Rock Paper Scissor Game

BY using Python and Tkinter

BY-Abhishek Saini

College Name-JMIETI
Radaur(Yamuna nagar)

TECHNOLOGY USED

- PYTHON
- TKINTER

PYTHON

- Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis.
- Python is a general-purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems.
- Python is a versatile and in-demand language that is one of the easiest programming languages to learn.

FEATURES OF PYTHON

- Free and Open Source. ...
- Easy to code. ...
- Object-Oriented Language. ...
- GUI Programming Support. ...
- High-Level Language. ...
- Large Community Support. ...
- Python is a Portable language. ...
- Python is an Integrated language.

TKINTER

- **Tkinter** module in Python is a **standard library** in Python used for creating **Graphical User Interface (GUI)** for Desktop Applications.
- With the help of **Tkinter** developing **desktop applications** is not a tough task.
- An important feature in favor of Tkinter is that it is **cross-platform**, so the same code can easily work on **Windows**, **macOS**, and **Linux**.
- Tkinter is a **lightweight module**.

PROJECT SOURCE CODE

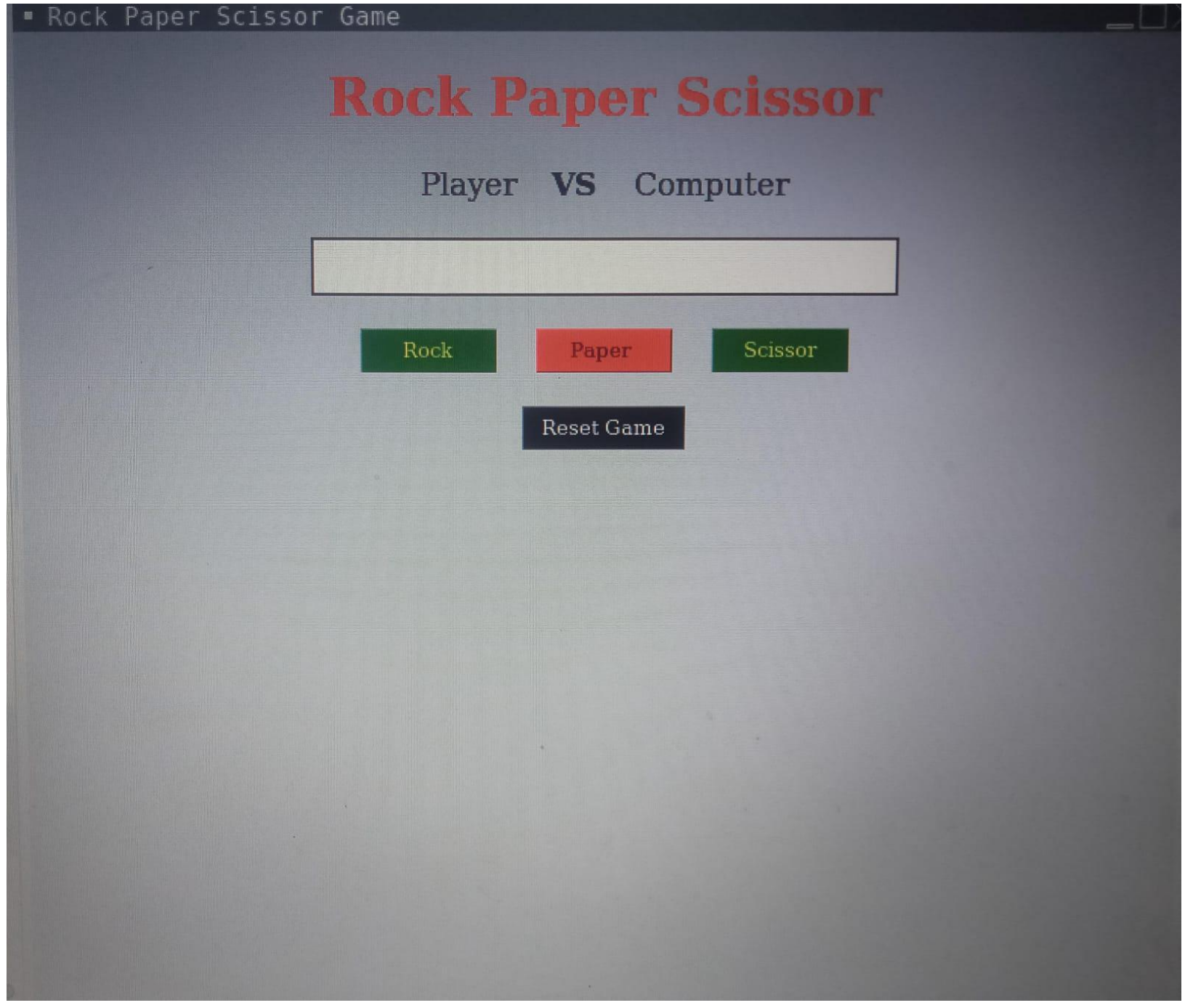
```python
# Import Required Library
from tkinter import *
from random import *

# Create Object
window = Tk()

# Set geometry
window.geometry("400x400")

# Set title
window.title("Rock Paper Scissor Game")

# Computer Value
comp_dict = {"0": "Rock", "1": "Paper", "2": "Scissor"}

# Reset The Game


def reset_game():
    b1["state"] = "active"
    b2["state"] = "active"
    b3["state"] = "active"
    l1.config(text="Player    ")
    l3.config(text="Computer")
    l4.config(text="")

# Disable the Button
```

```python
l1.grid(row=0,column=0)
l2.grid(row=0,column=1)
l3.grid(row=0,column=2)

l4 = Label(window,
           text="",
           font="times 20 bold",
           bg="white",
           width=20,
           fg="orange",
           borderwidth=2,
           relief="solid")
l4.pack(pady=20)

f2 = Frame(window)
f2.pack()

b1 = Button(f2, text="Rock", fg="yellow",bg="green",font="times 10", width=8, command=isrock)

b2 = Button(f2, text="Paper ", fg="black",bg="red" ,font="times 10", width=8, command=ispaper)

b3 = Button(f2, text="Scissor",fg="yellow",bg="green", font="times 10", width=8, command=isscissor)

b1.pack(side=LEFT, padx=12)
b2.pack(side=LEFT, padx=12)
b3.pack(padx=12)

Button(window,
       text="Reset Game",
```

```python

# If player selected paper


def ispaper():
    value = comp_dict[str(randint(0, 2))]
    if value == "Paper":
        match_result = "Match Draw"
    elif value == "Scissor":
        match_result = "Computer Win"
    else:
        match_result = "Player Win"
    l4.config(text=match_result)
    l1.config(text="Paper   ")
    l3.config(text=value)
    button_disable()


# If player selected scissor


def isscissor():
    value = comp_dict[str(randint(0, 2))]
    if value == "Rock":
        match_result = "Computer Win"
    elif value == "Scissor":
        match_result = "Match Draw"
    else:
        match_result = "Player Win"
```

```python
           width=20,
           fg="orange",
           borderwidth=2,
           relief="solid")
l4.pack(pady=20)

f2 = Frame(window)
f2.pack()

b1 = Button(f2, text="Rock", fg="yellow",bg="green",font="times 10", width=8, command=isrock)

b2 = Button(f2, text="Paper ", fg="black",bg="red" ,font="times 10", width=8, command=ispaper)

b3 = Button(f2, text="Scissor",fg="yellow",bg="green", font="times 10", width=8, command=isscissor)

b1.pack(side=LEFT, padx=12)
b2.pack(side=LEFT, padx=12)
b3.pack(padx=12)

Button(window,
       text="Reset Game",
       font="times 10",
       fg="white",
       bg="black",
       command=reset_game).pack(pady=20)

window.mainloop()
```

PROJECT INTERFACE



WORKING OF THE PROJECT

First, we import randint from the random module. This is how our computer opponent will play. There are three possible plays you and the computer can make on each turn, “Rock”, “Paper” and “Scissors”. Once the while loop starts, the computer will patiently wait for you to make a play.

We assign a random play to the computer using our list, t, and the randint function. Why (0,2)? Remember that computers start counting at 0. So “Rock” is in the 0 position, “Paper” is in the 1, and so on. Unlike playing RPS with friends in meatspace, the computer has made its play and is waiting for you to take your turn. Also unlike playing RPS with friends in meatspace, the computer isn’t go to cheat and change its play after you make yours. We set you, the player, to False. Why? I’m glad you asked. Let’s take a look at the body of our program the while loop:

Advantages of Rock Paper Scissor Game

Some of these advantages include

1.Helps in Decision Making. Rock Paper Scissors is a perfect game that helps in decision-making skills. ...
2.Reduces Anxiety and Stress. Playing RPS is a fun way to reduce anxiety and stress. ...
3.Increases Social Interaction. ...
4.Enhances Cognitive Function. ...
5.Boosts Morale.


thank
you