

Explanation for each file in repository

- `final_project_turtle.py`: assesses the users personality based off questionnaire and returns recommended songs for the user
- `traits.csv`: file with questions and corresponding traits
- `songs.json`: file with three lists of songs for each of the five traits
- `score_analysis.json`: file with detailed explanation for each of the five traits based on a high, medium, or low score
- `README.pdf`: this final with explanations and contributions

How to run program from command line

- `python3 final_project_turtle.py traits.csv songs.json score_analysis.json` (optional: number of songs, as integer, per trait you want returned in playlist)
 - Example: `--num_songs 5`

How to use program

- The user will input their answers on a scale from 1-5 for 10 questions

How to interpret output

- The output for our program will return three things: a playlisted based on the users personality, a bar plot visualization of the users traits, and a detailed explanation of how each trait may relate to them

Class/Method/Function	Primary author	Techniques demonstrated
BigFiveTest & Song	Group	Composition of two custom classes
load_questions	Jessica Doan	With statements
ask_questions	Jessica Doan	Frozensets
take_test	Jessica Doan	None
visualization	Jared Sherman	Visualizing data with pyplot
score_analysis	Jared Sherman	List comprehension
load_music	Chiamaka Ebulu	Use of <code>json.load()</code>
song_playlist	Chiamaka Ebulu	Optional parameter
highest_score	Chiamaka Ebulu	Use of a key function
<code>__str__</code>	Graham Albers	Magic method other than <code>__init__</code>
parse_args	Graham Albers	ArgumentParser class
main	Graham Albers	f-strings containing expressions

Resources

Lim, A. G. Y., & (Hons), A. G. Y. L. E. (2023, April 21). *Big five personality traits: The 5-factor model of personality*. Simply Psychology.
<https://www.simplypsychology.org/big-five-personality.html>

- We used this to better understand the big five personality traits to provide explanations in our program.