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Sem and Sub: 5th/DataScience

Topic: Tic Tac Toe Game

EXPLANATION

➤ Importing tkinter message box

```
import tkinter.messagebox
from tkinter import*
```

➤ Setting window Screen

```
root=Tk()
root.geometry("1350x750+0+0")
root.title("Zero Kanta")
root.configure(background= 'green')
```

➤ Setting Mainframe Screen

```
MainFrame = Frame(root, bg='white', bd=10, width=1350, height=600, relief=RIDGE)
MainFrame.grid(row=1,column=0)

RightFrame = Frame(MainFrame ,bd=10, width =900, height=500, pady=2,padx=10,bg="light green" ,relief=RIDGE)
RightFrame.pack(side=RIGHT)

LeftFrame = Frame(MainFrame ,bd=10 , width =360 , height=500, padx=10, pady=2, bg="white", relief=RIDGE)
LeftFrame.pack(side=LEFT)

LeftFrame1 = Frame(LeftFrame ,bd=10 , width =360 , height=200, padx=10, pady=2, bg="dark green", relief=RIDGE)
LeftFrame1.grid(row=0,column=0)

LeftFrame2 = Frame(LeftFrame ,bd=10 , width =360 , height=200, padx=10, pady=2, bg="dark green", relief=RIDGE)
LeftFrame2.grid(row=1,column=0)
```

➢ Setting player1 and player2 and its Values

```
player1=IntVar()
player2=IntVar()
player1.set(0)
player2.set(0)
buttons=StringVar()
```

➢ Checking buttons for X and O

```
click=True
def checker (buttons):
    global click
    if buttons["text"]==" "and click==True:
        buttons["text"]="X"
        click=False
        scorekeeper()
    elif buttons["text"]==" "and click==False:
        buttons["text"]="O"
        click=True
        scorekeeper()
```

➢ Checking for reset button for X and O

```
def Reset():
    button1['text']=" "
    button2['text']=" "
    button3['text']=" "
    button4['text']=" "
    button5['text']=" "
    button6['text']=" "
    button7['text']=" "
    button8['text']=" "
    button9['text']=" "

    button1.configure(background="gainsboro")
    button2.configure(background="gainsboro")
    button3.configure(background="gainsboro")
    button4.configure(background="gainsboro")
    button5.configure(background="gainsboro")
    button6.configure(background="gainsboro")
    button7.configure(background="gainsboro")
    button8.configure(background="gainsboro")
    button9.configure(background="gainsboro")
```

➢ Possible value for X

```python
def scorekeeper():
    if (button1[ "text"]=="X"and button2[ "text"]=="X"and button3[ "text"]=="X"):
        button1.configure(background="powderblue")
        button2.configure(background="powderblue")
        button3.configure(background="powderblue")
        n=float(player1.get())
        score=(n+1)
        player1.set(score)
        tkinter.messagebox.showinfo("winner X","you have won a game")
    if (button4[ "text"]=="X"and button5[ "text"]=="X"and button6[ "text"]=="X"):
        button4.configure(background="powderblue")
        button5.configure(background="powderblue")
        button6.configure(background="powderblue")
        n=float(player1.get())
        score=(n+1)
        player1.set(score)
        tkinter.messagebox.showinfo("winner X","you have won a game")
    if (button7[ "text"]=="X"and button8[ "text"]=="X"and button9[ "text"]=="X"):
        button7.configure(background="powderblue")
        button8.configure(background="powderblue")
        button9.configure(background="powderblue")
        n=float(player1.get())
        score=(n+1)
        player1.set(score)
        tkinter.messagebox.showinfo("winner X","you have won a game")
    if (button3[ "text"]=="X"and button5[ "text"]=="X"and button7[ "text"]=="X"):
        button3.configure(background="powderblue")
        button5.configure(background="powderblue")
        button7.configure(background="powderblue")
        n=float(player1.get())
        score=(n+1)
```

➢ Possible value for O

```python
    if (button1[ "text"]=="O"and button2[ "text"]=="O"and button3[ "text"]=="O"):
        button1.configure(background="powderblue")
        button2.configure(background="powderblue")
        button3.configure(background="powderblue")
        n=float(player2.get())
        score=(n+1)
        player2.set(score)
        tkinter.messagebox.showinfo("winner O","you have won a game")
    if (button4[ "text"]=="O"and button5[ "text"]=="O"and button6[ "text"]=="O"):
        button4.configure(background="powderblue")
        button5.configure(background="powderblue")
        button6.configure(background="powderblue")
        n=float(player2.get())
        score=(n+1)
        player2.set(score)
        tkinter.messagebox.showinfo("winner O","you have won a game")
    if (button7[ "text"]=="O"and button8[ "text"]=="O"and button9[ "text"]=="O"):
        button7.configure(background="powderblue")
        button8.configure(background="powderblue")
        button9.configure(background="powderblue")
        n=float(player2.get())
        score=(n+1)
        player2.set(score)
        tkinter.messagebox.showinfo("winner O","you have won a game")
    if (button3[ "text"]=="O"and button5[ "text"]=="O"and button7[ "text"]=="O"):
        button3.configure(background="powderblue")
        button5.configure(background="powderblue")
        button7.configure(background="powderblue")
        n=float(player2.get())
        score=(n+1)
        player2.set(score)
```

➢ Working Buttons

```python
btnReset = Button(LeftFrame2, text="Reset ",font=('Times 26 bold'), height=3, width=15, bg='gainsboro',command=Reset)
btnReset.grid(row=0, column=0,sticky =N+S+E+W)
btnNewGame = Button(LeftFrame2, text="NewGame ",font=('Times 26 bold'), height=3, width=15, bg='gainsboro',command=NewGa
btnNewGame.grid(row=0, column=1,sticky =N+S+E+W)

button1 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button1.grid(row=1, column=0,sticky =N+S+E+W)
button2 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button2.grid(row=1, column=1,sticky =N+S+E+W)
button3 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button3.grid(row=1, column=2,sticky =N+S+E+W)
button4 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button4.grid(row=2, column=0,sticky =N+S+E+W)
button5 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button5.grid(row=2, column=1,sticky =N+S+E+W)
button6 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button6.grid(row=2, column=2,sticky =N+S+E+W)
button7 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button7.grid(row=3, column=0,sticky =N+S+E+W)
button8 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button8.grid(row=3, column=1,sticky =N+S+E+W)
button9 = Button(RightFrame, text=" ",font=('Times 26 bold'), height=3, width=8, bg='gainsboro',command=lambda:checker(
button9.grid(row=3, column=2,sticky =N+S+E+W)
```