RATOS : THE RUN

A Project Report

on

Submitted For The Partial Fulfillment Of

Certificate Course On Python Programming

By

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ABSTRACT:

"RATOS : THE RUN" is an easy and simple game, which is developed based on the idea of "THE RACE BETWEEN THE RABBIT AND THE TORTOISE".

The graphics of the gameplay is good and smooth to control for the users. This game comes with a two-player mode. It is a racing-type game in which the dice will be throwed by the players. The dice consists of the numbers from 1 to 6. Based on the number on the dice throwed, the players moves on the board. The player who reaches the finish line is the "WINNER".

INTRODUCTION

PYTHON:

Python is an easy to learn, powerful programming language. It has efficient high-level data structures and a simple but effective approach to object-oriented programming. Python's elegant syntax and dynamic typing, together with its interpreted nature, make it an ideal language for scripting and rapid application development in many areas on most platforms.

TKINTER:

Tkinter is the inbuilt python module that is used to create GUI applications. It is one of the most commonly used modules for creating GUI applications in Python as it is simple and easy to work with. You don't need to worry about the installation of the Tkinter module separately as it comes with Python already. It gives an object-oriented interface to the Tk GUI toolkit.

GAME DESCRIPTION

RATOS : THE RUN game comes with a two-player mode. It is a racing-type game based on the theme of "**RACE BETWEEN RABBIT AND TORTOISE**" in which the dice will be throwed by the players. The dice consists of the numbers from 1 to 6. Based on the number on the dice throwed, the players moves on the path. There will be an individual path, which contains blocks. The player who reaches the last block of the path will be the "WINNER".

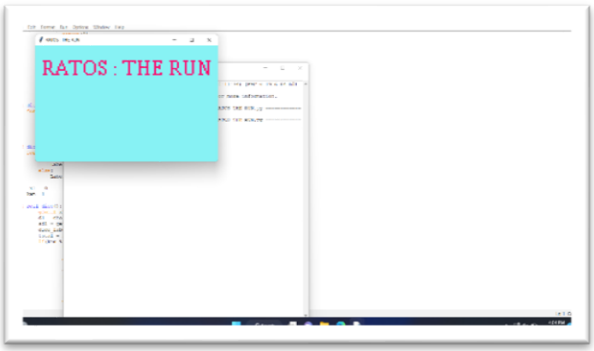
CODE

```
from tkinter import *
from random import *

root=Tk()
root.configure(bg="#83f0f2")
root.title("RATOS : THE RUN")
#root.attributes("-fullscreen",True)

def get_number(x):
      if x == '\u2680':
            return(1)
      elif x == '\u2681':
            return(2)
      elif x == '\u2682':
            return(3)
      elif x == '\u2683':
            return(4)
      elif x == '\u2684':
            return(5)
      elif x == '\u2685':
            return(6)

def dice(a):
    for i in range(60):
        if (i<=a):
            Label(root,bg="#f257a7",width=2,height=1).place(x=(i+5)*22,y=350)
        else:
            Label(root,bg="#0f0c69",width=2,height=1).place(x=(i+5)*22,y=350)

def dice2(b):
    for i in range(60):
        if (i<=b):
            Label(root,bg="#f257a7",width=2,height=1).place(x=(i+5)*22,y=425)
        else:
            Label(root,bg="#0f0c69",width=2,height=1).place(x=(i+5)*22,y=425)

x2 = x1 = 0
j = kam =1

def roll_dice():
        global x2,j,kam,x1
        d1 = choice(my_dice)
```

```
        sd1 = get_number(d1)
        dice_label1.config(text=d1)
        total = sd1
        if(kam %2 == 0):
                if (j==2):
                        x1 = (total-1)+x1
                else:
                        x1 = (total)+x1
                j+=1
                if (x1==59):
                        dice2(x1)
                        my_button.config(text="PLAYER-1")
                        result.config(text="PLAYER-2 HAS WON THE GAME
CONGRATULATIONS!!!")
                elif (x1>59):
                        x1=x1-total
                        total_label.config(text=f"PLAYER-2 NEEDED {59-x1} TRY
AGAIN!")
                        my_button.config(text="PLAYER-1")
                else:
                        dice2(x1)
                        total_label.config(text=f"PLAYER-2 ROLLED : {total}")
                        my_button.config(text="PLAYER-1")
        else:
                if (j==1):
                        x2 = (total-1)+x2
                else:
                        x2 = (total)+x2
                j+=1
                if (x2==59):
                        dice(x2)
                        result.config(text="PLAYER-1 HAS WON THE GAME
CONGRATULATIONS!!!")
                elif (x2>59):
                        x2=x2-total
                        total_label.config(text=f"PLAYER-1 NEEDED {59-x2} TRY
AGAIN!")
                        my_button.config(text="PLAYER-2")
                else:
                        dice(x2)
                        total_label.config(text=f"PLAYER-1 ROLLED : {total}")
                        my_button.config(text="PLAYER-2")
        kam +=1

my_dice = ['\u2680', '\u2681','\u2682','\u2683','\u2684','\u2685',]
```

```
title=Label(root,text=" RATOS : THE RUN ",font=("MS
Serif",40,"bold"),fg="#fc036b",bg="#83f0f2").pack(pady=25)

total_label = Label(root, text="", font=("Arial Black", 25), fg="#075e06",
bg="#83f0f2")
total_label.pack(pady=20)

result=Label(root,text="",font=("Arial Black",30),fg="#0f0c69",bg="#83f0f2")
result.pack(pady=20)

dice_label1 = Label(root, text='\u2685', font=("Helvetica", 125),
fg="#075e06",bg="#83f0f2")
dice_label1.place(x=700, y=450)

s1=Label(root,text=" 1 ",font=("Arial Black",30),fg="#0f0c69",bg="#83f0f2")
s1.place(x=50,y=330)
s2=Label(root,text=" 2 ",font=("Arial Black",30),fg="#0f0c69",bg="#83f0f2")
s2.place(x=50,y=402)

my_frame=Frame(root,bg="#83f0f2")
my_frame.place(x=1450,y=325)
f1=Label(my_frame,text=" E ",font=("Arial Black",25),fg="#0f0c69",bg="#83f0f2")
f1.pack()
f2=Label(my_frame,text=" N ",font=("Arial Black",25),fg="#0f0c69",bg="#83f0f2")
f2.pack()
f3=Label(my_frame,text=" D ",font=("Arial Black",25),fg="#0f0c69",bg="#83f0f2")
f3.pack()


my_button = Button(root, text="PLAYER-1", command=roll_dice, font=("Arial Black",
20),bg="#83f0f2",fg="#075e06")
my_button.place(x=680,y=625)

root.mainloop()
```

TESTING

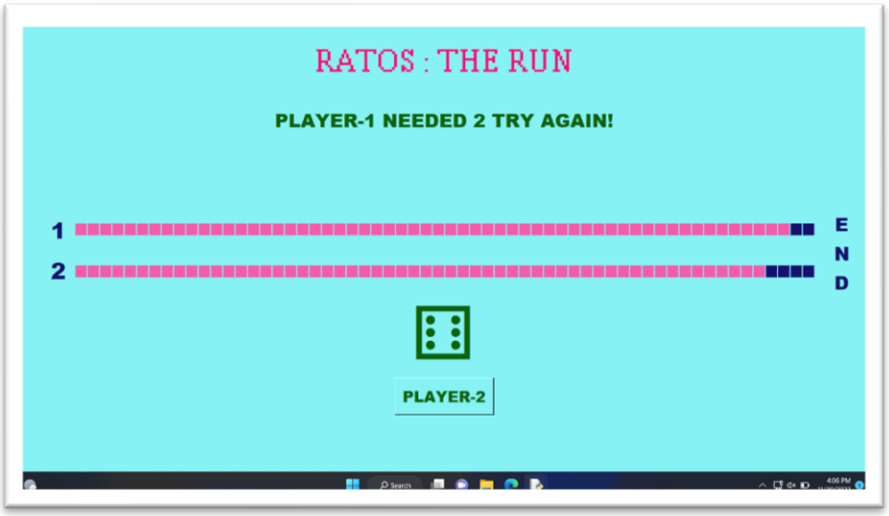

RATOS : THE RUN


RATOS : THE RUN
1
2
E
N
D
PLAYER-1


RATOS : THE RUN
PLAYER-1 ROLLED : 4
1
2
E
N
D
PLAYER-2


RATOS : THE RUN
PLAYER-2 ROLLED : 2
1
2
E
N
D
PLAYER-1


RATOS : THE RUN
PLAYER-1 ROLLED : 5
PLAYER-2 HAS WON THE GAME CONGRATULATIONS!!!
1
2
E
N
D
PLAYER-1



CONCLUSION

The game is designed for an entertainment purpose. It is a racing game that is purely dependent on the dice. Based on the number on the dice, the players will move on their tracks. Finally, it is really a good game which you can play having good graphic interface.

**********THE END**********