REPORT FOR HANGMAN GAME GUI

As a project work for Course

PYTHON PROGRAMMING (INT 213)

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HANGMAN GAME GUI

ABSTRACT:-

In learning foreign language such as English, a learner should have motivation in order to have willingness to learn. This study is an attempt to investigate the students' motivation in learning English by using Hangman Game. And this study was to find out if the use of Hangman game motivates the students in learning English. The method used in this study was quantitative with experimental research design. The target population of this study was the eighth grade students of MTs Negeri Cirebon 1.The writer took two classes as samples and the number of the samples was 36 students .The samples were divided into experimental group and control group. There are two research instruments which were used to collect data. They were questionnaire and observation. The result analysis of observation showed that the students in experimental group had higher motivation than in control group. Meanwhile, the calculation of the value of the questionnaire showed that there were significant differences between experimental group and control group.

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INTRODUCTION:-

1.1 Context

This project has been done as part of my course for the CSE(H) at Lovely Professional University . Supervised by Ankita Wadhawan, I have three months to fulfill the requirements in order to succeed the module.

1.2 Motivations

Being extremely interested in everything having a relation with the Coding and Database, the group project was a great occasion to give us the time to learn and confirm our interest for this field.

1.3 Idea:-

The Hangman Game In Python project requires good knowledge of Python which includes defining functions and managing for/while loops. The functions that we use here contain arguments that are defined in a global scope which can be further used in other functions to improve game quality. It can also be used to provide different steps when required to execute upon conditions by the for and while loops.

The objective of our project is to implement the hangman game using Python. It doesn't require any specific modules other than random and time. Python loops and functions are enough.

TEAM MEMBERS:-

TEAM LEADER:-

Aman:-

Contributions:-

1. Coding(joined)
2. GUI
3. My SQL (joined)

Pawnesh Narayan:-

Contributions:-

1. Coding(joined)
2. Reports
3. My SQL (joined)

LIBRARIES:-

Tkinter:-

Python offers multiple options for developing GUI (Graphical User Interface). Out of all the GUI methods, tkinter is the most commonly used method. It is a standard Python interface to the Tk GUI toolkit shipped with Python. Python with tkinter is the fastest and easiest way to create the GUI applications. Creating a GUI using tkinter is an easy task.

To create a tkinter app:
1. Importing the module – tkinter
2. Create the main window (container)
3. Add any number of widgets to the main window
4. Apply the event Trigger on the widgets.

My SQL Connector:-

MySQL is a Relational Database Management System (RDBMS) whereas the structured Query Language (SQL) is the language used for handling the RDBMS using commands i.e Creating, Inserting, Updating and Deleting the data from the databases. SQL commands are case insensitive i.e CREATE and create signify the same command.

MySQL Connector/Python enables Python programs to access MySQL databases, using an API that is compliant with the Python Database API Specification v2.0 (PEP 249). It is written in pure Python and does not have any dependencies except for the Python Standard Library

Subprocess:-

The subprocess module present in Python(both 2.x and 3.x) is used to run new applications or programs through Python code by creating new processes. It also helps to obtain the input/output/error pipes as well as the exit codes of various commands.

File Used in the code

Menu File:-

1.Play :Open
the GUI of
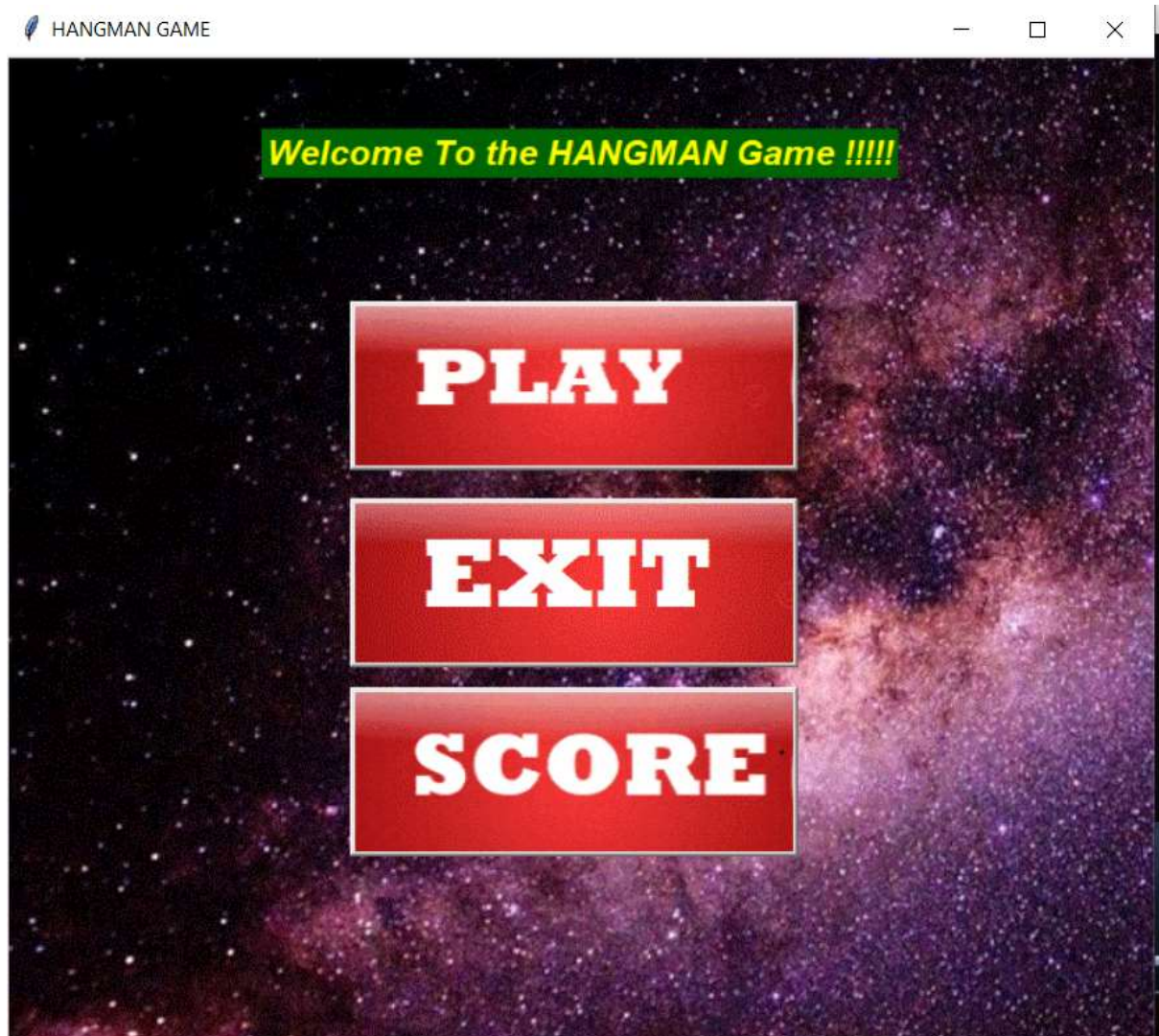game
2.Exit :close
menu 3.Score:
view score
from Database

Hangman file:-

1.Logic for
game
2.Images
,Letter etc

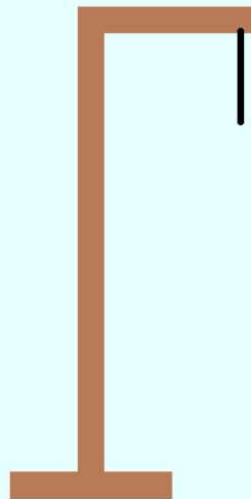## Add file:-

1.Add user name
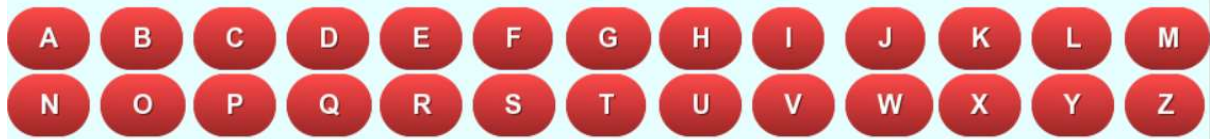and score into
the data base

Screen Shot of Project

CODE

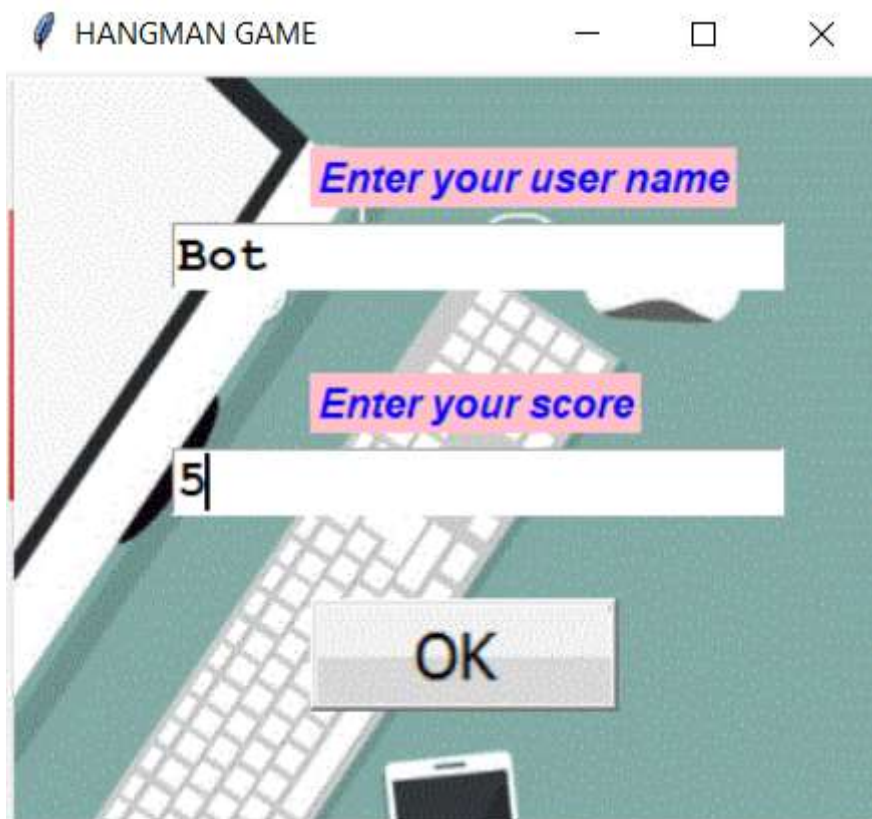## 1.Menu File code

```
from tkinter import *
from tkinter import messagebox


import os
import subprocess
top = Tk()

top.geometry("700x600")
top.title("HANGMAN GAME")
top.config(bg = '#E7FFFF')
bg = PhotoImage(file = "menubg.gif")
label1 = Label( top, image = bg)
label1.place(x = 0, y = 0)

def fun():
    #messagebox.showinfo("Hello", "Red Button clicked")
    subprocess.call("abc.py", shell=True)

def viewuser():
    subprocess.call("user.py", shell=True)

l1=Label(top,text="Welcome To the HANGMAN Game !!!!!",fg = "Yellow",bg
= "dark green",
      font = "Helvetica 16 bold italic").place(relx=0.5,rely=0.1,anchor='center')
#l2=Label(top,text="Choose PLAY to play game" , fg = "red",font =
"Times").place(relx=0.5,rely=0.2,anchor='center')


#l3=Label(top,text="Choose Exit to close window", fg = "red",font =
"Times").place(relx=0.5,rely=0.55,anchor='center')
```

```
img = PhotoImage(file="play.gif")



b1 = Button(top,text = "PLAY ",command = fun ,
        activeforeground = "red",activebackground = "orange")



b1.config(image=img)
b1.place(x=210,y=150)



img2=PhotoImage(file="exitr.gif")
b2 = Button(top, text = "EXIT",command =top.destroy
        ,activeforeground = "blue",activebackground = "pink")
b2.config(image=img2)
b2.place(x=210,y=270)
img3=PhotoImage(file="score.gif")
b3=Button(top,text="view scores " ,command=viewuser,activeforeground =
"red",activebackground = "orange")
b3.config(image=img3)
b3.place(x=210,y=385)




top.mainloop()
```

2. Game File code
```
import random
from tkinter import *
from tkinter import messagebox
```

```python
score = 0
run=True
# main loop
while run:

    root = Tk()


    root.geometry('905x700')
    root.title('HANG MAN')
    root.config(bg = '#E7FFFF')
    count = 0
    win_count = 0

    # choosing word
    index = random.randint(0,853)
    file = open('words.txt','r')
    l = file.readlines()
    selected_word = l[index].strip('\n')
    QQ=selected_word

    # creation of word dashes variables
    x = 250
    for i in range(0,len(selected_word)):
        x += 60

exec('d{}=Label(root,text="_",bg="#E7FFFF",font=("arial",40))'.format(i))
        exec('d{}.place(x={},y={})'.format(i,x,450))

    #letters icon
    al = ['a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s','t','u','v','w','x','y','z']
    for let in al:
        exec('{}=PhotoImage(file="{}.png")'.format(let,let))

    # hangman images
    h123 = ['h1','h2','h3','h4','h5','h6','h7']
    for hangman in h123:
        exec('{}=PhotoImage(file="{}.png")'.format(hangman,hangman))

    #letters placement
    button =
[['b1','a',0,595],['b2','b',70,595],['b3','c',140,595],['b4','d',210,595],['b5','e',280,59
5],['b6','f',350,595],['b7','g',420,595],['b8','h',490,595],['b9','i',560,595],['b10','j',6
```

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```python
30,595],['b11','k',700,595],['b12','l',770,595],['b13','m',840,595],['b14','n',0,645],
['b15','o',70,645],['b16','p',140,645],['b17','q',210,645],['b18','r',280,645],['b19','s'
,350,645],['b20','t',420,645],['b21','u',490,645],['b22','v',560,645],['b23','w',630,6
45],['b24','x',700,645],['b25','y',770,645],['b26','z',840,645]]

    for q1 in button:

 exec('{}=Button(root,bd=0,command=lambda:check("{}","{}"),bg="#E7F


,activebackground="#E7FFFF",font=10,image={})'.format(q1[0],q1[1],q1[0],q1
[1]))
        exec('{}.place(x={},y={})'.format(q1[0],q1[2],q1[3]))

    #hangman placement
    han = [['c1','h1'],['c2','h2'],['c3','h3'],['c4','h4'],['c5','h5'],['c6','h6'],['c7','h7']]
    for p1 in han:
        exec('{}=Label(root,bg="#E7FFFF",image={})'.format(p1[0],p1[1]))

    # placement of first hangman image
    c1.place(x = 300,y =- 50)




    # exit buton
    def close():
        global run

        answer = messagebox.askyesno('ALERT','YOU WANT TO EXIT THE
GAME?')

        if answer == True:

            run = False
            root.destroy()

    e1 = PhotoImage(file = 'exit.png')
    ex = Button(root,bd = 0,command = close,bg="#E7FFFF",activebackground
= "#E7FFFF",font = 10,image = e1)
    ex.place(x=770,y=10)
    s2 = 'SCORE:'+str(score)
```

```python
    s1 = Label(root,text = s2,bg = "#E7FFFF",font = ("arial",25))
    s1.place(x = 10,y = 10)




    # button press check function
    def check(letter,button):


      global count,win_count,run,score
        exec('{}.destroy()'.format(button))
        if letter in selected_word:
            for i in range(0,len(selected_word)):
                if selected_word[i] == letter:
                    win_count += 1
                    exec('d{}.config(text="{}")'.format(i,letter.upper()))
            if win_count == len(selected_word):
                score += 1
                answer = messagebox.askyesno('GAME OVER ','YOU
WON!\nWANT TO PLAY AGAIN?')
                if answer == True:
                    run = True
                    root.destroy()
                else:
                    run = False
                    root.destroy()
        else:
            count += 1
            exec('c{}.destroy()'.format(count))
            exec('c{}.place(x={},y={})'.format(count+1,300,-50))
            if count == 6:
                answer = messagebox.askyesno('GAME OVER\n the answer is
','YOU LOST!\nWANT TO PLAY AGAIN?')
                if answer == True:
                    run = True
                    score = 0
                    root.destroy()
                else:
                    run = False
                    root.destroy()
```

```
    root.mainloop()
```

3.Database connection file code :

```python
import mysql.connector
from tkinter import *
from  tkinter import ttk
top = Tk()
top.geometry("300x250")
top.title("HANGMAN GAME")


top.config(bg = '#E7FFFF')
game_frame = Frame(top)
game_frame.pack()
my_game = ttk.Treeview(game_frame)

my_game['columns'] = ('username', 'score')


my_game.column("#0", width=0,  stretch=NO)
my_game.column("username",anchor=CENTER, width=80)
my_game.column("score",anchor=CENTER,width=80)
my_game.heading("#0",text="",anchor=CENTER)
my_game.heading("username",text="username",anchor=CENTER)
my_game.heading("score",text="score",anchor=CENTER)




#username = StringVar()

#Label(top, text="Username * ").place(x=20,y=40)
   #Username textbox
#Entry(top, textvariable=username).place(x=90,y=42)

cnx = mysql.connector.connect(host ="localhost",
                    user = "root",
                    password = "root",
                    db ="hangman")
cursor = cnx.cursor()
```

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```
cursor.execute("select  * from score")
my_game.tag_configure("evenrow",background='pink',foreground='brown')
myresult = cursor.fetchall()
for x in myresult:
   my_game.insert(parent='',index='end',values=x,tags="evenrow")




my_game.pack()


b2 = Button(top, text = "EXIT",command =top.destroy
        ,activeforeground = "blue",activebackground = "pink").pack()


top.mainloop()

cnx.close()
```

4.Code of file for insertion in Database :

```
import random
from tkinter import *
from tkinter import messagebox
import mysql.connector
import os
import subprocess
cnx = mysql.connector.connect(host ="localhost",
                    user = "root",
                    password = "root",
                    db ="hangman")
cursor = cnx.cursor()



top = Tk()
top.geometry("350x300")
top.title("HANGMAN GAME")
top.config(bg = '#E7FFFF')
bg = PhotoImage(file = "bgxD.gif")
```

```python
label1 = Label( top, image = bg)
label1.place(x = 0, y = 0)

def ok():
    name=user_name.get()
    score2=score_val.get()

    if(len(name)==0):
        messagebox.showinfo("info", "enter user name")
    else:

        jmd=str(name)
        jmd2=int(score2)
        qry="INSERT INTO score(username,score) VALUES(%s,%s)"


        cursor.execute(qry,(jmd,jmd2,))

        cnx.commit()




user_name = StringVar()
score_val=IntVar()
Label(top, text="Enter your user name",fg = "blue",bg = "pink",
        font = "Helvetica 12 bold italic").place(relx=0.35,rely=0.1)
Label(top, text="Enter your score",fg = "blue",bg = "pink",
        font = "Helvetica 12 bold italic").place(relx=0.35,rely=0.4)
#Username textbox
Entry(top, textvariable=user_name,font = ('courier', 15,
'bold')).place(relx=0.19,rely=0.2)
Entry(top, textvariable=score_val,font = ('courier', 15, 'bold')
    ).place(relx=0.19,rely=0.5)
img=PhotoImage(file="ok.gif")
b1=Button(top,text="ok",command=ok,activeforeground = "red",
    activebackground = "orange")
b1.config(image=img)
b1.place(relx=0.35
        ,rely=0.7)
```

```
top.mainloop()
```

5.File Which call all function

```python
import mysql.connector
cnx = mysql.connector.connect(host ="localhost",
                    user = "root",
                    password = "root",
                    db ="hangman")
cursor = cnx.cursor()
import hangman as h

x=h.score



if(x==0):
    None
else:
    import between as b
```

References :-

1. https://www.geeksforgeeks.org/python-gui-tkinter/
2. https://www.w3schools.com/python/python_mysql_getstarted.asp
3. https://stackoverflow.com/questions/tagged/tkinter
4. https://www.tutorialspoint.om/index.htm
5. https://github.com/aman-jangra26/Python-project
6. Etc