

CS 418 Web Programming Extra Credit Project 3

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ABSTRACT

In this report, I'll describe the procedure I took to complete an additional project to my semester assignment of making a social media website. The type of website that I have built has similar functionality to the web app Slack. If you are not too familiar with Slack, the functionality is where users can communicate in different groups called channels by sharing text, files, pictures, and computer code. Today technology has created a way to do more in less time, which could be done in typing a single command. The feature I will be discussing is slash command or also known as bot command that allow the user to complete tasks through typing the command instead of navigating their way to fulfill the task. With many methods available to use to complete this implementation, I decided to use a conditional approach to help error handle and make it easier for myself. I explain my method in three different sections; research, implementation, and demonstration.

CCS Concepts

- Web Development → Database management system engines
- Programming Languages → HTML, CSS, and jQuery.

Keywords

OpenSearch; YouTube; phpMyadmin; query; SQL; QR code; reCAPTCHA;

1. INTRODUCTION

This project is the third of four extra credit projects that I have completed for my semester assignment of creating a social media website. User interaction with a website is very important. Some companies place big investment on how the consumer or account user spends time on their webpage. One of those investments has been in the company being to interact with the user. The biggest feature we see regarding this is live chat with a customer representative. Have you ever browsed a fall collection and had this pop-up window asking if you need assistance? Tools like that are designed to make your stay on that site easier, building your loyalty to the brand. Another example is how companies that use Facebook Business can automate conversations with user who want to get general information about the company like store hours or prices. How can this be translated to an environment like my social media page. I decided to make slash commands that would cause the user to do commands from one page that would take at least three clicks. I will be explaining the planning and research I placed into the slash commands, followed by the implementation and demonstration. In the implementation section, I will go over what I did to build this project. Lastly in the demonstration will include the visuals of the project.

2. SLASH COMMANDS

Slash commands have become very popular in the modern websites. You see them the most of project managements application where there is more than one user in a channel or chat room. The phrase slash commands and bots are referred to the same feature. You can type command preceded by a

backslash which will trigger the bot to carry out the command. This feature gives a sense of delegation and allows the bot to do certain tasks for you.

2.1 RESEARCH

Like the my first to projects, I did look for a brief tutorial on YouTube. As I looked and watched there was nothing that would be of any assistance. Since Slack is the leading application with the bot feature, there was a lot of videos of how to make Slack bots and apps. I originally thought it there was an API I could have used to work with my code, but there was not. I started to brainstorm as I looked at the requirements for this extra credit project outlines in an previous lecture. All I had to do to integrate this feature was to initiate the bot commands with a backslash. I started to look for PHP functions that would help me make this possible and I found the two; md_substr and explode. The function md_substr would allow me to extract the first character of a string. I needed this function to identify whether the user is typing a command or just a status message. The function explode was needed to grab words from the string that was typed into the text area. Once I understood how I was going to use these functions I designed my commands and started to implement the bot commands.

2.2 IMPLEMENTATION

The way I designed my commands was by the example made by Slack. Some commands are one-word commands others need objects or variable to carry out the command. I designed four slash commands; archive, message, invite, and who. Archive command is only for the administrator of the site [Milestone 3]. After typing in this command, the group where this command is typed will become archived. The next command is message, and this is a multiple object command. Any user can type the command followed by the username the user would like to send a message to. The third command is just like the second with multiple objects. This third command is allowing you to invite a user into the current group where the command is sent. The last slash command is called who. This command generates and displays a text file of the users who are in the group the user types this command in. Once I designed these slash commands, I was able to duplicate process I took during the milestones to create the user experience.

When I started to do this project, I knew that I wanted to make conditional loops for this process. I understood that if the requirement for the slash commands was to be initiated by a backslash, I need a way to extract the backslash. The function md_substr() allowed me to get the backslash from the beginning of the string meaning the command would have to come first and so would the backslash. The way I planned to use this slash was the predetermining factor for the rest of the conditional method I put into place. I next wanted to make sure I could find a way to identify the command word. Yes, I could continue to use the previous function, but I would have had to


Another feature that I added to guide users on the use of the slash commands, I duplicated the same autocomplete process I used for the search bar to search user. This process reads the command that I placed in a xml file that are organized by command noting the name, example, and function. This comes into play when the user types the backslash first the user will be able to few their options for a command from the autocomplete drop down menu.

2.3 DEMONSTRATION

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1
archive archive
archive current group
msg msg (I user)
starts a message to user
archive archive (I user)
informs user to current group
hello hello
generates list of current users in group

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By @dax on 2019-06-14 11:21:28


archive

0

UP

DOWN

Reply



By Coach Bot on 2019-06-14 11:21:07

archive

Only the administrator can do that!

3. FIGURES/CAPTIONS

4. CONCLUSION

5. ACKNOWLEDGMENTS

Thanks to Dr. Justin Brunelle for being so kind and for showing grace, allowing me an extension. I would also like to thank him for his advice. I'm a better programmer now because of what he showed me about debugging and troubleshooting. I would like to thank the many content creators who made this process that much easier by showing each step in their content. Lastly, I will like to acknowledge friends and family who echoed how I needed to finish this project.