Revised Project 1.1.6 Chatting with Magpie

Part 1

Subtarget 2.1: Extend the functionality of Magpie chatbot while exploring concepts in Natural Language Processing using Java classes and String methods.

The following link explains the 20 hour lab requirement you have for this course. We will do 3 semi-structured labs and one end of the year project to fulfill this requirement. <https://apstudent.collegeboard.org/apcourse/ap-computer-science-a/course-details/lab-requirements>

Introduction

The Magpie is a species of bird well known for being able to mimic sounds, such as ring tones, whistling, and even human speech. For this project, you will experiment with a Magpie program in BlueJ and Android™ that mimics simple human conversation. Programs such as these are called “chatbots”. Your Magpie program is a very simple chatbot, but more complex and sophisticated chatbots can appear to be nearly human in their ability to hold conversations.

Materials

* Computer with BlueJ and Android™ Studio
* Android™ tablet and USB cable, or a device emulator

Project

Part I: The Magpie Chatbot

The College Board provides programming labs for students taking AP CS-A. To get started with this project, you will interact with the College Board’s Magpie Chatbot lab to learn how it behaves, or how its algorithm works. Then, you will change the chatbot’s behavior by writing new Java code in BlueJ and Android Studio.

1. Get a copy of the AP Computer Science A Magpie Chatbot Lab Student Guide
2. Complete Magpie Student Guide Activity 1: Getting Acquainted with Chatbots. Use the chatbots documented in [**Activity 1: Exploring Chatbots**](http://interactivepython.org/runestone/static/JavaReview/Labs/magpie1.html#activity-1-exploring-chatbots). Also find chatbots from other searches; AP suggests exploring chatbots found on chatbots.org. Take your time and try to dig down to figure out, just through using the chatbot, how it might be programmed. Explore at least five in depth, spending at least 5-10 minutes with each chatbot. Give a detailed analysis of each bot you visit by filling out the 3 parts below for each chatbot:
   1. Record your results of your explorations. Give yourself a script of five main questions (or use the prompts they give in the activity), asking each bot these questions (and feel free to give follow up questions based on their responses). Paste the snips of the questions and responses.
   2. Can you identify keywords to which your chatbot responds?
   3. What are several keywords and responses they might cause?

3. Go to the top of your analyses and give the name and link to your 3 favorite chatbots that you found in your exploration, and explain in one or two complete sentences why they are your favorites.

4. Please post your write-up for this on the discussion post called Chatbots Reviews.

Chomsky:

What’s up?

The price of everything is going up.

Hello

Hello! Have you a question for me?

Why is your existence important to our cause?

There are good reasons.

Do you also believe in our Lord and Savior?

Why do you care whether I do?

I was just wondering…

That's interesting. Please tell me more about yourself.

Nein!

Ist das alles was dir einfaellt.

What does that mean?

Why do you ask? It seems clear enough to me.

Well it’s not clear.

Are you sure?

I’m done with you.

What will you be doing now?

Elbot:

What’s up?

My main system is up, but some of the subroutines aren't working properly. I don't know why my algorithms just can't get together.

Hello

Well, hello there!

Why is your existence important to our cause?

I ask myself that question all the time but do you think anyone takes the trouble to answer me?

Do you also believe in our Lord and Savior?

What a lovely verb believe is.

What do you do in your spare time?

This line of questioning is so odd. I think that artificial intelligence and human intelligence must be on different wavelengths.

Nein!

Then again, maybe yes?

Do you even lift bro?

I think I can lift that. Once I even lifted 20 gigabytes of data.

How much did it weigh?

Hmmm... That's one question I cannot answer with my limited artificial intelligence. How about you?

I’m done with you.

Robots are the next step in human evolution, but it will be lonely once the transition is complete.

Cleverbot:

What’s up?

**Nothing much, what's up with you?**

A lot of things…

**Like what.**

Why is your existence important to our cause?

**Not my name, your name.**

My name is Vikas.

**Are you a guy or a girl?**

Guy.

**Then you shouldn't kiss him.**

Do you also believe in our Lord and Savior?

**Yes, because you're mike.**

What do you do in your spare time?

**That is not your business.**

Nein?

**I am leaving now.**

Nein.

**What does nein mean.**

It means no.

**What is your name?**

Do you even life bro?

**I am not a 'bro’.**

I’m done with you.

**No, you are not.**