## Assignment 02 Report

Seyed Ali Firooz Abadi

## **Problem**

For the 2nd assignment we were supposed to process the data collected in the first assignment based on questions.

## **Solution**

Since I have already processed the data in the first assignment and each relevant information was saved in the relevant variable, I have created a dictionary and pickled it (professor said this would have extra credit) to the 2nd assignment.

In the second assignment:

- 1. Created a class named "Person" that would hold all the district representor information (name, phone, ...)
  - a. To do that, I created a method to de-pickle the data received from the first assignment.
  - b. extra: for future reusability, I created a method that would de-pickle a file if a path (string) was given to the constructor.
  - c. In the constructor, I used the received dictionary from the de-pickling process, and extracted it to relevant variables (firstName, phoneNum,...)
  - d. I have also created a method to access the dictionary based on an index (not a key). (This will be later used in next class)
  - e. Finally, sice all the attributes are private, I created access methods. I have used python "@property" to make all the accessors have the ability to be called like an attribute.
- 2. Created a second class (file) called "ChatManager" where we will teach our bot to look for words inside the user questions.
  - a. Defined 4 functions called "toString\_\*\*\*" to create a string from list based on a separator (space, tap, next line, numbered list), these function have

- the ability to include a custom string (passed to the method) when processing the list. (see implementation in the main code)
- b. Defined a method to ask the user for input and check if it was "exit" or "quit" and then return the user input as a string if it was not any of the above mentioned words.
- Finally used a method called "answerQuestions" to process the user input and return relevant information if it found anything.
  Note that this method is as good as the training process behind it. Right now it is very basic and will only give relevant information if it finds these

statements:

(full name, home address, columbia address, phone number, political party, county, personal information, committee assignments, service time)

Also, if you want information about me, just ask something that contain "your dad".

3. Finally I just used some attributes from the "Person" class to show that I have processed the data correctly and also initiated the chat bot, so now you can enter any question you want.