

# User Doc

## Project Goal

The goal of this programming project is to design and develop a bot user for a public chatting application, known as Discord, which offers a diverse set of general-purpose commands for users. We believe that our Discord bot application will provide a more immersive experience on Discord servers through its utility, moderation, and entertainment commands. The project is designed to allow for seamless user experience in all aspects, especially in regard to command invocation, which is why one of our primary focuses with Archibald is to modularize the design of commands in the code and to make invoking a command as simple as typing out a message, prefixed with the + symbol, into Discord. The bot automatically detects messages of this form and parses their contents into an easy-to-manipulate structure object that can be used by commands written by developers.

## Potential Users

Any user of Discord that has servers or joins servers may use our bot. Those who have their own servers are more likely to use our bot than those who do not. Server owners have the ability to add bots of their choosing to their servers. They are more likely to add bots that have a wide range of capabilities.

## Use Cases

### *remind-me*

The *remind-me* command schedules a “reminder” with the bot that notifies the invoking user once a certain amount of time has passed. The command takes a “time” argument, which is required upon invocation, possibly followed by any number of “description” arguments, that are combined together to form the description of the reminder. The time argument is taken to be a number (of type long) immediately followed by a unit of measurement (one of either “s”, “m”, or “h”, for seconds, minutes, or hours, respectively). Upon invocation, assuming all arguments are valid, the *remind-me* command will cause Archibald to notify the user after the specified amount

of time has passed, providing the given “reminder description” if one was provided when invoking the command.

### *mock*

*mock* is a command that takes a string from the user sent to Discord as an argument, and randomly changes the case of each letter in the message. Planned future changes to the command are using the last message posted to the server as the argument as well. This command was added primarily for entertainment purposes.

### *sort*

*sort* is a command that takes arguments from the user and returns the arguments sorted. Planned for the future is expanding the type sorts that are used and giving the user back the different execution time of the different sorting algorithms.

### *shuffle*

*shuffle* is a command that takes arguments from the users and returns the arguments that are shuffled by the function `shuffle` built in java. It only puts each string in random order right now. Planned future change is to shuffle the characters in each string. We also can use the `shuffle` function for encryption for text or passwords.

### *echo*

*echo* is a command that, when sent a sequence of arguments from the user, will send back the arguments, concatenated using a space character as a delimiter, to the message channel in which the command was invoked. The *echo* command exists primarily to help users see what their arguments are being parsed into when they include arguments in a command.