PYTHON HANGMAN GAME CODE:

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import random

from tkinter import *

# list of words

cat1=["afghanistan","ukaraine","malaysia","singapore","bangladesh","bulgaria","cambodia","ethiopia","
indonesia","jamaica","krygyzstan","luxembourg"]

cat2=["tangerine","dragonfruit","pomegranate","jackfruit","strawberry","blueberry","avacado","water
melon","pineapple","grapefruit"]

cat3=["tiger","cheetah","elephant","snake","crocodile","buffalo","donkey","koala","rabbit","panda"]

# list for randomly selected word

guessed_letters=[]

word=""

guessed_word=["_"]*len(word)

attempts=0

attemptext=""

atxt=""

# function to get random word from list

def getword(wlist):
  w=random.choice(wlist)
  return w
def animal():
   global word,guessed_letters,guessed_word,attempts,attemptext,hintcount
   hintcount=0
   #getting random word
   wo=getword(cat3)
   word=wo.upper()
   guessed_letters=[]
   guessed_word=["_"]*len(word)
   guess=False
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    attempts=10
    atxt=attemptext+str(attempts)
    popup()
def fruit():
    global word,guessed_letters,guessed_word,attempts,attemptext,hintcount
    hintcount=0
    wo=getword(cat2)
    word=wo.upper()
    guessed_letters=[]
    guessed_word=["_"]*len(word)
    guess=False
    attempts=10
    atxt=attemptext+str(attempts)
    popup()
def country():
    global word,guessed_letters,guessed_word,attempts,attemptext,hintcount
    hintcount=0
    wo=getword(cat1)
    word=wo.upper()
    guessed_letters=[]
    guessed_word=["_"]*len(word)
    guess=False
    attempts=10
    atxt=attemptext+str(attempts)
    popup()
# category window(2nd window)
def choosecategory():
    global top
    top=Toplevel(gui)
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gui.withdraw()
#this function keeps the root functioning however hides it from the output screen
top.geometry("1024x650")
top.title("CATEGORIES")
bg1 = PhotoImage(file ="welcomepage.png")
# Show image using label -
label2 = Label(top,image= bg1)
label2.place(x = 0, y = 0)
category = Label(top,text="C H O O S E C A T E G O R Y",font=("Georgia",17),bg='white')
category.place(x=360,y=100)
#Animal category
category1 = Label(top,text="ANIMAL",font=("Georgia",14),bg='white')
category1.place(x=160,y=200)
ani = PhotoImage(file="animal_button1.png")
animal_label=Label(top,image = ani)
animal_btn = Button(top,image = ani,command=animal)
animal_btn.place(x=105,y=250)
#fruit category
category2 = Label(top,text="FRUIT",font=("Georgia",14),bg='white')
category2.place(x=470,y=200)
fru = PhotoImage(file="fruit_button1.png")
fruit_label = Label(top,image =fru)
fruit_btn = Button(top,image =fru,command=fruit)
fruit_btn.place(x=405,y=250)
#country category
category3 = Label(top,text="COUNTRY",font=("Georgia",14),bg='white')
category3.place(x=760,y=200)
coun =PhotoImage(file="country_button1.png")
country_label = Label(top,image = coun)
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    country_btn = Button(top,image = coun,command=country)
    country_btn.place(x=705,y=250)
    top.mainloop()
#function for hint button
hintcount=0
def clickedhint(wig):
    global hintcount
    if(hintcount<2):
        callhint(wig)
        hintcount+=1
    else:
       hidebutton(wig)
def callhint(wig):
    global guessed_word,guessed_letters,word,hintcount
    wo=word.upper()
    #converts the word into a list of its characters
    tolist=list(word)
    hintlist=[]
    for i in word:
        if i not in guessed_letters:
            #hintlist will contain characters from the word that have not been guessed.
            hintlist.append(i)
    #selects a random character from the hintlist
    h=random.choice(hintlist)
    guessed_letters.append(h)
    a=0
    for char in word:
        if char in guessed_letters:
            guessed_word[a]=wo[a]
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        else:
            guessed_word[a]="_"
        a+=1
    display()

# function for checking guess
def checkletter(gu,w):
    global atxt,attemptext,word,guessed_word
    global attempts,guessed_letters

    attemptext="A T T E M P T S L E F T: "
    exp=""
    g=gu.upper()
    hidebutton(w)

    if g in guessed_letters:
        return
    else:
        guessed_letters.append(g)
    a=0
    for char in word:
        if char in guessed_letters:
            guessed_word[a]=word[a]
        else:
            guessed_word[a]="_"
        a+=1
    if g in word:
        display()
    else:
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        attempts-=1
        atxt=attemptext+str(attempts)
        for i in guessed_word:
            exp+=i
        display()



    if "_" not in guessed_word:
        #call new congo pop up screen
        youwin()

    if attempts==0:
        youloose(word)

#function for displaying images after guess
def display():
        global my_Label,attempts
        global img0,img1,img2,img3,img4,img5,img6,img7,img8,img9,img10
        exp=""
        for i in guessed_word:
            exp+=i
        text_change_label.config(text=' '.join(str(exp)))
        attempts_label.config(text=' '.join(str(atxt)))
        if attempts==10:
            my_Label.config(image=img0)
        elif attempts==9:
            my_Label.config(image=img1)
        elif attempts==8:
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            my_Label.config(image=img2)
        elif attempts==7:
            my_Label.config(image=img3)
        elif attempts==6:
            my_Label.config(image=img4)
        elif attempts==5:
            my_Label.config(image=img5)
        elif attempts==4:
            my_Label.config(image=img6)
        elif attempts==3:
            my_Label.config(image=img7)
        elif attempts==2:
            my_Label.config(image=img8)
        elif attempts==1:
            my_Label.config(image=img9)
        elif attempts==0:
            my_Label.config(image=img10)
        # function to hide alphabet after clicking it
def hidebutton(let):
        let.destroy()
        #fucntion to hide the last two pop up screen and restart the game after finshing the game
def removescreen(widget):
        widget.withdraw()
        choosecategory()
# popup window for main game
def popup():
    global text_change_label,attempts_label,attempts,my_Label,root,top
    global img0,img1,img2,img3,img4,img5,img6,img7,img8,img9,img10
    root=Toplevel(gui)
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    root.geometry("1024x650")
    root.title("Hangman")
    top.withdraw()
    bgg =PhotoImage(file="welcomepage.png")
    label3 = Label(root,image=bgg)
    label3.place(x=0 ,y=0 )
    attempts_label = Label(root, text=" ",font=("Georgia",12),bg='white') #attempts left ch label
    attempts_label.place(x=560,y=120)
    #attempts_label.config(text='ATTEMPTS LEFT: '.join(str(attempts)))
    guess_the_word_label = Label(root, text="GUESS THE WORD!!",
    font=("Georgia",14),bg='white') #guess the word asa lihun yeil
    guess_the_word_label.place(x=630,y=180)
    text_change_label= Label(root,text=' ',bg='white',font=('Georgia',20))
    text_change_label.place(x=600,y=260)
    # letter selection buttons
    a =Button(root, text='a', fg= 'black', bg= 'white', height =
2,width=4,command=lambda:checkletter('a',a))
    a.place(x=460,y = 400)
    b =Button(root, text='b', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('b',b))
    b.place(x=500,y = 400)
    c=Button(root, text='c', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('c',c))
    c.place(x=540,y = 400)
    d =Button(root, text='d', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('d',d))
    d.place(x=580,y= 400)
    e =Button(root, text='e', fg= 'black', bg= 'white', height =
2,width=4,command=lambda:checkletter('e',e))
    e.place(x=620,y = 400)
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    f =Button(root, text='f', fg= 'black', bg= 'white', height =2,width=4,command=lambda:checkletter('f',f))

    f.place(x=660,y = 400)

    g =Button(root, text='g', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('g',g))

    g.place(x=700,y = 400)

    h =Button(root, text='h', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('h',h))

    h.place(x=740,y = 400)

    i =Button(root, text='i', fg= 'black', bg= 'white', height =2,width=4,command=lambda:checkletter('i',i))

    i.place(x=780,y = 400)

    j =Button(root,text='j', fg= 'black', bg= 'white', height =2,width=4,command=lambda:checkletter('j',j))

    j.place(x=820,y = 400)

    k =Button(root,text='k', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('k',k))

    k.place(x=860,y = 400)

    l =Button(root, text='l', fg= 'black', bg= 'white', height = 2,width=4,command=lambda:checkletter('l',l))

    l.place(x=900,y = 400)

    m =Button(root, text='m', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('m',m))

    m.place(x=940,y = 400)

    n =Button(root, text='n', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('n',n))

    n.place(x= 460,y = 442)

    o =Button(root, text='o', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('o',o))

    o.place(x= 500,y = 442)

    p =Button(root, text='p', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('p',p))

    p.place(x= 540,y = 442)

    q =Button(root, text='q', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('q',q))

    q.place(x= 580,y = 442)
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    r =Button(root, text='r', fg= 'black', bg= 'white', height =2,width=4,command=lambda:checkletter('r',r))

    r.place(x= 620,y = 442)

    s =Button(root, text='s', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('s',s))

    s.place(x= 660,y = 442)

    t =Button(root, text='t', fg= 'black', bg= 'white', height =
2,width=4,command=lambda:checkletter('t',t))

    t.place(x= 700,y = 442)

    u =Button(root, text='u', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('u',u))

    u.place(x= 740,y = 442)

    v=Button(root, text='v', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('v',v))

    v.place(x= 780,y = 442)

    w =Button(root, text='w', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('w',w))

    w.place(x= 820,y = 442)

    x =Button(root, text='x', fg= 'black', bg= 'white', height =
2,width=4,command=lambda:checkletter('x',x))

    x.place(x= 860,y = 442)

    y=Button(root, text='y', fg= 'black', bg= 'white', height =
2,width=4,command=lambda:checkletter('y',y))

    y.place(x= 900,y = 442)

    z =Button(root, text='z', fg= 'black', bg= 'white', height
=2,width=4,command=lambda:checkletter('z',z))

    z.place(x= 940,y = 442)

    hint = Button(root, text=' Hint ', fg='black', bg='salmon3', height=1,

    width=7,command=lambda:clickedhint(hint))

    hint.place(x=730,y=490)

    img0 = PhotoImage(file="s.png")

    img1 = PhotoImage(file="h0.png")

    img2 = PhotoImage(file="h1.png")
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    img3 = PhotoImage(file="h2.png")
    img4 = PhotoImage(file="h3.png")
    img5 = PhotoImage(file="h4.png")
    img6 = PhotoImage(file="h5.png")
    img7 = PhotoImage(file="h6.png")
    img8 = PhotoImage(file="h7.png")
    img9 = PhotoImage(file="h8.png")
    img10 = PhotoImage(file="h9.png")
    my_Label = Label(root,image=img0)
    my_Label.place(x=40,y=20)
    root.mainloop()
# popup window for win
def youwin():
    chicken = Toplevel(gui)
    chicken.title('wohoo!')
    chicken.geometry('300x200')
    you_won_label = Label(chicken,text = "CONGOO!!\nYOU WON!",font=("Georgia",16))
    you_won_label.pack()
    replay = PhotoImage(file="Replay_button.png")
    replay_label = Label(chicken,image=replay)
    replay_btn = Button(chicken,image = replay,command=lambda:removescreen(chicken))
    replay_btn.pack()
    exit2 = PhotoImage(file="exit_button.png")
    exit_label2 = Label(chicken, image = exit2)
    exit_btn2 = Button(chicken, image= exit2,command=lambda:hidebutton(gui))
    exit_btn2.pack()
    chicken.mainloop()
# popup window for loose
def youloose(word):
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    rat = Toplevel(gui)
    rat.title('oh no :(')
    rat.geometry('300x230')
    you_lost_label = Label(rat,text = "YOU LOST :(",font=("Georgia",16),bg='white')
    you_lost_label.pack()
    label=Label(rat,text="the word was:",font=("Georgia",12),bg="white")
    label.pack()
    labell=Label(rat,text=word,font=("Georgia",16),bg="white")
    labell.pack()
    replay1 = PhotoImage(file="Replay_button.png")
    replay1_label = Label(rat,image=replay1)
    replay_btn1 = Button(rat,image = replay1,command=lambda:removescreen(rat))
    replay_btn1.pack()
    exit3 = PhotoImage(file="exit_button.png")
    exit_label3 = Label(rat, image = exit3)
    exit_btn3 = Button(rat, image= exit3,command=lambda:hidebutton(gui))
    exit_btn3.pack()
    rat.mainloop()
#Rules window


def rules():
    R=Toplevel(gui)
    label=Label(R,text="HANGMAN RULES",relief=RAISED,font=("Georgia",16))
    label.pack()
    text=StringVar()
    msg=Message(R,textvariable=text,relief=RAISED,font=("Georgia",16))
    text.set("HOW TO PLAY\nIntro:\nHangman is a classic word game.\nIn this game, you must guess the
secret word one letter at a time.\nEach incorrect guess adds another part to the hangman. Hints:\nIf
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you need help finding a word, click the Hint button \nEach hint will give you 1 letter.\nYou are only allowed two hints per word\nHOPE YOU ENJOY GAMING :)")
    msg.pack()
    R.geometry("600x500")
    R.mainloop()


gui= Tk()
# Adjust size
gui.geometry("1024x650")
gui.title("HANGMAN")
# Add image file
bg = PhotoImage(file = "welcomepage.png")
# Show image using label
label1 = Label(image = bg)
label1.place(x = 0, y = 0)
l = Label(gui, text="W E L C O M E T O H A N G M A N :)",bg='white')
l.config(font=("Georgia",25))
l.pack(pady=80)
# Add buttons
start = PhotoImage(file="start_button.png")
start_label = Label(gui,image = start)
button1 = Button(gui,image=start,command=choosecategory)
button1.pack(pady=15)
rule =PhotoImage(file="rules_button.png")
rules_label = Label(gui,image = rule)
rules_btn = Button(gui,image = rule,command=rules)
rules_btn.pack(pady=30)
# exit button
exit1 = PhotoImage(file="exit_button.png")
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exit_label = Label(gui,image=exit1)
# function for quit
exit_btn = Button(gui,image=exit1,command=lambda:hidebutton(gui))
exit_btn.pack(pady=28)
# Execute tkinter
gui.mainloop()
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