SOURCE CODE

# Start Button <--------  
###### choose number of rounds, quit button, or play as long as you wish. still add quit button  
#### keep track of score but clear last rounds choice  
# i don't like the text box, id rather have something like " x wins" and an update on score count  
# contents of window should expand with window  
  
  
  
  
  
  
# 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()