



Wild Card Bot

Sprint 2 Planning Document

Team 25: Konstantin Liehr, Arun Thirumavalavan, Nikolas Damalas, Kyle Arrowood, Michael Gu, Matthew Wang

Sprint Overview:

During this sprint, we will start developing extra features that we thought would be helpful to have as a part of a discord bot. A lot of discord bots can perform specific functions on servers, but the purpose of our bot is that it will be very easy to customize and a bot that can do it all. During the last sprint we finished the server administration features as well as the modular functionality. Now we will start to create modules that will work with the bot to do all types of different things from google searches to video game statistics.

Scrum Master: Kyle Arrowood

Meeting Plan: Monday/Wednesday/Friday @ 11:30am EST

Risks and Challenges:

The main risks and challenges going into our second sprint will be making sure we can complete the work that we give ourselves in the amount of time we are given. In the first sprint a lot of our tasks were pretty simple so it was easy to get everything done in time and we even had extra time. I think that now we are past the initial development of the bot the feature we are implementing will become a lot more difficult to complete. We need to make sure that we run into any issues that we let our team members know so that we can help each complete tasks if needed.

Current Sprint Detail:

User Story #1

As a user, I want to access code documentation

#	Description	Estimated Time	Owner
1	Determine how the python documentation website is formatted	2 Hour	Nikolas
2	Create a function to scrape the python documentation website on a requested page	3 Hours	Nikolas
3	Determine how the java documentation website is formatted	2 Hour	Nikolas
4	Create a function to scrape the java documentation website on a requested page	3 Hours	Nikolas
5	Create a module for the bot that will search for a requested item in the python or java documentation and return the documentation information plus a link.	3 Hours	Nikolas
6	Create manual test cases for both python and java documentation	30 minutes	Nikolas

Acceptance Criteria:

- Given that the search term or language is invalid, the bot will notify the user that the requested information is not available and to check to be sure all the spelling is correct.
- Given that the search term and language are valid, the bot returns the documentation information for the term in the language specified within 10 seconds.
- Given that the search term and language are valid, and the user specifies that they want more information, the bot will provide a link to the documentation page.

User Story #2

As a user, I want to queue multiple songs to be played

#	Description	Estimated Time	Owner
1	Create a queue to hold youtube links	2 Hour	Nikolas

	for the music module, with automatic resizing		
2	Learn how to find the end of a song in the bot and then Create loop to play from queue until empty	2 Hours	Nikolas
3	Make the module process the next song during the current song so that it is ready to play once it finishes	2 Hours	Nikolas
4	Create manual test case	15 minutes	Nikolas

Acceptance Criteria:

- Given the user provides a valid youtube link, the link will be added to the queue and the user will be notified.
- Given the queue has more than one song in it, when the song finishes the next song will automatically play.
- Given a link is invalid, the bot will notify the user that it was not added to the queue.

User Story #3

As a user, I want to add and remove songs from the queue

#	Description	Estimated Time	Owner
1	Create function to remove a song from the queue given the index in the list	2 Hours	Nikolas
2	Modify the !play command to add to queue instead of immediately playing the song	2 Hours	Nikolas
3	Create manual test case	15 minutes	Nikolas

Acceptance Criteria:

- Given the youtube link is valid, the play command will add the song to the queue and the user will be notified the song was added.

- Given the provided index is valid, the remove command will remove the song at the given index from the queue.
- Given the provided index is invalid, the user will be notified that no songs were removed from the queue.

User Story #4

As a user, I want to view the queue

#	Description	Estimated Time	Owner
1	Create function to list out the queue with index numbers for reference	2 Hours	Nikolas
2	Create manual test case	15 minutes	Nikolas

Acceptance Criteria:

- Given the queue has songs, when viewing the queue it will display each song with an associated index.
- Given the queue has songs and a song is playing, when viewing the queue it will show which song is currently being played.
- Given the queue is empty, the view function will tell the user the queue is empty.

User Story #5

As a user, I want to clear the queue.

#	Description	Estimated Time	Owner
1	Create a function to clear all songs from the queue	2 Hours	Nikolas
2	Create manual test case	15 minutes	Nikolas

Acceptance Criteria:

- Given the queue has songs, the clear function will empty all songs out of the queue.

- Given a song is currently playing, the clear function will empty the songs without stopping the currently playing song.
- Given the queue is empty, the user will be notified that the queue is already empty.

User Story #6

As a user, I want to skip a song.

#	Description	Estimated Time	Owner
1	Create a function to skip the current song and go to the next one in the queue	1 Hour	Nikolas
2	Create manual test case	15 minutes	Nikolas

Acceptance Criteria:

- Given there are multiple songs in the queue, the skip function will stop the current song and then play the next song in the queue.
- Given there are no songs in the queue and a song is playing, the skip function will stop the current song.
- Given there are no songs playing, the user will be notified there is no song to skip.

User Story #7

As a user, I want to get a google search result in the server with a command.

#	Description	Estimated Time	Owner
1	Create a function to send search query to google search engine.	1 Hour	Kyle
2	Create a function to display information received from google.	1 Hour	Kyle
3	Create an option to search for images.	1 Hour	Kyle
4	Create an option to search for videos.	1 Hour	Kyle

5	Create manual test case	15 Minutes	Kyle
---	-------------------------	------------	------

Acceptance Criteria:

- Given that the google search module is loaded, when the user uses a search command, it will call a function that will send a query and receive results from google.
- Given that the google search command is called, when information is returned to the bot it should present that information to the user in a nice presentable way.
- Given that the google search module is loaded, when the user requests a google search for images, the bot will return the top image results to the user.
- Given that the google search module is loaded, when the user requests a google search for videos, the bot will return the top video results to the user.

User Story #8

As a user, I want there to be an option to jump to the search in my browser from an extra command.

#	Description	Estimated Time	Owner
1	Create a function to display a link to the search.	1 Hour	Kyle
2	Create a function to display links of the top results when requested.	1 Hour	Kyle
3	Create manual test case	15 Minutes	Kyle

Acceptance Criteria:

- Given that the google search module is loaded, when the user requests a google search, the bot will return information and also provide a hyperlink to the google search.
- Given that the google search module is loaded, when the user requests a google search with an option for just hyperlinks, the bot will show no information and instead just the top amount of search results requested.
- Given that the google search module is loaded, when the user requests a search with more than 5 results, the bot will display links to however many results the user requested.

User Story #9

As a user, I want there to be an option for the bot to give me a short answer rather than extra unneeded information.

#	Description	Estimated Time	Owner
1	Create a function to display the google short answer to the user.	2 Hours	Kyle
2	Create a function to create a short answer for the user when google doesn't provide one.	4 Hours	Kyle
3	Create manual test case	15 Minutes	Kyle

Acceptance Criteria:

- Given that the google search module is loaded, when the user requests a google search, the bot will by default return a short answer with a hyperlink to the search.
- Given that the google search requested does not have a short answer, the bot will generate a description or fact about the search.
- Given that the google search module is loaded, when the user requests information from google, the bot will display it in an easy to look at fashion.

User Story #10

As a user, I want to be able to run a stopwatch on the server.

#	Description	Estimated Time	Owner
1	Create a function to start a stopwatch functionality. It will start at time equal to zero and count up.	2 Hours	Kyle
2	Create a function to display how long the stopwatch has been running.	3 Hours	Kyle
3	Create a function to reset the stopwatch.	1 Hour	Kyle

4	Create a function to stop the stopwatch.	1 Hour	Kyle
5	Create manual test case	15 Minutes	Kyle

Acceptance Criteria:

- Given that the clock module is loaded, when the user asks to start a stopwatch, the bot responds with a stopwatch that has started.
- Given that a stopwatch has already started, when the user wants to know how long it has been going, the bot will have displayed how long it has been going for.
- Given that there is already a stopwatch, when the user wants it to start over at 0 again, they can use a command to reset it.
- Given that a stopwatch has already started, when the user tells the bot to stop the stopwatch, it will stop on command.

User Story #11

As a user, I want to be able to set a timer for a specific length of time on the server.

#	Description	Estimated Time	Owner
1	Create a function to start a timer functionality. It will start at the time given and count down to zero.	2 Hours	Kyle
2	Create a function to display how much time is left on the timer.	3 Hours	Kyle
3	Create a function to notify the user that created the timer when it is done.	1 Hour	Kyle
4	Create a function to stop the timer.	1 Hour	Kyle
5	Create a function that deletes the timer.	1 Hour	Kyle
6	Create manual test case	15 Minutes	Kyle

Acceptance Criteria:

- Given that the clock module is loaded, when the user asks to start a timer, The bot will do so if given an amount of time, otherwise it will notify the user that their input was incorrect.
- Given that a timer is running, when the user wants to know how much time is left on the timer, the bot will have displayed how much longer until it is done.
- Given that a timer has finished, the bot will notify the user that created the timer by using the @ function in discord.
- Given that a timer is running, when the user wants to stop a timer they can use a command and the bot will stop the timer.
- Given that a timer exists, when the user wants to delete a timer, they can use a command and the bot will delete the timer.

User Story #12

As a user, I want to type a command to give a timezone in a certain city.

#	Description	Estimated Time	Owner
1	Create a function that will fetch the timezone of any given city.	1 Hour	Kyle
2	Create a function that displays the local time in the city given	1 Hour	Kyle
3	Create a function that displays the time difference between the city given and the local time zone.	1 Hour	Kyle
4	Create manual test case	15 Minutes	Kyle

Acceptance Criteria:

- Given that the clock module is loaded, when the user requests to see a time zone of a specific city, it will display the local time of that city.
- Given that the user asks for a timezone, when the user wants to see the time difference, the bot will display the time difference in hours.
- Given that the clock module is loaded, when the user requests to see a timezone, it will display the information in a nice presentable fashion.

User Story #13

As a user, I want to display information and stats from my Riot account.

#	Description	Estimated Time	Owner
1	Determine how the Riot API works and learn how to extract data for a user about champion skill orders, various item paths, matchups, lane/jungle tips, etc.	2 Hours	Konstantin/Michael/Arun
2	Create a function that displays information about a Riot account.	2 Hours	Konstantin/Michael/Arun
3	Create a function that displays a user's League profile.	6 Hours	Konstantin/Michael/Arun
4	Create a function that displays a user's Valorant profile	4 Hours	Konstantin/Michael/Arun
5	Create a function that displays a user's TFT profile	3 Hours	Konstantin/Michael/Arun
6	Create a function that displays a user's Legends of Runeterra Profile	3 Hours	Konstantin/Michael/Arun
4	Create manual test case	15 minutes (each)	Konstantin/Michael/Arun

Acceptance Criteria:

- Given that the Riot API module is loaded to the bot, when a user requests a specific profile using the game specific command and in-game username, the bot will give them a specific profile with username, profile picture, and ranked stats if any.
- Given that the Riot API module is loaded, when a user requests a specific game using a username, the bot will give the user the profile for that username and for that specific game (i.e. League of Legends, TFT).
- Given that the Riot API module is loaded, if a user requests information about a username or game that is not valid, the bot will respond with an invalid command notification.
- Given that the Riot API module is loaded, if a user requests information about region tags, the bot will display a list with all valid tags.

User Story #14

As a user, I want to get statistics on a live game and display a user's match history.

#	Description	Estimated Time	Owner
1	Create a function that displays the match history of a user.	3 Hours	Konstantin/Michael/ Arun
2	Create a function that displays all champion masteries for a user.	2 Hours	Konstantin/Michael/ Arun
3	Create a function that searches and displays information on live League games.	4 Hours	Konstantin/Michael/ Arun
4	Create manual test cases	15 minutes (each)	Konstantin/Michael/ Arun

Acceptance Criteria:

- Given that the Riot API module is loaded, when the user requests the recent match history of a username for League of Legends, the bot will respond with the last 5 games played in all modes of that League of Legends username.
- Given that the Riot API module is loaded, when the user gives the bot a League of Legends username for League of Legends along with a champion mastery command, the top 3 champion masteries of that League of Legends username will be displayed to the user.
- Given that the Riot API module is loaded, when the user requests if a certain username is in a live game of League of Legends the bot will respond with information from the game that is live.

User Story #15

As a user, I want to get relevant information about each champion, recommended builds, and gameplay tips.

#	Description	Estimated Time	Owner
1	Research Item order, skill orders and laning tips for general lane matchups for all 150+ characters (winrates are in the API, but tips and ordering are obtained through playing the game, not found in the API)	6 Hours	Michael/Konstantin

1	Research how to use the database of items and characters	1 Hour	Michael/Konstantin
2	Create a function that recommends items builds for each champion.	6 Hours	Michael/Konstantin
3	Create a function that recommends level-up orders for each champion	4 Hours	Michael/Konstantin
4	Create a list of gameplay tips. Create a function that displays relevant ones for each lane.	6 Hours	Michael/Konstantin
5	Create manual test cases	45 minutes	Michael/Konstantin

Acceptance Criteria:

- Given that the Riot API module is loaded, when the user requests for information on a champion, the bot will display relevant info on it including champion skill order.
- Given that the Riot API module is loaded, when the user requests a recommended build path for a champion, the bot will display a recommended build path for that champion.
- Given that the Riot API module is loaded, when the user requests for general tips on playing with or against a champion, the bot will output relevant information.

User Story #16

As a user, I want the bot to recommend me the jungle pathing depending on lane matchup, jungle matchup, and most popular jungle routes.

#	Description	Estimated Time	Owner
1	Research the most popular first clear jungle routes done by high elo junglers	3 Hours	Konstantin/Michael/Arun
2	Create a database of jungle routes done by high elo junglers.	6 Hours	Konstantin/Michael/Arun
3	Research jungle matchups, item builds and jungle paths relative to matchup	5 Hours	Konstantin/Michael/Arun
4	Create a function that identifies the	8 Hours	Konstantin/Michael/

	jungle matchup and assigns a recommended jungle path.		Arun
5	Research lane matchups, cc per champ and recommended gank styles and paths depending on enemy and players team	6 Hours	Konstantin/Michael/ Arun
6	Create a function that determines the laners and indicates which path to take based on lane matchups.	8 Hours	Konstantin/Michael/ Arun
7	Create a function that takes #4 and #6 into account and determines the best route.	1 Hour	Konstantin/Michael/ Arun
8	Create manual test cases	45 minutes	Konstantin/Michael/ Arun

Acceptance Criteria:

- Given that the bot is loaded, the bot should include a database of first clear jungle routes done by high elo junglers that is up to date to the current patch, which can be searched using a command.
- Given that the bot is loaded, when a user requests a jungle champion name, the bot will recommend a jungle path based on that jungle champion matchup in the form of a list.
- Given that the bot is loaded, when the user requests a jungle champion main list, the bot will output a list of the top 3 best jungle players in NA on that jungle champion.

User Story #17

As a user, I want to receive messages in game telling me where to go on the recommended jungle pathing

#	Description	Estimated Time	Owner
1	Research how to privately message a user using discord API and turn on their discord overlay for the game, (giving them a notification for this).	4 Hours	Arun/Michael
2	Message the user during the loading	5 Hours	Arun/Michael

	screen of which path they should take as a discord private message dependent on champion, matchup, and lane matchups.		
3	Automatically turn on discord overlay for League of Legends. Message the user during the game of which camp they should be at (i.e. "Go to Red, raptors, krugs, Can Gank Top, Reset).	6 Hours	Arun/Michael
4	Create manual test cases	45 minutes	Arun/Michael

Acceptance Criteria:

- Given that the bot is active and the user is playing a match of Summoner's Rift League of Legends, the bot will privately message the user a list of the path they should take from the database based on the character that they are playing.
- Given that the bot is active and the user is playing a match of Summoner's Rift League of Legends and the overlay is on, the bot will activate discord overlay and privately message the user during the game which camp they should be at.
- Given that the bot is active and the user is playing a match of Summoner's Rift League of Legends, the bot will exit and stop messaging after the in-game clock reaches a certain time-frame.

User Story #18

As a user, I want to have the bot to randomly generate a number between a range of values.

#	Description	Estimated Time	Owner
1	Research and learn about the usages of the Python random library.	1 Hour	Matthew
2	Create a function that will use the random number function to generate a random number in the range specified by the user if applicable.	1 Hour	Matthew
3	Create a function that will display the picked number to the user.	30 Min	Matthew
4	Create unit tests to make sure the bot	1 Hour	Matthew

	is correctly generating a number in the given range.		
--	--	--	--

Acceptance Criteria:

- Given that the decision maker module is loaded, when the user asks to randomly generate a number without specifying a range, the bot generates a random number between 0 and 9 and displays it.
- Given that the decision maker module is loaded, when the user asks to randomly generate a number while only specifying one bound, the bot generates a random number from 0 to the bound and displays it.
- Given that the decision maker module is loaded, when the user asks to randomly generate a number and specifies a range, the bot generates a random number in the range that is specified and displays it.
- Given that the decision maker module is loaded, if the user specifies a float for either bound, the random number generated will also be a float. Likewise, if the user only specifies integers, then the random number generated will also be an integer.

User Story #19

As a user, I want to have the bot randomly pick between a set of options to help me make decisions.

#	Description	Estimated Time	Owner
1	Determine the best format for users to pass in the set of options via arguments.	1 Hour	Matthew
2	Create a function that will parse the options given by the user into a list and randomly generate a number in the list index range to pick an option.	2 Hours	Matthew
3	Create a function that will display the picked option to the user.	30 Min	Matthew
4	Create unit tests to make sure the bot is correctly generating an index and properly parsing the set of options even if the options include spaces.	1 Hour	Matthew

Acceptance Criteria:

- Given that the decision maker module is loaded, when the user specifies to use custom options and provides a set of options, the bot will parse the options into a list and pick one option which is displayed to the user.
- Given that the decision maker module is loaded, when the user wants to specify options with spaces, they can do so using quotes and the bot will properly parse the options accordingly.
- Given that the decision maker module is loaded, if the user provides a set of options without specifying the use of custom options, an error message is sent to the user.

User Story #20

As a user, I want the bot to pick more than one of the possible choices or numbers.

#	Description	Estimated Time	Owner
1	Create a function that detects if the user has specified that more than one of choices should be picked.	1 Hour	Matthew
2	Create a function that will generate unique random numbers in a range and return a list of with size equal to the number of choices.	1 Hour	Matthew
3	Enhance the functions for numbers and options to account for multiple picks and display all picks accordingly.	1 Hour	Matthew
4	Create unit tests to make sure that the bot is correctly picking more than one possible choice or number.	1 Hour	Matthew

Acceptance Criteria:

- Given that the user has specified a valid number of picks and has provided a set of options, the bot should properly parse the set of options and make the specified number of picks from the parsed set of options. No option should be picked more than once.
- Given that the user has specified a valid number of picks and has given a valid range to generate random numbers from (no range is also acceptable), the bot

should randomly generate multiple numbers equal to the specified number of picks. No random number should be the same.

- Given that the user specifies more picks than possible options or numbers, the bot should detect the error and immediately send an error message to the user indicating incorrect arguments.

User Story #21

As a user, I want to have the bot generate a poll that members of the server can vote on.

#	Description	Estimated Time	Owner
1	Determine the information the user needs to provide in order to create a poll such as the title and time limit.	1 Hour	Matthew
2	Create a class that represents a poll and has variables that correspond with the necessary information.	1 Hour	Matthew
3	Research how reactions work in discord and determine how to implement them with a poll.	1 Hour	Matthew
4	Create a function that given the necessary information for a poll will create a poll object with that information.	1 Hour	Matthew
5	Create a function that given a poll object creates and formats a message to represent to the poll. It will also add the proper reactions so that members can vote on the poll.	2 Hours	Matthew
6	Create manual tests to make sure that the bot is correctly creating the poll and that the members can vote on it.	1 Hour	Matthew

Acceptance Criteria:

- Given that the poll module is loaded, if the user requests to make a poll and has provided the necessary information, the bot should parse the information and send the poll as a message with the correct information.
- Given that the poll is sent to a text channel by the bot, the bot should react with all the reactions corresponding to a poll option to outline all possible options for the members of the server and make it significantly easier to vote.
- Given that the poll is sent to a text channel by the bot, the poll should allow users with proper permissions on the server to react to the poll and vote on the given options provided by the creator of the poll.
- Given that the poll is sent to a text channel by the bot, the poll should display the time remaining for the poll if a time limit was specified by the creator. If no time limit was specified, no time remaining field should be displayed.

User Story #22

As a user, I want to create a poll using direct messages to not reveal the question and topic beforehand.

#	Description	Estimated Time	Owner
1	Research how direct messages are handled by the bot and how the bot can directly message a user.	2 Hours	Matthew
2	Create a command that will indicate the user wants to create a poll and immediately direct the message the user.	1 Hour	Matthew
3	Create a function that will continue to ask users for information such as the poll title, questions, and reactions for the poll using direct message and parse the given information for the creation of the poll.	3 Hours	Matthew
4	Create a function that will send the poll to a channel in the server specified by the user.	1 Hour	Matthew
5	Create manual tests to make sure that the bot is correctly direct messaging the user and obtaining	1 Hour	Matthew

	required information.		
--	-----------------------	--	--

Acceptance Criteria:

- Given that the poll module is loaded, if the user requests to make a poll, they will be directly messaged by the bot and provided instructions on how to make a poll.
- Given that the poll module is loaded, if the user requests to make a poll and has been directly messaged by the bot, the bot will correctly parse the information provided by the user via direct messages and construct a poll accordingly.
- Given that the poll module is loaded, if the user provides invalid information via direct messages, the bot will notify the user with an error message.
- Given that the poll module is loaded, if the user requests to make a poll and has provided the necessary information via direct messages, the bot should send the poll to the channel in the server specified by the user.

User Story #23

As a user, I want the bot to announce the result in the text channel the poll was sent to with voting statistics.

#	Description	Estimated Time	Owner
1	Create a function that will count the reactions on the poll after the specified time limit and parse the poll results into a list.	1 Hour	Matthew
2	Create a function that will obtain and parse the list with the poll results and create a message that pings all users and displays the poll results with desired voting statistics.	1 Hour	Matthew
3	Create manual tests to make sure that the bot is correctly announcing the voting statistics in the text channel the poll was sent to after the correct amount of time.	1 Hour	Matthew

Acceptance Criteria:

- Given that a poll's time limit is reached or the poll is concluded by the creator, the results of the poll are incorporated into a message and sent to the same channel the poll was originally sent to and all users should be notified of the results.
- Given that the poll results are displayed, the number of votes for each option, total number of votes, and who voted for what should be provided in the results.
- Given that the poll results are displayed, the winner or the option that obtained the most votes should be uniquely identified. Ties should also be indicated.

User Story #24

As a user, I want to be able to pause and resume the currently playing music.

#	Description	Estimated Time	Owner
1	Create a function to pause currently playing audio	0.5 Hour	Nikolas
2	Create a function that will resume currently paused audio	0.5 Hour	Nikolas
3	Create four manual tests to make sure both functions work as intended	1 Hour	Nikolas

Acceptance Criteria:

- Given a song is currently playing, using the "!pause" command will pause the music.
- Given a song is currently paused, using the "!resume" command will resume the paused music
- Given that a song is not playing, the pause command will warn the user.
- Given that a song is not paused, the resume command will warn the user.

User Story #25

As a user, I want to be able to play a song from youtube using the title

#	Description	Estimated Time	Owner
---	-------------	----------------	-------

1	Use the google search library to get the link of the most relevant youtube video given a title	1.5 Hour	Nikolas
2	Modify the play command so that it will accept both titles and usernames	1 Hour	Nikolas
3	Create two manual tests to make sure it works as intended	0.5 Hour	Nikolas

Acceptance Criteria:

- Given a search title, the bot will play the audio from the most relevant youtube search result.
- Given a url, the bot will play audio from that youtube video.
- Given the bot is searching for a title, it will notify the user that it is searching and print out the title of the relevant video found.

Remaining Backlog:

Functional Requirements

1. Modular Function System:

- ~~As a Server Administrator, I want to add functions to the bot using Discord's file sharing feature.~~
- ~~As a Server Administrator, I want to remove functions from the bot with a command.~~
- ~~As a Server Administrator, I want to add and remove functions to the bot via a function folder.~~
- ~~As a developer, I want to dynamically load functions and features to the bot from separate files.~~
- ~~As a developer, I want functions to be able to use libraries not found in the main bot.~~
- ~~As a developer, I want to know what format to code commands in.~~
- ~~As a developer, I want to know what languages I can code commands in.~~
- ~~As a Server Administrator, I want to know if the function I am adding uses the same command as a currently implemented command.~~
- ~~As a Server Administrator, I want to specify and change which roles can use a command.~~
- ~~As a Server Administrator, I want to know where I can download additional modules.~~

2. Administration Services:

- ~~a. As a Server Administrator, I want the bot to automatically delete messages containing banned words~~
- ~~b. As a Server Administrator, I want the bot to warn users if they try to use a banned word.~~
- ~~c. As a Server Administrator, I want to be able to edit the list of banned words.~~
- ~~d. As a Server Administrator, I want the bot to kick/ban users with a command.~~
- ~~e. As a Server Administrator, I want to create text and voice channels with a command.~~
- ~~f. As a Server Administrator, I want to assign and change user roles with a command.~~
- ~~g. As a Server Administrator, I want the bot to have the ability to remove messages with links in certain channels.~~

3. Basic Bot Usage: As a user,

- ~~a. I want to know what commands are available to use with the bot.~~
- ~~b. I want to know what a command does and ways to invoke it.~~

4. Music Function: As a user,

- ~~a. I want to play songs from youtube by providing a youtube link.~~
- ~~b. I want to queue multiple songs to be played.~~
- ~~c. I want to add and remove songs from the queue.~~
- ~~d. I want to view the queue.~~
- ~~e. I want to clear the queue.~~
- ~~f. I want to skip a song.~~
- ~~g. I want to pause and resume songs~~
- ~~h. I want to play songs from youtube using their title~~

5. Decision Maker: As a user,

- ~~a. I want to have the bot randomly pick between a set of options to help me make decisions.~~
- ~~b. I want to have the bot to randomly generate a number between a range of values.~~
- ~~c. I want the bot to pick more than one of the possible choices or numbers.~~

6. Poll Maker: As a user,

- ~~a. I want to have the bot generate a poll that members of the server can vote on.~~
- ~~b. I want the bot to announce the result in the text channel the poll was sent to with voting statistics.~~
- ~~c. I want to create a poll using direct messages to not reveal the question and topic beforehand.~~

7. Google Search: As a user,
 - ~~a. I want to get a google search result in the server with a command.~~
 - ~~b. I want there to be an option to jump to the search in my browser from an extra command.~~
 - ~~c. I want there to be an option for the bot to give me a short answer rather than extra unneeded information.~~
8. Basic Financial Info: As a user,
 - ~~a. I want to see basic stock information when I provide a ticker~~
 - ~~b. I want to see expanded stock information and get a link with more info about the stock.~~
9. Voice Interaction: (If time allows) As a user,
 - a. I want to speak to the bot telling it to do different commands.
 - b. I want the bot to talk back to me. (Optional feature)
10. Game statistics display (Riot and Steam (If time allows)): As a user,
 - a. I want to display my overall game statistics for a game of choice.
 - b. I want to actively know what games my friends play.
 - c. I want to be able to see when me or my friends have sales on their wishlist.
 - d. I want to know what games me and my friends have in common.
 - e. I want the bot to share my game statistics with others on the server.
11. Riot API Integration (League of Legends)
 - ~~a. I want to display information for the game I'm currently in.~~
 - ~~b. I want to get information on a specific champion.~~
 - ~~c. I want to get information on a specific account.~~
 - ~~d. I want to see my recent match history.~~
 - ~~e. I want to see my champion mastery score.~~
 - ~~f. I want to see information about an in-game item.~~
 - g. I want to see what pro players build on my champion.
 - ~~h. I want to see what jungle pathing is the best.~~
 - ~~i. I want to see the matchup rates of my laners to know which lanes to focus and help.~~
 - j. I want to see my teams individual win rates to know who can carry and which players to enable.
 - ~~k. I want to see tips for laning on how to manage minions in all forms: slow pushing, hard pushing, freeze and what to do in each situation.~~
 - l. I want to see if there are any ongoing in-game events or special modes.
12. Code Manual Documents (If time allows: Java, Python, C): As a user,
 - ~~a. I want to access code documentation for python and java.~~
13. Clock Integration: As a user,
 - ~~a. I want to be able to run a stopwatch on the server.~~

- ~~b. I want to be able to set a timer for a specific length of time on the server.~~
 - ~~c. I want to type a command to give a timezone in a certain city.~~
14. Sports Info: As a user,
- a. I want to be able to view live scores on the discord server.
 - b. I want to be able to see betting odds, spreads, etc.
 - c. I want to be able to get a link to the box score from the bot.
15. Pokemon Information Reference: As a user,
- a. I want to be able to see information about a Pokemon given its name or number
 - b. I want to be able to see a Pokemon when I request information about it
 - c. I want to see information about an in-game item
 - d. I want to see information about a Pokemon move
 - e. I want to see information about a Pokemon ability

Non Functional Requirements

1. Architecture:
 - a. I want to develop the program in python with the Discord API.
2. Performance:
 - a. I want the bot to respond within a second of requesting something from it.
 - b. I want the bot to be available 24 hours of the day.
3. Usability:
 - a. I want the bot to be easy to download, set up, and customize for my server.
 - b. I want to be able to set up the bot easily with no previous experience with discord bots.
 - c. I want to never have to interact with code while running my bot.
 - d. I want to be able to know which commands I can use.
 - e. I want to use commands easily.
4. Security:
 - a. I only want trusted individuals to be able to upload functions to the bot.