**AC31008 Networks Coursework 2: Socket Programming**

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Introduction

In this coursework we were working on connecting an IRC chatbot to our own made server. In this server we were to allow the chatbot we created to respond to commands inputted by the user within the given channel (in this case bot- Probot would have to respond to messages inputted by user within channel #test). Throughout the life of the project the group assigned each other various tasks to work on so we could all work together easily and we also communicated throughout the life of the project too via social media so we would be able to give updates on our progress each week.  
  
Any Issues with the project?

During the project we had a few issues throughout, during the process of the bot a few hiccups were found on the way.

*The Chatbot*

It was mainly figuring out the private messaging elements to it. It would only be able to send one of these two scenarios, either it would allow for the bot to respond to everyone in the channel at once or it would only allow for the bot to respond to each user privately in different windows on hex chat when testing. This issue was being flagged up solely due to the fact that the target which was set for the bot to respond to was “name”, meaning any message that was inputted into the channel would then automatically be responded too within a private chat to that same user, and again this would be the same the other way round where the “target” would be set to “channel” rather than “name” meaning it would only respond within that channel even if it was a private message.

This issue was fixed by creating a single method for the messages and then within each if statement or message, the target would be assigned at the end i.e. “hello chatbot, channel” for the message to be only in the channel and vice versa for “name”.

Another issue found in the bot was getting the random fact to be responded to within a private chat, if a user messaged the bot it would not respond properly, but after a few debugging sessions the bot was able to be fixed by looking into it a bit further and figuring it out that when a message would be sent to the bot, it would read in “PRIVMSG + the message” so by altering the code to say when it reads in that line of code for the message, it would then activate the if statement and send the “random fact” to the user who was messaging in the first place, hence ticking off the requirement for responding to private messages.

Finally, not exactly an issue but more of a point that was brought up was that the name of the channel and bot had to be changed before hand-in as there was already given names for both listed within the brief.

Conclusion

In conclusion the assignment was a lot of work as the brief stated it would, it allowed for the whole group to work well as a team, communicate and efficiently execute the given tasks assigned within the brief itself. In terms of any issues we had with the project there were not that many surprisingly considering this was the 2nd assignment for the module and we were given warning that it would take a long time to implement, which it did but with good teamwork it was quite easily accomplished.