Use Case 1: Display user's participation statistics

Preconditions

User is in the same server as the Bot

Main Flow

User will request for their participation statistics [S1]. Bot responds with statistics [S2]

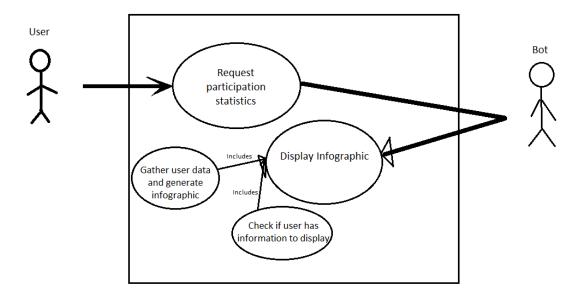
Subflows

- [S1] User provides /statistics command followed with @username
- [S2] Bot will gather user data and calculate appropriate information to integrate into a graphical display, and reply in the same channel with an image

Alternative Flows

- [E1] User has not interacted in the server and has no information to display
- [E2] Bot does not have permission to send messages in the channel where the command was issued

Model:



Use Case 2: Bot keeps track of reactions to messages to determine how much to reward an answer

Preconditions

A user has reacted to an answer message by another user. The Bot is on the same server as the user.

Main Flow

A user responds to another user's question in a message on the server [S1]. The user whose question was answered reacts to the answer message with a thumbs up [S2]. Bot takes the number of reactions [S3].

Subflows

- [S1] Bot takes the timestamp of the message and the username of the answerer for its collected data.
- [S2] The number of reactions gets updated.
- [S3] Bot updates the number of reactions the answer got in its collected data spreadsheet.

Alternative Flows

- [E1] The response or question message have been deleted
- [E2] The wrong reaction is used and the number does not get updated in the Bot's data.
- [E3] Bot cannot update the number of reactions of a deleted message.

Model:

User who answers Respond to question Bot New Take username and timestamp for data answer message on server includes Update number of reactions for message in Thinks the answer Change in data helpful and puts a reactions on thumbs up reaction answer message User who questions

Use Case 3: Search previous/similar Questions:

Preconditions

The user must be in the same Discord server as the bot.

Main Flow

[S1] The user makes a search inquiry to bot. [S2] The bot responds with a list of search results, organized from most to least recently asked. [S3] The user goes through each page of search results until they find what they are looking for.

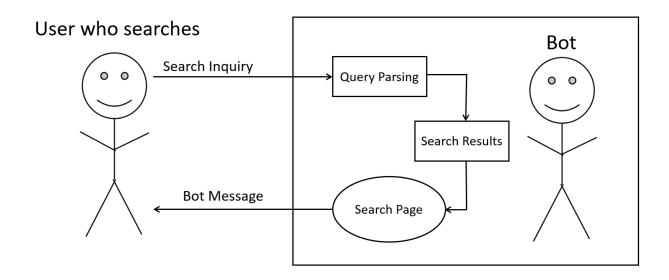
Subflows

- [S1] The bot parses the user input using either an exact-match inquiry or using Regex as appropriate.
 - [S2] The bot returns a page of inquiries relevant to the search results.
 - [S3] The bot returns the next page of search results and prepares other search results.

Alternative Flows

- [E1] If the search has no matches, the bot notifies the user
- [E2] The user can also specify a certain page in the search inquiry

Model:



Use Case 4: Content Moderation

Preconditions

The moderator must be in the same Discord server as the bot.

The bot needs permission to ping moderators and delete messages.

The users must be able to react/message on the same server as the bot.

Main Flow

The user sees a message that violates either Discord's community guidelines or the rules of the server. The user reacts to the message, indicating that it is inappropriate. [S1] The moderator of the server is notified about the message for review. [S2] The moderator takes appropriate action, either deleting the message or dismissing the reports [S3].

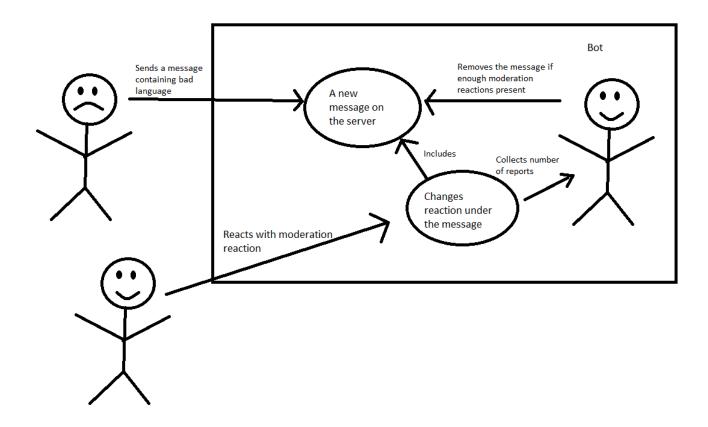
Subflows

- [S1] The number of report reactions for a particular message gets updated.
- [S2] The bot sends a private message to the moderator of the server linking back to the flagged message.
- [S3] The moderator can either manually delete the flagged message or delete it via the bot.

Alternative Flows

[E1] The moderator can specify a number of user reactions necessary for a question or response to be auto-deleted.

Model:



Use Case 5: See all Commands

Preconditions

The user must be in the same Discord server as the bot.

The bot must be able to private message the user.

Main Flow

The user requests a list of all available commands from the bot [S1]. The bot proceeds to send a private message to the user with all of its commands and a brief description on how to use them [S2].

Subflows

[S1] The user types the "\$help" command or some equivalent to the same server that the bot is on.

[S2] The bot sends the list of commands to the user.

Alternative Flows

[E1] If the user is the moderator of the server the bot is on, they will see a different list of commands compared to a normal user.

Model:

(very cool Sequence diagram)

