Assignment 1 - Famous Personality Chatbot

Title: Famous Personality Chatbot

Step 1 - Problem Statement:

Create a Famous Personality chatbot. To do so, first, you need to choose a famous person: actor/actress, singer, musician, anime/cartoon/fairy tale character, sport player - the choice is yours! Then, you must create a chatbot that is this famous person "conversing" with the user.

Requirements:

- You must create your own Python 3 program using IDLE. You cannot use AI tools to create your program nor can you use someone else's program. For more details regarding Academic Honesty (or lack of) and what is permissible and what is not, please, read **A word about Academic Honesty** under **Lecture 1** on our course web site.
- Your chatbot program must start when the menu option **Run** is selected or **F5** is pressed once we have opened your program file in IDLE.
- Your chatbot must ask the user **at least 3 questions**.
- When writing your chatcbot, you must use **at least one of each of the following three conditional statement variants:**
    1. **`if`** (with no `elif` and no `else`),
    2. **`if/else`**, and
    3. **`if/elif/else`** (this one may have several **`elif`**).

  In other words, you must use the conditional statement **`if`** (with no `elif` and no `else`) at least once, you must use the conditional statement **`if/else`** at least once and you must use the conditional statement **`if/elif/else`** (this one may have several **`elif`**).
- Your chatbot must **use the answer (input) from the user** in some of its responses/comments.
- Your chatbot must use the keyword **`or`** in the condition of at least two conditional statements (**`if`**, **`if/else`** and **`if/elif/else`**), to accept at least two different input strings from the user, as illustrated in this example:

  `if favSport == "Football" or favSport == "football":`
- Your program must have a **header comment block** containing the expected sections (4 sections) and located at the expected place in your program.
- Your program must follow these **Good Programming Style (GPS) rules**:
    - **Variables** must be named in a descriptive fashion (describing their purpose).
    - All **import** statements must be placed at the top of the file, immediately after the header comment block.
    - Modules must only be included **once per file**.

- Each line of your code must not exceed 80 characters in length.
  - Why? This is to help you develop a habit of *good code formatting*.
  - In most cases, you can break long lines of code (statements) into separate steps or have them span multiple lines. You could also use intermediate variables to store parts of long messages to be printed.
  - How to know the length of your lines (code and comments) when you are using the text editor of IDLE? Answer: Place the cursor by the last (right-most) character of a line and look at the **Col:** (column) figure at the bottom right-hand side corner of the text editor window.
- Finally, make sure you add some personality to your chatbot!
- Save your program naming it **`Assignment1.py`**

You are encouraged to expand on this assignment by using Python statements we have not seen in class in order to expand your understanding of Python, **as long as** your meets still satisfies all the **Requirements** stated in this assignment. There are no extra points for this, but it will help you to better learn Python and have fun!

Step 2 - Design:

Before you start coding, make sure you design your algorithm using English (natural language) or using pseudocode. You must include your algorithm as comments in your program.

Step 3 – Implementation:

Once you have included your algorithm as comments in *yet still non-existent* your program, translate each of the steps of your algorithm (each comment) into Python code. You must leave the comments in the code.

Incremental development: Implement a few comments at a time, then …

Step 4 - Testing:

… test as you go! Avoid the painful **Big Bang approach** to the software development process. ☹

Make sure to **run** your program to ensure that it is error free and that it solves the problem stated above before to submit to CourSys. You must also ensure that all other requirements stated in this assignment have been satisfied.

Submission:

- Submit your program on CourSys (https://coursys.sfu.ca/2024sp-cmpt-120-d3/). Click on the course activity called **Assignment 1**, then click on the option Make Submission on the left and finally, follow the instruction to browse for your program file.

- Note that you can submit your program as often as you wish. As long as your submissions are done before or on the due date and time, your assignment will be marked. CourSys will not stop you from submitting your program late, i.e., after the due date and time, but if your program is late, it will receive 0 marks.

How your Assignment 1 will be marked:

- When the TA mark your Assignment 1, he will be looking at:
  - Section 1. Whether your program executes (i.e., does it contain any errors) (5 points) and whether your program solves the problem (5 points). More specifically, this means that …
    - If you program does not execute (i.e., it contains one or more errors), this signifies that the TA will not be able to ascertain whether your program solves the problem and you will get 0 points for this Section 1.
    - If you program does execute (it does not contain any errors), this signifies that the TA will be able to ascertain whether your program solves the problem. If it does, you will get 10 points for this Section 1. If it does not, you will get 5 points for this Section 1, i.e., your program executes, but does not solve the problem.
  - Section 2. Whether your program satisfies **all the requirements** stated in this assignment (maximum of 10 points), regardless of whether or not your program executes.
- The rubric for Assignment 1 is based on the above. Make sure your program satisfies the above before submitting it on CourSys.

If you have any questions, drop by our office hours or post them on our Discussion Forum. Suggestion: Make sure you deal with your questions as you go. Do not wait until exam time.

Finally, there are no extension granted unless for medical reason once the Official Medical Certificate has been completed and submitted to the instructor.