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# C:\Users\Admin\Desktop\Python\Programme\morpion\aide ligne pour gagner.py
001| from tkinter import *
002|
003| fenetre1 = Tk()
004| fenetre1.title('Tic Tac Toe')
005| fenetre1['bg']='white' # couleur de fond
006|
007| #création lancement
008| Frame1 = Frame(fenetre1,bg="red",borderwidth=2,relief=GROOVE)
009| Frame1.pack(side=LEFT,padx=10,pady=10)
010| Label(Frame1,text="Bonjour et bienvenue",fg="white",bg="red").pack(padx=10,pady=10)
011| Button(Frame1,text="C'est
parti!",fg='navy',command=fenetre1.destroy).pack(padx=10,pady=10)
012| fenetre1.mainloop ()
013|
014| #création séléction joueurs
015| fenetre2 = Tk()
016| fenetre2.title('Séléction joueurs')
017| fenetre2['bg']='white'
018| Frame2 = Frame(fenetre2, bg='purple',borderwidth=3,relief=GROOVE)
019| Frame2.pack(padx=10,pady=10)
020| Label(Frame2,text="Veuillez saisir le nom de votre joueur\n quand vous aurez terminer,
cliquez sur jouer!",fg="white",bg="purple").pack(padx=10,pady=10)
021| Label(Frame2,text="Joueur 1",fg="red",bg="white").pack(side=LEFT,padx=0,pady=1)
022| import tkinter
023| texte0=tkinter.Text(Frame2, width=10, height=0)
024| texte0.insert("end","          ")
025| texte0.pack(side=tkinter.RIGHT,padx=2,pady=0)
026| state=tkinter.DISABLED
027| Label(Frame2,text="Joueur 2",fg="blue",bg="white").pack(side=RIGHT,padx=0,pady=0)
028| texte1=tkinter.Text(Frame2, width=10, height=0)
029| texte1.insert("end","          ")
030| texte1.pack(side=tkinter.LEFT,padx=2,pady=3)
031| state=tkinter.DISABLED
032| Button(Frame2, text="Jouer",command=fenetre2.destroy).pack(padx=15,pady=15)
033| fenetre2.mainloop()
034|
035| #création grille
036| class Morpion(Tk):
037|     def __init__(self):
038|         Tk.__init__(self)
039|         self.title("Plateau ")
040|
041|         self.can = Canvas(self, width = 350, height = 350, bg = "white")
042|         self.can.pack(padx = 10, pady = 10)
043|         self.tracer_plateau()
044|
045|         self.bind("<Button>", self.analyser_position_clic)
046|
047|         self.bouton1 = Button(text="Recommencer",fg="white",bg="purple",
command=self.recommencer).pack(padx=10,pady=10)
048|         self.plateau = [0] * 10
049|         self.joueur = 1
050|
051|
052|     def tracer_plateau(self):
053|         self.can.create_line(123.3, 20, 123.3, 330, width = 4)
054|         self.can.create_line(226.6 , 20, 226 , 330, width=4)
055|         self.can.create_line(20, 123.3, 330, 123.3, width=4)
056|         self.can.create_line(20 ,226.3 ,330 ,226.3, width=4)
057|         self.can.create_line(20,20,330,20,width=4)
058|         self.can.create_line(20,20,20,330,width=4)
059|         self.can.create_line(20,330,330,330,width=4)
060|         self.can.create_line(330,20,330,330,width=4)
061|
062|     def changement_de_joueurs(self):
063|         if self.joueur == 1:
064|             self.joueur = 2
065|         else:
066|             self.joueur = 1
067|
068|     def tracer_croix(self, x, y):
069|         self.can.create_line(x-45.5, y-45.5, x+45.5, y+45.5, width = 5, fill = "red")
070|         self.can.create_line(x-45.5, y+45.5, x+45.5, y-45.5, width = 5, fill = "red")
071|
072|     def tracer_rond(self, x, y):
```

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073|            self.can.create_oval(x-51.5, y-51.5, x +51.5, y+51.5, fill = "blue")
074|            self.can.create_oval(x-46.5,y-46.5,x+46.5,y+46.5, fill = "ivory")
075|
076|        def analyser_position_clic(self, event):
077|            #Detection de la position de la souris dans le Canvas en fonction des cases
078|            # 1 | 2 | 3
079|            # - + - + -
080|            # 4 | 5 | 6
081|            # - + - + -
082|            # 7 | 8 | 9
083|
084|            if self.plateau[0] == 0:
085|                if event.x > 20 and event.x < 123:
086|                    if event.y > 20 and event.y < 123:
087|                        i = 1
088|                        self.x = 71.5
089|                        self.y = 71.5
090|                    if event.y > 123 and event.y < 226:
091|                        i = 4
092|                        self.x = 71.5
093|                        self.y = 174.5
094|                    if event.y > 226 and event.y < 330:
095|                        i = 7
096|                        self.x = 71.5
097|                        self.y = 277.5
098|                elif event.x > 123 and event.x < 226:
099|                    if event.y > 20 and event.y < 123:
100|                        i = 2
101|                        self.x = 174.5
102|                        self.y = 71.5
103|                    if event.y > 123 and event.y < 226:
104|                        i = 5
105|                        self.x = 174.5
106|                        self.y = 174.5
107|                    if event.y > 200 and event.y < 300:
108|                        i = 8
109|                        self.x = 174.5
110|                        self.y = 277.5
111|                elif event.x > 226 and event.x < 330:
112|                    if event.y > 20 and event.y < 123:
113|                        i = 3
114|                        self.x = 277.5
115|                        self.y = 71.5
116|                    if event.y > 123 and event.y < 226:
117|                        i = 6
118|                        self.x = 277.5
119|                        self.y = 174.5
120|                    if event.y > 226 and event.y < 330:
121|                        i = 9
122|                        self.x = 277.5
123|                        self.y = 277.5
124|
125|            if self.plateau[i] is 0:
126|                if self.joueur is 1:
127|                    self.plateau[i] = 1
128|                    self.tracer_croix(self.x, self.y)
129|                else:
130|                    self.plateau[i] = 2
131|                    self.tracer_rond(self.x, self.y)
132|
133|                self.changement_de_joueurs()
134|                self.test_gagnant()
135|
136|
137|        def recommencer(self):
138|            self.can.delete(ALL)
139|            self.tracer_plateau()
140|            self.plateau = [0] * 10
141|            self.joueur = 1
142|
143|        def test_gagnant(self):
144|            if self.plateau[1] == self.plateau[2] == self.plateau[3] and self.plateau[1]!= 0:
145|                self.can.create_line(20,70,330,70,width=20)
146|                self.plateau[0] = self.plateau[1]
147|
148|            elif self.plateau[4] == self.plateau[5] == self.plateau[6] and self.plateau[4]!=
```

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0:
149|          self.can.create_line(20,173,330,173,width=20)
150|          self.plateau[0] = self.plateau[1]
151|      elif self.plateau[7] == self.plateau[8] == self.plateau[9] and self.plateau[7]!=
0:
152|          self.can.create_line(20,276,330,276,width=20)
153|          self.plateau[0] = self.plateau[1]
154|      elif self.plateau[1] == self.plateau[5] == self.plateau[9] and self.plateau[1]!=
0:
155|          self.can.create_line(30,30,320,320,width=20)
156|          self.plateau[0] = self.plateau[1]
157|      elif self.plateau[3] == self.plateau[5] == self.plateau[7] and self.plateau[3]!=
0:
158|          self.can.create_line(30,320,320,30,width=20)
159|          self.plateau[0] = self.plateau[1]
160|      elif self.plateau[1] == self.plateau[4] == self.plateau[7] and self.plateau[1]!=
0:
161|          self.can.create_line(70,330,70,20,width=20)
162|          self.plateau[0] = self.plateau[1]
163|      elif self.plateau[2] == self.plateau[5] == self.plateau[8] and self.plateau[2]!=
0:
164|          self.can.create_line(176,330,176,20,width=20)
165|          self.plateau[0] = self.plateau[1]
166|      elif self.plateau[3] == self.plateau[6] == self.plateau[9] and self.plateau[3]!=
0:
167|          self.can.create_line(276,330,276,20,width=20)
168|          self.plateau[0] = self.plateau[1]
169|
170|
171| if __name__ == "__main__":
172|     fenetre = Morpion()
173| Frame3 = Frame(fenetre,bg="white",borderwidth=2,relief=GROOVE)
174| Frame3.pack(side=LEFT,padx=5,pady=5)
175| Label(Frame3,text="Joueur 1",fg="red",bg="white").pack(side=LEFT,padx=5,pady=5)
176| Frame4 = Frame(fenetre,bg="white",borderwidth=2,relief=GROOVE)
177| Frame4.pack(side=RIGHT,padx=5,pady=5)
178| Label(Frame4,text="Joueur 2",fg="blue",bg="white").pack(side=RIGHT,padx=5,pady=5)
179|
180|
181| fenetre.mainloop()
```