PROJECT I: CREATIVE CODING IN THE TERMINAL

For the purpose for CART 351, I created a python project called *Air Quality Roulette*. Since we're in the subject about air quality and health, I felt it is appropriate to put in the mix of *Russian Roulette*. As we all know, air is very important in our every day lives although we should not take it for granted. There are cities around the world who doesn't have access to fresh air, which leads to dire health consequences for health to the people who live in it. Some may say: «You need to be **lucky** to have good air quality in your city» especially areas in the Midde East and South Asia. That idea led the creation of the python program that lets you choose to either type in your city or late fate choose a city for you and crossing your fingers that you have a good air quality. Initially, the project started as a *Chose Your Own Adventure* and using the 7API feature that we saw at class as the foundation. Although, for the sake of keeping things simple and not giving a complex navigation on the terminal. I change the formula to an air quality randomizer roulette for a fun and simple interactivity for the project.

The mechanics of the *Air Quality Roulette* leaves to users with two decisions. The first option gives the player to type in the city that they want to try out (and totally not a left-out code for debugging) to see if they got good air quality. The second option lets the program to choose the city from the API website instead to see if the air quality is good. After inserting the AQI token, a small loading text will check on the website on the air quality. The deciding factor of the roulette is the air quality index. If their air quality is below 101 AQI, they won the roulette since is consider breathable under that number. Any number that goes above 101 AQI is consider toxic

and a game over. At the end, they will show the results and the details in the terminal of the city they chose or picked, to give them insight of the status. They will be able replay again too and try their luck again and see the results all over again. The codes are purely made with Python, along with third part libraries like [1]Pyfiglet and [2]Colorama for a more intriguing visuals on the terminal. There's also that comes pre-install like: Random, Time, System and OS.

- [3]**random** = for generating random cities and chamber outcomes
- [4]**time** = to create timed delays for dramatic effect
- [5]**sys** = to control how text appears one character at a time
- [6]**os** = for safely managing external inputs such as the user's API token

In short, Air Quality Roulette uses code as a medium and as a tool: a humorous but uncomfortable reminder of how our environment determines our survival far more often than we are normally disposed to recognize.

References:

1. https://aqicn.org/city/montreal/
2. https://pypi.org/project/pyfiglet/
3. https://pypi.org/project/colorama/
4. https://www.geeksforgeeks.org/python/python-random-module/
5. https://www.geeksforgeeks.org/python/python-time-module/
6. https://www.geeksforgeeks.org/python/python-sys-module/
7. https://www.w3schools.com/python/module_os.asp?ref=escape.tech

A few screenshots of the project: