Chatbot Project Report – COSC 310 Assignment 3

Team 31
Mohammed Al-Surkhi
Jordan Colledge
Gabriel McLachlan
Jordan Ribbink
Nathan Wright

Project Description:

The project consists of a chatbot built in Electron; the chatbot comes with a generic visual interface to ensure simplicity of use and understanding. (Apparently this is extra credit for the next assignment, which we weren't aware of until it had been implemented.) The chatbot takes on the role of a doctor, who can be asked questions about different symptoms and describe the likely illness and remedy. Thus, the user takes on the role of a patient.

Our GitHub Usernames:

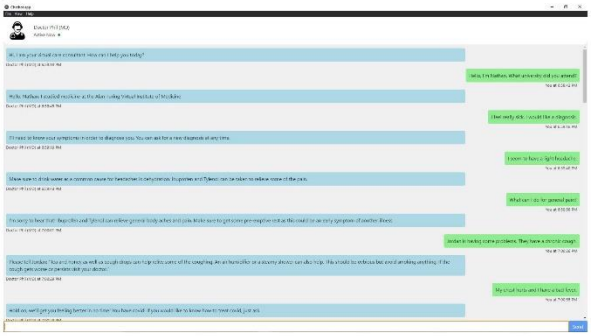
Mohammed – msurkhi-1106
Jordan C. – ItsMyFuneral
Gabriel – GmcLachlan45
Jordan R. – jribbink
Nathan – DapperShark1

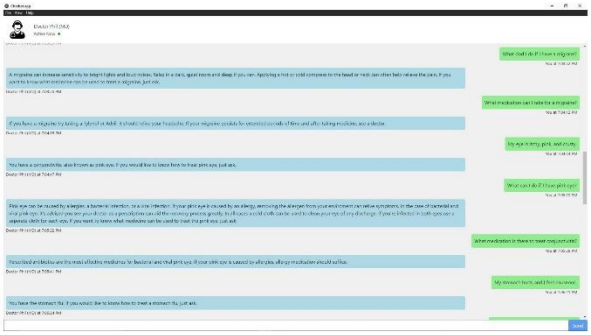
For SDLC information, WBS, and Gantt chart, please see the previous assignment's project report.

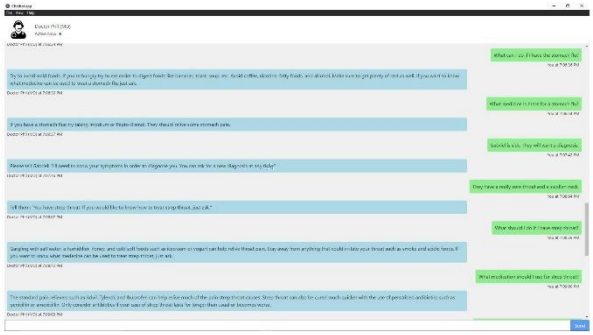
For a list of features included, the data flow diagrams, and the extractable features for an API, please see the GitHub repository and the README. The repository can be found here: https://github.com/cosc310-project/chatbot-app/tree/dev

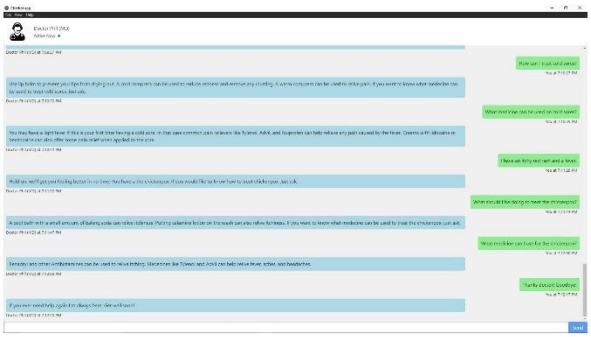
Sample Output: (30-turn dialogue on next page. It's big. Read across first, then down, because Word is finicky.)

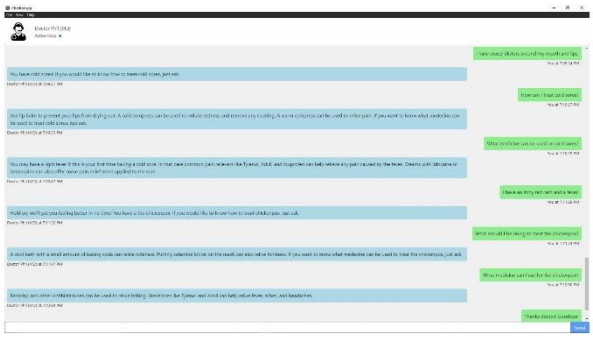
Here's a complete 30+ turn conversation between a user and our chatbot. The bot is capable of diagnosing and offering medical advice for some common illnesses as well as general health issues like a basic headache or muscle pain.





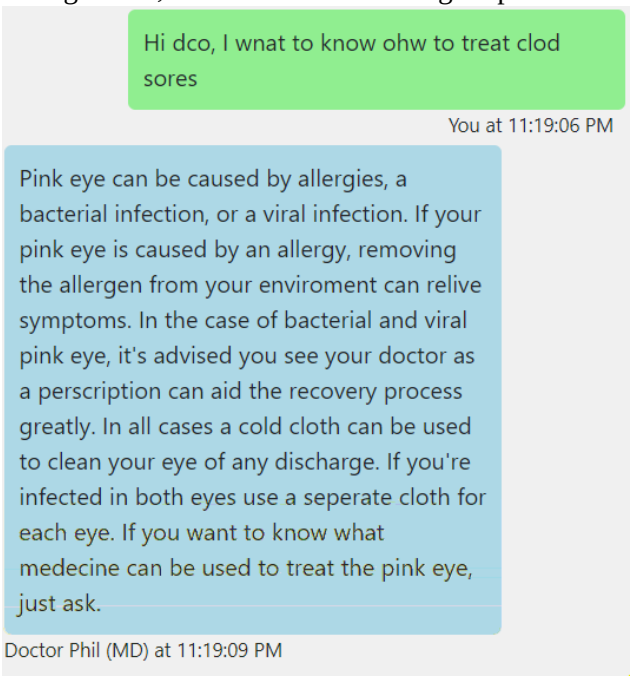






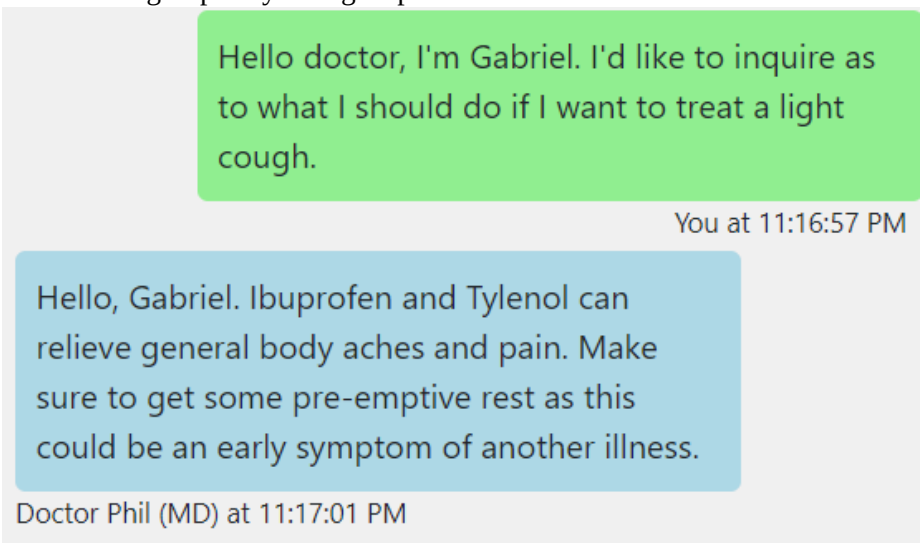
Limitations:

- Bot fails on some messages with short misspelled words. This leads to the spellcheck outputting the wrong words, which causes the wrong output for the bot.



-

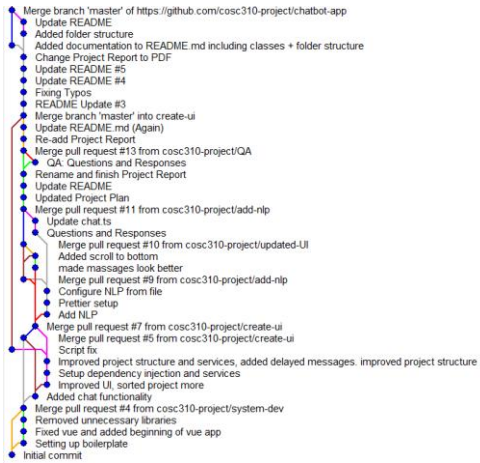
- Bot also fails on relatively long inputs, e.g. inputs longer than the expected 10-15 words. This is because the long input essentially confuses TensorFlow's learning system, and makes it more likely to provide wrong or poorly fitting responses.



You can also find these in "./assets/examples" in the Github repo.

Github Graph:

This is the entire Github tree, including all branches that were used for different features:



This was the branch structure of Assignment 2. As you can see we did much better in using branches in this assignment, something we wanted to improve on in the first section