

Christian Lee

## CSCE240 Chatbot Report

### Requirement:

The instructor asked us to create a chatbot about South Carolina's district representatives. We chose a representative and then collected their information for the chatbot. We were given the option to use any language we desired. We stored the information and then accessed it using a file reader. We were given more instructions such as breaking down the user's response into separate words and if the words match 70% or more, it would display the appropriate information. This made sure the user did not have to have an identical match. We also had to create a log of user responses and a chat statistics comma separated values file.

### Specification:

My representative was William Scott Cogswell Jr. of District 110 in Charleston County. I used Java because I am the most comfortable with it and it feels to me like it has more features than C++ or Python. I loaded my information onto a file text and then read it using a file reader and then parsed it into my variables. Overall, I think I learned a lot from this project and felt proud of myself for separating into multiple methods. I used what I thought was the best and easiest way to solve the problem, but I am curious to see how my peers did.

### Development Highlights:

I made multiple methods in my class that helped to organize my code. I tested my code many times and used exceptions for errors. I used system output multiple times to see when my code was breaking and it helped tremendously with locating the error and finding out what was able to fix it. I faced many problems during the course of this project. Before this class, I was comfortable with my coding skills but still needed refinement regarding organization. This project has helped me to understand why I did previous assignments in a certain manner and how it helps to make the project overall easier. I faced many problems such as being able to write onto the data logs using buffer writers and file writers. I am not sure if there is an easier way to do them, but it currently works for me. It was also aggravating creating the names for the data logs and then moving them into the correct folder.

#### Reuse:

To make my code reusable, I separated my code into different methods with clear titles on what they do. I reused David Eta's code because he was very organized with his code and he was able to explain why he did what he did which helped me implement it into my project even though we used different languages. His code is also not too dense and concise. David Eta has also used my code because I feel like I was able to organize my code well enough and we have graded each other's homework before so I feel that he understands how I code so I was able to explain it well to him. A challenge that I faced when using his code is that he works in Python, which I am not very comfortable with, and he has different features than me so I had to figure out a way to work around that.

#### Future Work:

If I were to redo this project, I would make it, so I am reading an HTML file to get the information from the prescribed website so I can use any person's information and not just District 110. I would also like to have guidance on how to better organize my code and break them into different methods so one method is not too long, and each method is concise. I would also like to use more classes, but I was unsure of when to use a new class so I restrained from doing so. This code will need to be changed over time as more information is added to the South Carolina District Representative's website. If they added information such as, spouse, children, or future plans, I will need to update the chatbot to accept these new features.