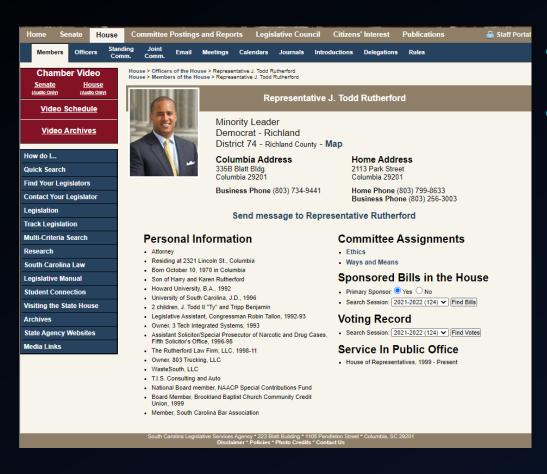
## Course Project: District 74 Chatbot

ANGELA ALAISA

## Scope



- District 74
- All programs were written in Java
  - Most familiar program
  - Wanted to expand on my current knowledge

### Data

- Types of data retrievable from the source code:
  - I1 Contact information
  - I2 Personal information
  - 13 Committee Assignments
  - 16 Service in Public Office

- Others that were not accessible (due to being on a separate page of the website)
  - I4 Sponsored Bills
  - I5 Voting Record

## Code Organization

Assignment Highlights:

PA1 Reads contents directly from the website's URL

PA2 & PA3 Implementation of regex

- search through html file and read user queries

PA4 Doesn't use the suggested approach

- added functionality to search for more specific data when requested

Use of logger class and implemented File Writer for stats

PA6 Reused code from a Darshan Patel, who reused my code as

well

- had trouble figuring out how to obtain the number of files within a folder

## Code Organization (continued)

Assignment Highlights:

- All programming assignments were written using only one Java file
  - Didn't feel necessary to have more than that
- Consisted of one class
  - Had variables to hold each data type, inputs, outputs, etc.
  - One instance of the class was made

# Snapshots of Supported Queries

## #1 - Program Exit "Quit", "quit", or "q"

#### #2 - Personal Info

#### "Tell me about the representative/rep"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
tell me about the rep
       Attorney
       Residing at 2321 Lincoln St., Columbia
       Born October 10, 1970 in Columbia
       Son of Harry and Karen Rutherford
       Howard University, B.A., 1992
       University of South Carolina, J.D., 1996
       2 children, J. Todd II "Ty" and Tripp Benjamin
       Legislative Assistant, Congressman Robin Tallon, 1992-93
       Owner, 3 Tech Integrated Systems, 1993
       Assistant Solicitor/Special Prosecutor of Narcotic and Drug Cases, Fifth Solicitor's Office, 1996-98
       The Rutherford Law Firm, LLC, 1998-11
       Owner, 803 Trucking, LLC
       WasteSouth, LLC
       T.I.S. Consulting and Auto
       National Board member, NAACP Special Contributions Fund
       Board Member, Brookland Baptist Church Community Credit Union, 1999
       Member, South Carolina Bar Association
       House of Representatives, 1999 - Present
```

#### #3 - Contact Info: Home Address "Where does my rep live"

where does the rep live Apr 19, 2022 2:08:51 AM Chatbot main INFO: where does the rep live

2113 Park Street Columbia 29201

Apr 19, 2022 2:08:51 AM Chatbot answerQuery INFO: 2113 Park Street Columbia 29201

## #4 - Contact Info "How do I contact my rep"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
how do i contact my rep
Apr 19, 2022 2:09:03 AM Chatbot main
INFO: how do i contact my rep

Home Address:
2113 Park Street Columbia 29201
Home Phone: (803) 799-8633
Business Phone: (803) 256-3003

Columbia Address:
335B Blatt Bldg. Columbia 29201
Business Phone: (803) 734-9441
```

#### #5 – Committee Assignments

"What committees is my rep on"

## #6 — Give All Extracted Info "Tell me everything"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
what committees is my rep on
Apr 19, 2022 2:09:15 AM Chatbot main
INFO: what committees is my rep on

Ethics
Ways and Means
```

```
tell me everything
Apr 19, 2022 2:09:26 AM Chatbot main
INFO: tell me everything

Name: J. Todd Rutherford
Party: Democrat
District: 74
County: Richland
Business Address: 335B Blatt Bldg. Columbia 29201
Home Address: 2113 Park Street Columbia 29201
Personal Info:
[Attorney, Residing at 2321 Lincoln St., Columbia, Born October 10, 1970 i
Committee Assignments:
[Ethics, Ways and Means]
Sponsored bills: in another webpage section, currently unavailable
Voting Record: in another webpage section, currently unavailable
Service in Public Office: House of Representatives, 1999 - Present
```

## #7 - District Number and Name #8 - Any other query "What district is supported for Q&A"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
what district is supported for Q&A
Apr 19, 2022 2:09:42 AM Chatbot main
INFO: what district is supported for Q&A

District 74, Richland
```

```
some random question here
Apr 19, 2022 2:09:52 AM Chatbot main
INFO: some random question here
some random question here - I do not know this information
Please rephrase query
```

#### #9 – summary

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
summary
Apr 19, 2022 3:03:49 AM Chatbot main
INFO: summary
There are 54 chats to date with user asking 76 times and system responding 76 times. The total duration is 986.0 seconds
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
```

#### #10 - showchat summary <#>

"showchat-summary 6"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
showchat summary 6
Apr 19, 2022 3:05:22 AM Chatbot main
INFO: showchat summary 6
Chat 6 has user asking 7 times and system respond 7 times.
Total session duration: 96 seconds
```

## #11 - showchat <#> "showchat 6"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
showchat 3
Chat 3 chat is:
User Query:
        where does he work
System Response:
        335B Blatt Bldg. Columbia 29201
User Query:
       where does he live
System Response:
       2113 Park Street Columbia 29201
User Query:
       which district does he legistlate
System Response:
        74
```

## #12 - showchat <invalid#> "showchat 200"

```
Enter query below
(type "Quit", "quit", or "q" to exit the program.)
showchat 50
Apr 19, 2022 3:02:11 AM Chatbot main
INFO: showchat 50
There are only 18 chat sessions. Please choose a valid number
```

#### Demo Video

https://youtu.be/hqWdIP5EPCA

```
Edit Source Refactor
                        Navigate Search Project Run Window Help
                                                🊀 - | 🕫 📝 📴 🗐 · 🛮 | ী - 🛂 - 🐫 - 💝 ← - → - | 🗃
                             🖹 ≒ 🗄 🗇 🗇 Chatbot.java 🗶 🗎 document.trt
☐ Package Explorer ×
Assignment1
                                                  10/
                                                     * Written by Angela Alaisa
 Assignment2
 Assignment3
 Assignment4
                                                  50 import java.io.BufferedReader;
 Assignment5
                                                 6 import java.io.BufferedWriter;
                                                 7 import java.io.File;
8 import java.io.FileReader;

✓ 

Assignment6

  > IRE System Library [JavaSE-14]
                                                 9 import java.io.FileWriter;
  ¥ # STC
                                                 10 import java.util.ArrayList;
     11 import java.util.List;
  V 🤚 data
                                                 12 import java.util.Scanner;
                                                13 import java.util.concurrent.TimeUnit;
      chat sessions
                                                 14 import java.util.logging.*;
      document.txt
                                                 15 import java.util.regex.Matcher;
   test :
                                                 16 import java.util.regex.Pattern;
                                                17 import java.util.Date;
                                                import java.time.LocalTime;
import java.text.SimpleDateFormat;
                                                 20 import java.time.format.DateTimeFormatter;
                                                22 public class Chatbot {
                                                            String name;
                                                            String county;
                                                            String colaAddress;
                                                            String homeAddress;
                                                            String busiColaPhone;
                                                            String busiHomePhone;
                                                            String homePhone;
                                                            List<String> serviceInfo = new ArrayList<String>();
                                                            List<String> personalInfo = new ArrayList<String>();
                                                                                                                       //a list to hold personal info since the number of info is not
                                                            List<String> committeeAssign = new ArrayList<String>();
                                                            String sponsoredBills = "Sponsored bills are found in a separate link. Data retrieval is still in progress";
                                                            String votingRecord = "Voting records are found in a separate link. Data retrieval is still in progress";
                                                            String party;
                                                            String districtNum:
```

## Conclusion

- Experience implementing the chatbot
  - Project seemed a bit intimidating at first
  - Became easier to understand after PA3 when the main parts of the chatbot were starting to be put together

#### Testing

- Was not too difficult due to constant error checking to make sure the program was doing what it was intended to do
  - Outputting everything
  - Exceptions (try/catch block, throws exception)