World of Games

GuessGame.py

The purpose of guess game is to start a new game, cast a random number between 1 to a variable called *difficulty*. The game will get a number input from the

Properties

1. Difficulty
2. Secret number

Methods

1. generate_number - Will generate number between 1 to difficulty and save it to secret_number.
2. get_guess_from_user - Will prompt the user for a number between 1 to difficulty and return the number.
3. compare_results - Will compare the the secret generated number to the one prompted by the get_guess_from_user.
4. play - Will call the functions above and play the game. Will return True / False if the user lost or won.

MemoryGame.py

The purpose of memory game is to display an amount of random numbers to the users for 0.7 seconds and then prompt them from the user for the numbers that he remember. If he was right with all the numbers the user will win otherwise he will lose.

Properties

1. Difficulty

Methods

1. generate_sequence - Will generate a list of random numbers between 1 to 101. The list length will be **difficulty**.
2. get_list_from_user - Will return a list of numbers prompted from the user. The list length will be in the size of **difficulty**.
3. is_list_equal - A function to compare two lists if they are equal. The function will return True / False.
4. play - Will call the functions above and play the game. Will return True / False if the user lost or won.

CurrencyRouletteGame.py

This game will use the free currency API to get the current exchange rate from USD to ILS.

Your code will do the following:

- Generate a random number between 1 and 100 and multiply it by the USD to ILS rate, which is the value that you'll assign to the variable named ***t.***
- Money interval definition: values in the range of *t - (5 - difficulty)* and *t + (5 - difficulty)*.
- Ask a user to input his guess and check whether that value is in the range of values from the previous section.

Properties

1. difficulty

Methods

1. get_money_interval -Will generate an interval as follows:
    a. For a given difficulty d, and the total value of money t the interval will be: (t - (5 - d), t + (5 - d))
2. get_guess_from_user - A method to prompt a guess from the user to enter a guess of value to a given amount of USD
3. play - Will call the functions above and play the game. Will return True / False if the user lost or won.

Function Update

1. Change the function load_game() from the previous document that after it will get the user's game of choice and level of difficulty, it will start a new function of the corresponding game with the given difficulty. For example: If a user will choose the first option in load_game() function with difficulty 3, it will call the play() function from the module MemoryGame with difficulty of 3.
2. Change the 3rd game description on load_game() function to: Currency Roulette - try and guess the value of a random amount of USD in ILS

What to send me?

A compressed zip file containing the following:

1. GuessGame.py
2. MemoryGame.py
3. CurrencyRouletteGame.py
4. Updated MainGame.py