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Final Assignment Report

JILIN UNIVERSITY OF FINANCE AND ECONOMICS

Department of College of Managment Science and Information Engineering

BBA in Information management and information system

(2021)

Final Assignment: Part 01

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MODULE: Data Mining

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RULES:

1. I have added tips and required learning resources for each question, which helps you to solve the exercise.
2. Finish the assignment in **group of two students** (**Any group find copying/sharing from other group or internet will get '0' points!!!**)
3. Once you finish the Assignment **convert your .ipynb file into PDF (https://github.com/milaan9/91_Python_Tips/blob/main/000_Convert_Jupyter_Notebook_to_PDF.ipynb** (both .pynb and .pdf file will be required!)
4. Create **.zip** file and include your two files:
    A. Your Jupyter Notebook file (**001_Python_Assignment_01.ipynb**)
    B. Your PDF converted file of 001_Python_Assignment_01.ipynb (**001_Python_Assignment_01.pdf**)
5. Name your .zip file as your student numbers and names.

   example: **0318021907632 0318021907633 Milan Nina(米兰 妮娜).zip**

Python Assignment 02

Question: Hangman Game

Write a python program to create a Hangman game.

About Game: Going back to our old school days, some of the pen-paper games were always a top for our leisure time. In Hangman user has to guess words according to the guesses determined and as soon as they lost all their wrong guesses, they were hanged (not really, but on paper 😉). In the game of Hangman, the player only has 7 incorrect guesses (head, body, 2 legs, and 2 arms, hang) before they lose the game.

Structure:

1. In Part 1, you will require to load a random word from a **dictionary (https://github.com/milaan9/92_Python_Assignments/blob/main/sowpods.txt)**.
2. In Part 2, you will require the logic for guessing the letter and displaying that information to the user.

After completing part 1 and part 2 you will need to add the following features:

Features:

- Only let the user guess 7 times, and tell the user how many guesses they have left. Example: "You have 6 guesses left!"
- No restriction in uppercase and lowercase letters.
  - Example: user can guess "a" and it will be equal to "A" or vice-versa.
- If user guesses a numbers or a special characters, don't penalize them - ask them again to choose only letter.
  - Example: user guess "9" or "?" then ask user again to choose a letter.
- If the guess letter appear more than one time in the word display it.
  - Example: Word is "Apple" and user guess the word 'p' so --> **P P __**
- Keep track of the letters the user guessed incorrectly. If the user guesses a letter they already guessed, don't penalize them - let them guess again.
- Display some picture art for the Hangman. This is challenging - do the other parts of the exercise first!
- When the player wins or loses, let them start a new game.

Expected/Similar Output:

```
**********************
Welcome to Hangman!
**********************
Guess one letter at a time
Game is not case sensitive


__ __ __ __ __ __ __ __


What is your guess?: a


__   A   __ __   A   __ __ __


What is your guess?: 9
Please chose just a letter: e
e is not in this word!

      ____
    |    |


You have 6 guesses left!
your previous wrong guesses: ['E']


__   A   __ __   A   __ __ __


What is your guess?: e
You have already guessed e!


__   A   __ __   A   __ __ __


What is your guess?: h
h is not in this word!

      ____
    |    |
    |    O
    |    |


You have 5 guesses left!
your previous wrong guesses: ['E', 'H']


__   A   __ __   A   __ __ __


What is your guess?: d
d is not in this word!

      ____
    |    |
    |    O
    |   /|


You have 4 guesses left!
your previous wrong guesses: ['E', 'H', 'D']


__   A   __ __   A   __ __ __
```

```
What is your guess?: b
b is not in this word!

      ____
     |    |
     |    0
     |   /|\


You have 3 guesses left!
your previous wrong guesses: ['E', 'H', 'D', 'B']

__  A  __ __  A  __ __ __

What is your guess?: k

K  A  __ __  A  __ __ __

What is your guess?: r

K  A  __ __  A  R __ __

What is your guess?: t
t is not in this word!


      ____
     |    |
     |    0
     |   /|\
     |   /


You have 2 guesses left!
your previous wrong guesses: ['E', 'H', 'D', 'B', 'T']

K  A  __ __  A  R __ __

What is your guess?: l
l is not in this word!


      ____
     |    |
     |    0
     |   /|\
     |   / \


You have 1 guesses left!
your previous wrong guesses: ['E', 'H', 'D', 'B', 'T', 'L']

K  A  __ __  A  R __ __

What is your guess?: p
p is not in this word!


      ____
```

```
|    |
|    |
|    0
|   /|\
|   / \
__|__
```

You have 0 guesses left!
You lose!
your previous wrong guesses: ['E', 'H', 'D', 'B', 'T', 'L', 'P']

The word was ['K', 'A', 'N', 'G', 'A', 'R', 'O', 'O']

Would you like to play again? [y|n]: n

In [1]:

```python
# Solution:

import random
import string
# you can use more libraries if you want
people = ['''
   ___
  |   |   ''','''
   ___
  |   |
  |   0
  |   |   ''','''
   ___
  |   |
  |   0
  |  /|   ''','''
   ___
  |   |
  |   0
  |  /|\   ''','''
   ___
  |   |
  |   0
  |  /|\
  |  /    ''','''
   ___
  |   |
  |   0
  |  /|\
  |  / \   ''','''
      ___
     |   |
     |   |
     |   0
     |  /|\
     |  / \
   __|__   ''']
word = ["academy","shortcut","fitness","famous","revolution","politeness","meaning","diploma","enjoy
number = ['0','1','2','3','4','5','6','7','8','9']
def chooseword():
    #Function: Select a word at random from the dictionary
    i = random.randint(0,len(word)-1)
    return(word[i])
while 1:
    code = ""
    life = 7
    s=[]
    s1=""
    w = chooseword()
    word_right = []
    word_wrong = []
    right = []
    for i in w:
        i = i.upper()
        word_right.append(i)
        s.append("__ ")
    s1="".join(s)
    print("********************\n  Welcome to Hangman!\n********************\nGuess one letter
    print(s1,'\n')
```

```
    #print(word_right)
    while life>0 and code!="win":
        letter = ''
        letter = input("What is your guess?:")
        while letter in number:
            letter = input("Please chose just a letter:")
        letter1=letter.upper()
        if letter1 in right:
            print("You have already guessed ",letter,'!')
            continue
        if letter1 in word_right:
            right.append(letter1)
            for i in range(len(word_right)):
                if word_right[i]==letter1:
                    s[i]=letter1
            if "__ " not in s:
                code="win"
            print("".join(s))
            continue
        if letter1 not in word_right:
            print(letter," is not in this word!")
            print(people[7-life])
            right.append(letter1)
            life = life -1
            if life==0:
                code="lose"
            print("\nYou have ",life," guesses left!")
            word_wrong.append(letter1)
            print("your previous wrong guesses:",word_wrong)
            continue
    if code=="win":
        print("You win!")
        print("The word was ",word_right)
        choose = input("Would you like to play again? [y|n]: ")
        choose = choose.upper()
        if choose=="Y":
            continue
        else:break
    if code=="lose":
        print("You lose!")
        print("The word was ",word_right)
        choose = input("Would you like to play again? [y|n]: ")
        choose = choose.upper()
        if choose=="Y":
            continue
        else:break
```

```
**********************
   Welcome to Hangman!
**********************
Guess one letter at a time
Game is not case sensitive
__ __ __ __ __

What is your guess?:a
__ A__ __ __ __
What is your guess?:c
c  is not in this word!


  ____
```

```
|     |

You have  6  guesses left!
your previous wrong guesses: ['C']
What is your guess?:m
__ AM__ __ __
What is your guess?:f
FAM__ __ __
What is your guess?:o
FAMO__ __
What is your guess?:u
FAMOU__
What is your guess?:s
FAMOUS
You win!
The word was  ['F', 'A', 'M', 'O', 'U', 'S']
Would you like to play again? [y|n]: y
**********************
  Welcome to Hangman!
**********************
Guess one letter at a time
Game is not case sensitive

— — — — — — — — — —

What is your guess?:a
a  is not in this word!


 ___
|     |

You have  6  guesses left!
your previous wrong guesses: ['A']
What is your guess?:b
b  is not in this word!


 ___
|     |
|     O
|     |

You have  5  guesses left!
your previous wrong guesses: ['A', 'B']
What is your guess?:c
c  is not in this word!


 ___
|     |
|     O
|    /|

You have  4  guesses left!
your previous wrong guesses: ['A', 'B', 'C']
What is your guess?:d
d  is not in this word!


 ___
|     |
|     O
|    /|\

You have  3  guesses left!
```

```
your previous wrong guesses: ['A', 'B', 'C', 'D']
What is your guess?:f
f  is not in this word!



 ┌───┐
 |   |
 |   0
 |  /|\
 |  /

You have  2  guesses left!
your previous wrong guesses: ['A', 'B', 'C', 'D', 'F']
What is your guess?:e
__ __ __ __ __ E__ E__ __
What is your guess?:g
g  is not in this word!



 ┌───┐
 |   |
 |   0
 |  /|\
 |  / \

You have  1  guesses left!
your previous wrong guesses: ['A', 'B', 'C', 'D', 'F', 'G']
What is your guess?:h
h  is not in this word!



  ┌───┐
  |   |
  |   |
  |   0
  |  /|\
  |  / \
__|__

You have  0  guesses left!
your previous wrong guesses: ['A', 'B', 'C', 'D', 'F', 'G', 'H']
You lose!
The word was  ['P', 'O', 'L', 'I', 'T', 'E', 'N', 'E', 'S', 'S']
Would you like to play again? [y|n]: n
```

In [ ]: