INST326 Section 0102, Table 4: Lily Grant, Nahum Ephrem, Maggie Zhang, Egypt Butler

Slingo Documentation

Repository Files

- Slingo.py
    - This file contains the main program that runs all aspects of the game, including classes, functions, and methods so that the game can run entirely in the terminal.
- Slingo_example.txt
    - This file contains instructions and all necessary information to play the game.

Running the Program from the Command Line

The program requires the ArgumentParser, random, sys, seaborn, and matplotlib.pyplot modules. These modules must be installed in order to run the program. The program can be run in the built-in terminal by typing python3 (on macOS) or python (on Windows) followed by a space and "slingo.py". These are two required arguments. Here is an example:

```
○ (base) maggiezhang@Maggies-MacBook-Air-2 INST326 % python3 slingo.py█
```

Using the Program and Interpreting Output

Upon running the program from the command line, it will prompt you to input your name. From there, you are given the options to begin the game by typing "s" to spin the wheel, quit the game by typing "q", or "h" for instructions on playing the game. Here is an example:

```
Please Enter your name: Maggie
Welcome to Slingo Maggie!
Please select s to begin, select q to quit, or select h for help: s
Welcome to Slingo, let's begin!
Here is your Slingo board:
-----------------
|10|28|33|52|66|
-----------------
|13|21|35|47|63|
-----------------
|15|17|45|55|75|
-----------------
|6|16|40|48|69|
-----------------
|11|22|42|51|73|
-----------------

Spins left: 9
Player board: []
Matched numbers in this round: [17]
Matched numbers in this round: [35]
Spin Result: [17, 12, 65, 57, 35]
Points earned this round: 10
Total points: 10
-----------------
|10|28|33|52|66|
-----------------
|13|21|X |47|63|
-----------------
|15|X |45|55|75|
-----------------
|6|16|40|48|69|
-----------------
|11|22|42|51|73|
-----------------
Press 's' to spin again or 'q' to exit: █
```

Attribution (Techniques used):

Method/function	Primary author	Techniques demonstrated
play_game	Egypt Butler	Optional parameters
__init__ (in player class)	Egypt Butler	Regular Expressions
parse_args	Maggie Zhang	ArgumentParser class
max_contribution	Maggie Zhang	Use of key function with max()
filter_best_spins	Nahum Ephrem	Pandas
plot_score_trend	Nahum Ephrem	matplot seaborn
main	Lily Grant	With statement
__repr__	Lily Grant	Magic method other than init