TIC - TAC - TOE

TEAM 3

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Team Members

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Abstract

First known use of tic-tac-toe is circa 1866,TIC TAC TOE is a simple,two-player game that,if played optimally by both players,will always result in a tie.The game is also called as noughts and crosses or Xs and Os. TIC-TAC-TOE is a game that is traditionally played by being drawn on paper,and it can be played on a computer or on a variety of media.

Rules

- The game is to be played between two players.
- One of the player choose X and other player choose O.

Rules

- The game starts with one of the player and the game ends with one of the player has one whole row/column/diagonal with the X or O.

- If no one wins then the game said to be draw.

Technical Stack

1. Language
   - python
2. Tool
   - Pycharm

Project Flow

DAY-1
We have done overall analysis of the project , then from t-kinter we imported message box , we build buttons and then we grid buttons.

DAY-2
We have done with our basic implementation of button clicked function and we created a disabled function.

DAY FLOW

DAY-3
We have worked on the number of ways to win the game by a player.

DAY-5
By the final day we are done with the implementation of whole game.

DAY-4
By fourth day we worked on whether the game is tie (or) not and we created a reset option to restart the game.

Day 1: Analysis

- We have done overall analysis of the project, then from tkinter imported message box,we build buttons and then we grid buttons.

```python
from tkinter import *
from tkinter import messagebox


root = Tk()
root.title('Tic - Tac - Toe')
#X starts so true
clicked = True
count = 0
```

```
#build our buttons
    b1 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b1))
    b2 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b2))
    b3 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b3))
    b4 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b4))
    b5 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b5))
    b6 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b6))
    b7 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b7))
    b8 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b8))
    b9 = Button(root, text=" ", font=("Helvetica", 20), height=3, width=6, bg="gold", command=lambda: b_click(b9))
# grid our buttons to the screen
    b1.grid(row=0, column=0)
    b2.grid(row=0, column=1)
    b3.grid(row=0, column=2)
    b4.grid(row=1, column=0)
    b5.grid(row=1, column=1)
    b6.grid(row=1, column=2)
    b7.grid(row=2, column=0)
    b8.grid(row=2, column=1)
    b9.grid(row=2, column=2)
```
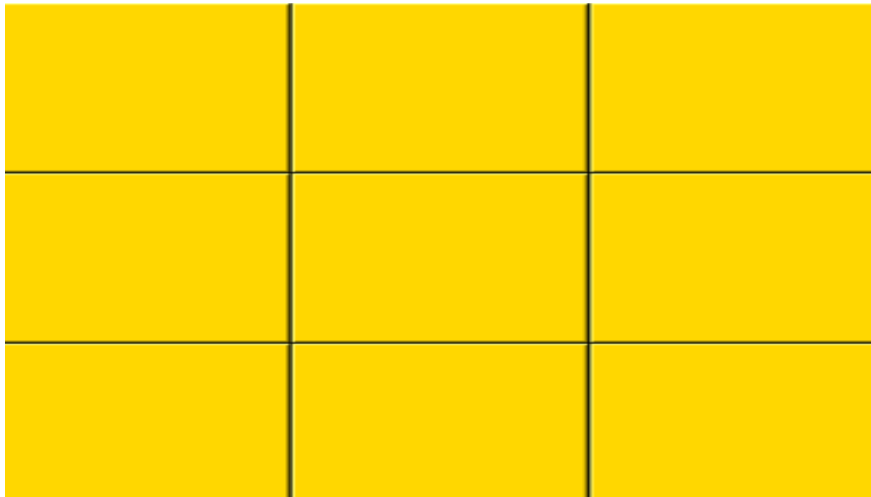
Day 2:

- we have done with our basic implementation of button clicked function and we created a disabled function.

```python
#button clicked function
def b_click(b):
    global clicked,count
    if b["text"] == " " and clicked == True:
        b["text"] = "X"
        clicked = False
        count += 1
        checkifwon()
    elif b["text"] == " " and clicked == False:
        b["text"] = "O"
        clicked = True
        count += 1
        checkifwon()
    else:
        messagebox.showerror("TIC TAC TOE","That box has already been selected\n pick another line")
```

```python
#disable buttons
def disable_all_buttons():
    b1.config(state=DISABLED)
    b2.config(state=DISABLED)
    b3.config(state=DISABLED)
    b4.config(state=DISABLED)
    b5.config(state=DISABLED)
    b6.config(state=DISABLED)
    b7.config(state=DISABLED)
    b8.config(state=DISABLED)
    b9.config(state=DISABLED)
```

Day 3:

- we have worked on the no.of ways to win the game by a player

```python
#check to see if someone won
def checkifwon():
    global winner
    winner = False
    if b1["text"] == "X" and b2["text"] == "X" and b3["text"] == "X":
        b1.config(bg="sky blue")
        b2.config(bg="sky blue")
        b3.config(bg="sky blue")
        winner = True
        messagebox.showinfo("TIC TAC TOE","CONGRATULATIONS X WINS!!")
        disable_all_buttons()
    elif b4["text"] == "X" and b5["text"] == "X" and b6["text"] == "X":
        b4.config(bg="sky blue")
        b5.config(bg="sky blue")
        b6.config(bg="sky blue")
        winner = True
        messagebox.showinfo("TIC TAC TOE","CONGRATULATIONS X WINS!!")
        disable_all_buttons()
    elif b7["text"] == "X" and b8["text"] == "X" and b9["text"] == "X":
        b7.config(bg="sky blue")
        b8.config(bg="sky blue")
        b9.config(bg="sky blue")
        winner = True
        messagebox.showinfo("TIC TAC TOE","CONGRATULATIONS X WINS!!")
        disable_all_buttons()
    elif b1["text"] == "X" and b4["text"] == "X" and b7["text"] == "X":
        b1.config(bg="sky blue")
        b4.config(bg="sky blue")
        b7.config(bg="sky blue")
        winner = True
```

```python
elif b1["text"] == "O" and b2["text"] == "O" and b3["text"] == "O":
    b1.config(bg="sky blue")
    b2.config(bg="sky blue")
    b3.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
elif b4["text"] == "O" and b5["text"] == "O" and b6["text"] == "O":
    b4.config(bg="sky blue")
    b5.config(bg="sky blue")
    b6.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
elif b7["text"] == "O" and b8["text"] == "O" and b9["text"] == "O":
    b7.config(bg="sky blue")
    b8.config(bg="sky blue")
    b9.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()

#check o wins
elif b1["text"] == "O" and b4["text"] == "O" and b7["text"] == "O":
    b1.config(bg="sky blue")
    b4.config(bg="sky blue")
    b7.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
```

```python
elif b2["text"] == "O" and b5["text"] == "O" and b8["text"] == "O":
    b2.config(bg="sky blue")
    b5.config(bg="sky blue")
    b8.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
elif b3["text"] == "O" and b6["text"] == "O" and b9["text"] == "O":
    b3.config(bg="sky blue")
    b6.config(bg="sky blue")
    b9.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
elif b1["text"] == "O" and b5["text"] == "O" and b9["text"] == "O":
    b1.config(bg="sky blue")
    b5.config(bg="sky blue")
    b9.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
elif b3["text"] == "O" and b5["text"] == "O" and b7["text"] == "O":
    b3.config(bg="sky blue")
    b5.config(bg="sky blue")
    b7.config(bg="sky blue")
    winner = True
    messagebox.showinfo("TIC TAC TOE", "CONGRATULATIONS O WINS!!")
    disable_all_buttons()
```

Day 4:

- By fourth day we worked on weather the game is tie or not and we created and a reset option to reapet the game.

```
#check if tie

if count == 9 and winner == False:

    messagebox.showinfo("TIC TAC TOE","IT'S A TIE!\n NO ONE WINS!")

    disable_all_buttons()
```
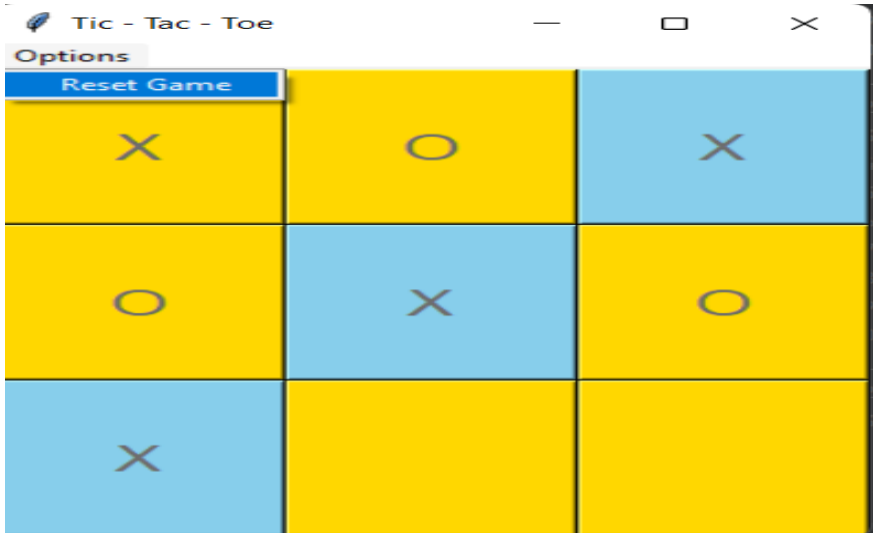
Day 5: overall game

```python
from tkinter import *
from tkinter import messagebox



root = Tk()
root.title('Tic - Tac - Toe')
#X starts so true
clicked = True
count = 0
```

challenges

- 1)when we are creating reset option we feel so difficult 2) And when we creating button clicked function

GITLAB URL

- https://gitlab.com/silk-wise-group-3/tic-tac-toe-wise-10.git