CS 3340.005

How the trivia game program works/How to run it

Important Note:

When you have to enter the answer to the trivia game question do not hit "enter/return" or then the program will crash.

Menu:

I created the trivia game to have five topics: Movie/Tv, General Knowledge, Pop Culture, Current Events, Music 2018/2017. I display this in a menu to the user so they know the other options if they want to choose a different topic for their question.

Start of game/ choosing trivia game topic:

Once the game begins, the user will get to choose if they want to play the trivia game or end the game, and they will have this option after each question gets answered in order to continue to a new question. If they want to continue, they should press '0', if they want to end the game they should press any other number.

The topics are generated randomly for the user so the user will not be able to enter the number of the topic they want, however, they can press '0' to choose a different topic. If they want to change their topic they can choose '0' or any other number to continue playing with the topic that has been generated for them.

Answering Trivia Questions:

The questions are displayed from five separate files for each topic. So each file has a line for a question, followed by the three answer choices, followed by the right answer to the question. And each file has 15 questions in this way.

The trivia question will be displayed along with the three answer choices which have corresponding numbers (1,2,3). User should enter '1', '2', or '3' to match the answer choices. If the user gets the answer right, the program will display a message that they got the answer right and a message that they got the answer wrong if they answered wrong.

The program will keep track of how many Trivia questions they got right and they will get 10 points accordingly for each question they get right.

Lives in Game:

The program will allow the user to have 4 saves or lives at the start of the game that they can use. The number of lives the user has will be displayed when the user enters a wrong answer. If they get an answer wrong they have the ability to use a life. If they run out of lives but have at least 30 points or more, the program will give the user an automatic life and take 30 points away because it is like buying a life.

However, if the user runs out of lives and doesn't have at least 30 points or more if they select the wrong answer, the trivia game will end and display points the user earned and the number of trivia questions they correctly answered along with a message that says it is the end of the trivia game.

How the Program Works Behind the Scenes, Code Wise:

There are 5 text files excluding the text file for the menu which is just all printed out at once. With the other text files, each one of them is associated with a trivia game topic: Movie/tv, General knowledge, Pop Culture, Current Events, MusicQ&A's. I used five buffers to store the text from the files in each. My program jumps from file to file when having display the different questions to the user from different topics. So, I had to read each line byte by byte and store it in a variable and append to it until I reached a newline character. I had to read only five lines at a time and then display for each file, and then repeat because the five lines had:

- 1. question
- 2. answer choice
- **3.** answer choice
- 4. answer choice
- 5. correct answer

So, lines 1,2,3,4 are stored in strFileQuestfx variable, where x in strFileQuestfx is either 1,2,3,4 or 5 based on file being read from). Line 5 is stored in strCrrctAns variable to be compared to user input.

This process repeats for each file and each set of question/ 3 answer choices/ correct answer. Then, I had to make sure that if, for example, one question was already read from file 1 which has topic movies/tv, that if the topic was randomly generated again, that it would go to the next set of questions in the file and repeat the storing process in the variables.