SOURCE CODE

import random  
from tkinter import \*  
  
from PIL import Image, ImageTk

# game class that handles all scores, and player moves #

class Game:

def \_\_init\_\_(self):

self.\_name = None

self.playerScore = 0

self.computerScore = 0

self.draw = 0

self.window = None

#self.label = None

self.computer\_label = None

self.player\_label = None

self.draw\_label = None

def show\_window(self):

# labels the window

self.window = Toplevel(master)

self.window.title("Rock Paper Scissors")

# sets the window size

self.window.geometry("400x500")

self.window.resizable(height = True, width = True) #

# exit button

def Close():

master.destroy()

exit\_button = Button(root, text="Exit", command=Close)

exit\_button.pack(pady=10)

# changes the background color

self.window.configure(bg='light blue')

self.label = Text(self.window, height=10, width=30)

# score label for computer

self.computer\_label = Label(self.window, text=" Computer: ")

self.computer\_label.place(x=75, y=175)

# score label for Player

self.player\_label = Label(self.window, text=" Player: ")

self.player\_label.place(x=250, y=175)

# number of draws

self.draw\_label = Label(self.window, text="Draw: ")

playerLabel.place(x=90,y=120)

#label(text="any text here", font=('Helvetica', '14

# Creates a rock button

rock\_image = Image.open(r"images\Rock.png")

rock\_image = rock\_image.resize((80, 90))

rock = ImageTk.PhotoImage(rock\_image)

# lambda will execute commands one by one

rock\_button = Button(

self.window,

image=rock,

command=lambda: [self.display("rock"), self.play\_computer("rock")]

)

# places rock the button

rock\_button.place(x=60, y=50,)

# Creates a paper button

paper\_image = Image.open(r"images\paper.png")

paper\_image = paper\_image.resize((80, 90))

paper = ImageTk.PhotoImage(paper\_image)

# lambda will execute commands one by one

paper\_button = Button(

self.window,

image=paper,

command=lambda: [self.display("paper"), self.play\_computer("paper")]

)

#Button Label

def on\_enter(e):

rock\_button['background'] = ''

print(Rock)

def on\_leave(e):

rock\_button['background'] = 'SystemButtonFace'

rock\_button.bind("<Enter>", 'Rock' )

rock\_button.bind("<Leave>", )

# places the paper button

paper\_button.place(x=155, y=50)

# Creates a scissors button

scissors\_image = Image.open(r"images\scissors.png")

scissors\_image = scissors\_image.resize((80, 90))

scissors = ImageTk.PhotoImage(scissors\_image)

scissors\_image = (0,weight=1)

# lambda will execute commands one by one

scissors\_button = Button(

self.window,

image=scissors,

command=lambda: [self.display("scissors"), self.play\_computer("scissors")]

)

# places the scissors button

scissors\_button.place(x=250, y=50)

# places the textbox widget (get rid of this)

self.label.place(x=40, y=220) # this is the text box

##Button to reset the Game## ##not added yet##

self.window.mainloop()

def display(self, name):

self.\_name = name

print(self.\_name)

self.label.insert(1.0, "Your choice: {}".format(name) + '\n')

# Computer choice PLayer Choice

def play\_computer(self, player):

options = ["rock", "paper", "scissors"]

num = random.randint(0, 2)

self.label.insert(1.0, "Computers choice: {}".format(options[num] + '\n'))

self.label.insert(1.0, player + '\n')

if player == "rock" and options[num] == "scissors":

self.playerScore = self.playerScore + 1

self.label.insert(1.0, "Player beat computer with ", player + '\n')

self.player\_label['text'] = ("Player: ", self.playerScore)

elif player == "rock" and options[num] == "paper":

self.computerScore = self.computerScore + 1

self.label.insert(1.0, "Computer beat player with ", player + '\n')

self.computer\_label['text'] = ("Computer: ", self.computerScore)

elif player == "rock" and options[num] == "rock":

self.label.insert(1.0, "Draw" + '\n')

self.draw = self.draw + 1

self.draw\_label['text'] = ("draw: ", self.draw)

elif player == "paper" and options[num] == "rock":

self.playerScore = self.playerScore + 1

self.player\_label['text'] = ("Player: ", self.playerScore)

self.label.insert(1.0, "Player beat computer with ", player + '\n')

#

elif player == "paper" and options[num] == "paper":

self.label.insert(1.0, "Draw" + '\n')

self.draw = self.draw + 1

self.draw\_label['text'] = ("draw: ", self.draw)

elif player == "paper" and options[num] == "scissors":

self.computerScore = self.computerScore + 1

self.computer\_label['text'] = ("Computer: ", self.computerScore)

self.label.insert(1.0, "Computer beat player with ", player + '\n')

elif player == "scissors" and options[num] == "rock":

self.computerScore = self.computerScore + 1

self.computer\_label['text'] = ("Computer: ", self.computerScore)

self.label.insert(1.0, "Computer beat player with ", player + '\n')

elif player == "scissors" and options[num] == "paper":

self.playerScore = self.playerScore + 1

self.player\_label['text'] = ("Player: ", self.playerScore)

self.label.insert(1.0, "Player beat computer with ", player + '\n')

else:

self.label.insert(1.0, "Draw" + '\n')

self.draw = self.draw + 1

self.draw\_label['text'] = ("draw: ", self.draw)

# instance of the game class

g = Game()

# creates a Tk() object

master = Tk()

# title

master.title("Start Rock Paper Scissors")

# sets the geometry of main

# root window

master.geometry('600x600')

# font

master.option\_add('\*Font', 'Times 15')

#master.resizable

label = Label(master,

text="ROCK PAPER SCISSORS"

)

label.pack(pady=55)

#'''Game Rules"

#"In this game 2 players throw a choice simultaneously Rock, Paper, or Scissors."

#"The rules of the game are simple"

#"rock beats scissors"

#"paper beats rock"

#"scissors beats paper"

#"If players choose the same it is a draw and no points are awarded")'''

# You will play against the computer, the computer is not AI (yet) so will choose at random.

# changes the background color

master.configure(bg='aliceblue')

# a button widget which will open

# new window on button click

start\_button = Button(master,

text="START",

command=lambda: g.show\_window())

#Create a Button to Hide/ Reveal the Main Window

button= exit.Button(win, text="RESET" ,command= reset\_win)

button.pack(pady=50)

master.mainloop()