Some of the bugs during this project were CORS and how to fix them on deployment of a cloud. This took me some time and I ended up looking for hours for how to fix the post and get call methods. For the AWS cloud environment. I realized after many hours that the issue was a simple / found on the linking address of the newly added cloud domain address of the virtual machine. This bug was very painful but taught me patience and to keep at it even the issue seems unsolvable. The tricky thing about this error was that the error itself wasn't being triggered by the error handling and I spent hours looking at how COR works only to find that it's a typo.

The other challenging bug was getting the messaging elements found on the page to append and delete so it wouldn't bloat up the page. This error didn't take me as long as the other error but it was very time consuming nonetheless. This was solved by understanding the call nature of the messages and where to place them. Working the timing of the messages so that one event would trigger another was challenging. I had to time the trigger of the chatbot to match the response of the client. This was hard and I used timing functions in order to load and serve the messages from the python files to the javascript client.