



Word CHAIN

A GAME USING PYTHON (PySimpleGUI)

BASIC IDEA:

The goal of the game is to create a chain of words where each word starts with the last letter of the previous word.

GAMEPLAY:

The game can be played by 2-4 players. Each player takes turns to enter a word that starts with the last letter of the previous word entered by the previous player. The player who fails to enter a valid word or repeats a word loses the round. The game continues for a set number of rounds, and the player with the most points at the end of the game wins.

IMPLEMENTATION:

To build this game, you can use Python's Flask or Django framework to handle the backend and a frontend framework like React or Vue.js for the user interface. You can use the Merriam-Webster API or NLTK library to validate words and create a database to store the game's progress and scores.

Basic Logic

```
def log(word):
    word2=input("")
    if word2[0]!=word[len(word)-1]:
        print("YOU LOOSE!")
        print("score",score_count)
    else:
```

```

    print("ENTER A NEW WORD STARTING WITH THE LETTER ",word2[len(word2)-1])
    return word2

```

NOTE : At first I had planned to make it as a web application using Flask but I ended up making the GUI INTERFACE using python's PySimpleGUI module

IMPLEMENTING GUI USING PySimpleGUI MODULE:

```

import PySimpleGUI as sg

def get_first_word():
    first_layout = [
        [sg.T("Enter the first word:")],
        [sg.I(key="-first_word-")],
        [sg.Button("OK")]
    ]

    first_window = sg.Window("Word Chain Game - First Word", first_layout)

    event, values = first_window.read()
    if event == sg.WIN_CLOSED:
        exit()

    first_word = values["-first_word-"]
    ending_letter = first_word[-1]
    first_window.close()

    return first_word, ending_letter

score_count = 0

first_word, ending_letter = get_first_word()

subsequent_layout = [
    [sg.T(f"Enter a word starting with '{ending_letter}':")],
    [sg.I(key="-subsequent_word-")],
    [sg.Button("OK")]
]

while True:
    subsequent_window = sg.Window("Word Chain Game - Word starting with '{}'".format(ending_letter), subsequent_layout)

    event, values = subsequent_window.read()
    if event == sg.WIN_CLOSED:
        break

    subsequent_word = values["-subsequent_word-"]
    score_count += 1

    if subsequent_word[0] != ending_letter:
        sg.popup("The word should start with '{}'.format(ending_letter)")
        sg.popup("YOU LOSE!", f"Score: {score_count}")
        break

    ending_letter = subsequent_word[-1]

    subsequent_layout = [
        [sg.T(f"Enter a word starting with '{ending_letter}':")],
        [sg.I(key="-subsequent_word-")],
        [sg.Button("OK")]
    ]

    subsequent_window.close()

```

```
print(subsequent_word)  
sg.popup("Game over")
```