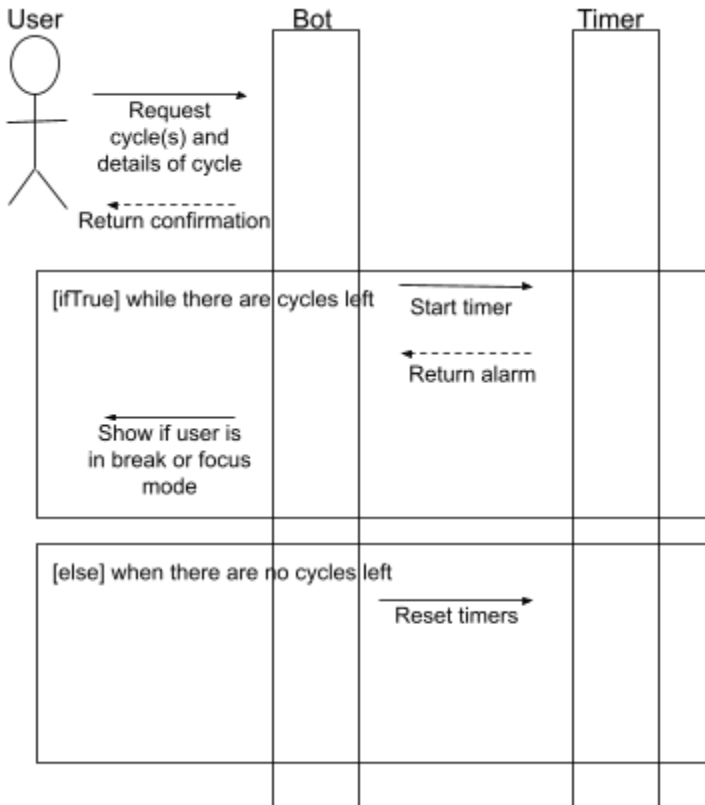
[S1] User provides number of cycles and time for breaks and focus time

[S2] Bot will return a confirmation

[S3] Bot will start pomodoro cycle and ring alarm once timer is up and show the user if they are in break or focus mode

4 Alternative Flows

[E1] No cycles in pomodoro are left so the bot will reset it all



Use Case 2: User wants feedback/report on their recent performance

1 Preconditions

User must have studied while using the bot at least once before

2 Main Flow

User will ask the bot to make a report on their recent study sessions [S1]

Bot will take look at the sessions and take into account the focused study time, any moment the user got distracted by unrelated tasks, and how many of their current tasks they completed or worked on [S2]

The bot will return a visibly appealing report with everything the user got distracted with, how often they got distracted, and how much actual studying they got done while outlining the ost concerning problems in their study habits. The bot will also provide techniques or technologies so the user can make better use of their study cycles and get distracted less. [S3]

3 Subflows

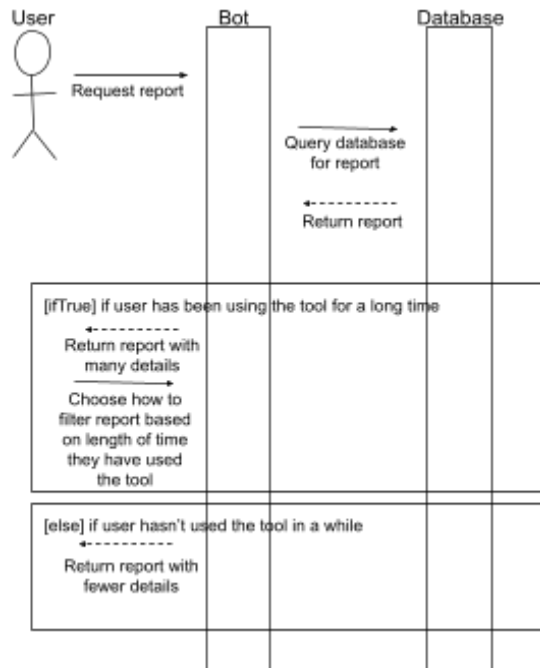
[S1] The user has been using the tool for a long time.

[S2] The user can choose to filter their report by the most recent week, month or longer depending on how long they have been using the tool.

4 Alternative Flows

[E1] The user has not used the bot in a long time.

[E2] The bot might still provide feedback based on the information it has gathered but it might not reflect the current study habits of the user.



Use Case 3: The user gets distracted while using Focusbot

1 Preconditions

The user is currently making use of a study cycle or has the bot active

2 Main Flow

The user is studying but gets distracted or goes inactive for a decent amount of time [S1]

The bot will show a small pop-up window asking the user if they are still studying or asking them to get back to studying if they are distracted[S2]

If the user is still active, they can close the pop up. The bot will proceed to count any time spent in unrelated tasks as distracted time [S3]

3 Subflows

[S1] The user is either not paying attention or is not at their computer.

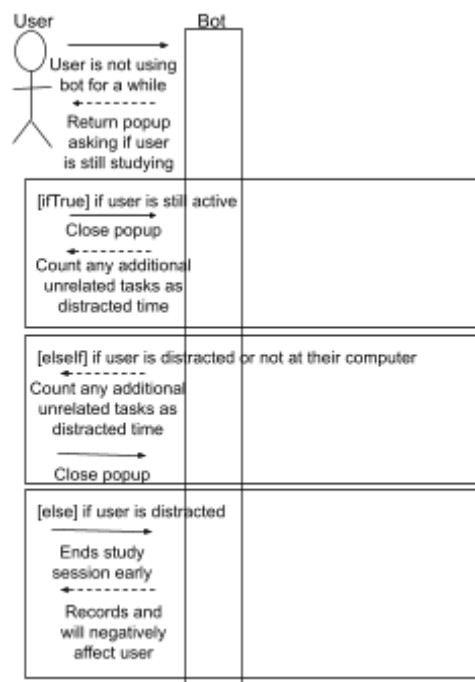
[S2] The user will not close the pop-up and all the time spent with the pop-up active will either count as distracted time or inactive time.

[S3] Once the user is back and closes the pop-up, the bot will stop counting the time as distracted or inactive if the user gets back to studying.

4 Alternative Flows

[E1] The user gets distracted, gets the pop-up alert, but ends the study session early instead of going back to studying.

[E2] The bot takes note of this, which will negatively affect the user's report.



Use Case 4: The user wants to get reminders to start and finish future tasks early

1 Preconditions

Bot has calendar/to do list functionality included

2 Main Flow

User submits tasks along with deadlines, importance of task and, optionally, a description of the task and the time commitment estimated for its completion. [S1]

The bot will process this information and store it in a calendar or to do list [S2]

The bot will send reminders days or weeks early depending on how close the deadline is, the time commitment established and the importance of the task [S3]

3 Subflows

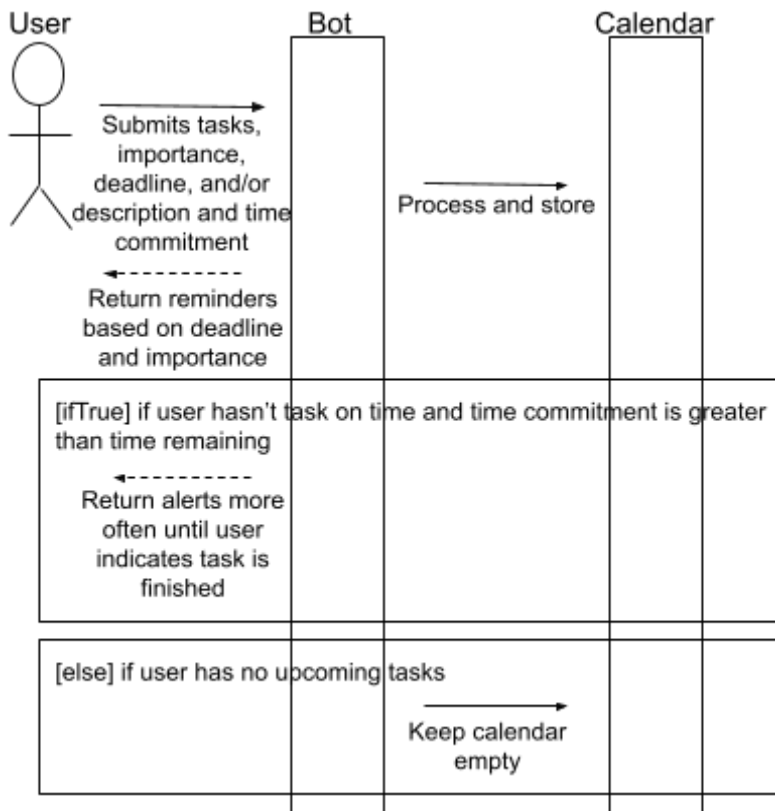
[S1] The user does not start on the task and the time commitment of the task is greater than the time left until the deadline

[S2] The bot will make note of this, which will negatively impact the report and feedback.

[S3] The bot will send alerts and warnings more often as long as the user does not indicate they have either started or finished the task before the deadline.

4 Alternative Flows

[E1] The user has no upcoming tasks currently, leaving the to do list empty.



Use Case 5: Pre-study session relaxation techniques

1 Preconditions

The user has identified the need to relax and reduce stress or anxiety before starting a study session.

2 Main Flow

User activates the Focus Bot and indicates a desire to undergo pre-study relaxation techniques.

Focus Bot presents a selection of relaxation techniques, including (but not limited to):

Guided breathing exercises, short meditation, progressive muscle relaxation, calming music playlists, visualization exercises, the user selects their desired relaxation technique.

Focus Bot provides instructions or plays the necessary audio to guide the user through the technique.

3 Subflows

[S1] Focus Bot instructs the user to find a comfortable sitting or lying position.

[S2] Focus Bot guides the user to tense specific muscle groups and then relax them.

[S3] This process continues, moving from one muscle group to another until the entire body has been addressed.

4 Alternative Flows

[E1] User gets interrupted or distracted during the relaxation technique:

Focus Bot pauses the ongoing technique.

Once the user is ready to continue, they can either resume where they left off or restart the relaxation technique.

