

ALGORITMIA E ESTRUTURAS DE DADOS

A BIBLIOTECA TKINTER / CUSTOMTKINTER

PARTE II - CONTAINERS

TKINTER

CUSTOM TKINTER

LICENCIATURA EM
TECNOLOGIAS E SISTEMAS DE INFORMAÇÃO PARA A WEB
#ESMAD #P.PORTO

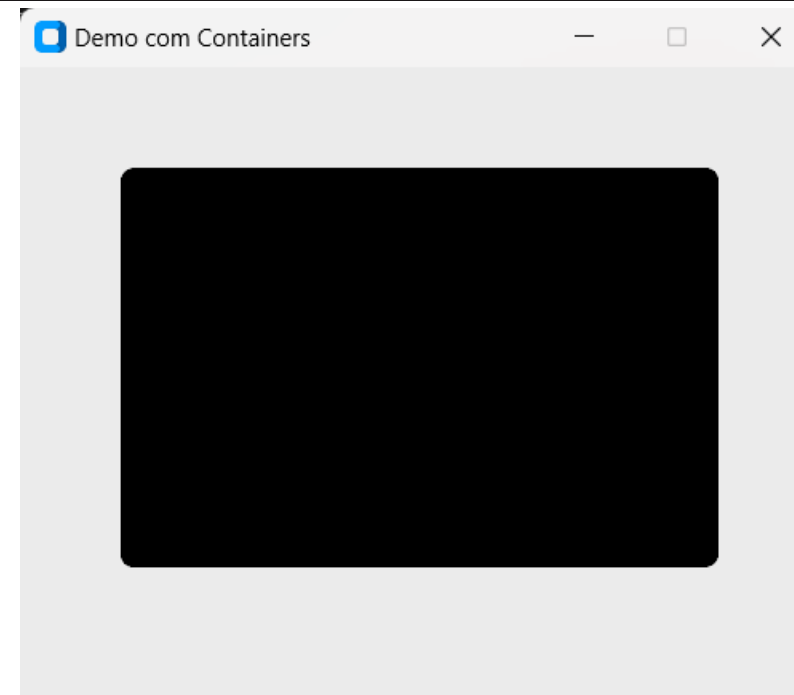
- ❑ GUI - *Graphical User Interface*
- ❑ Bibliotecas para GUI em python
- ❑ A BIBLIOTECA TKINTER VS CUSTOMTKINTER
- ❑ Biblioteca CustomTkinter
 - ❑ Instalação
 - ❑ Windows
 - ❑ *Widgets*
 - ❑ *Containers*



❖ Containers

❑ Frame

- ❑ width
- ❑ height
- ❑ border_width
- ❑ Border_color
- ❑ fg_color
- ❑ bg_color



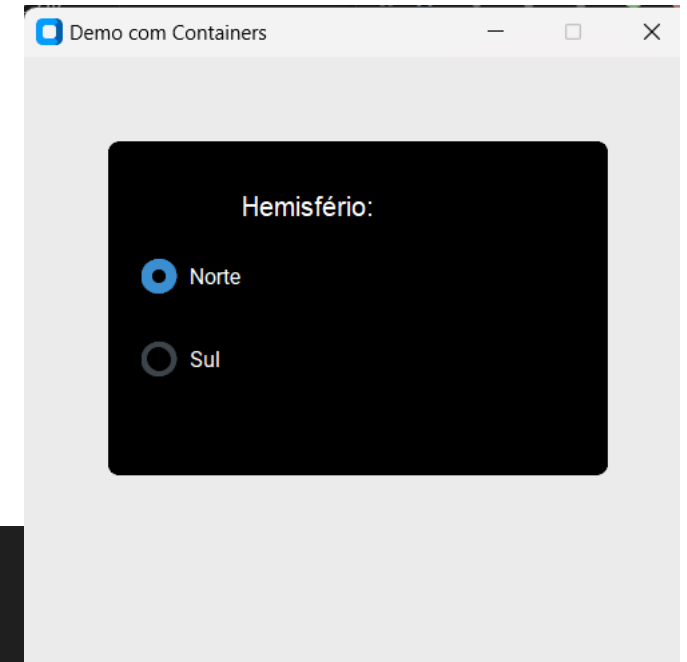
```
1  # FRAME
2  frameRadioButtons = customtkinter.CTkFrame(app, width=300, height=200, fg_color="black")
3  frameRadioButtons.place(x=50, y=50)
4
```

❖ Containers

❑ Frame

- ❑ width
- ❑ height
- ❑ border_width
- ❑ Border_color
- ❑ fg_color, bg_color

```
1  # Label
2  labelHemisferio = customtkinter.CTkLabel(frameRadioButtons, text= "Hemisfério:", text_color="white",
3                                          bg_color="transparent", font=("Helvetica", 16))
4  labelHemisferio.place(x=80, y=25)
5
6  # RadioButtons
7  radioVariable = customtkinter.StringVar(value="Norte")
8  radiobutton1 = customtkinter.CTkRadioButton(frameRadioButtons, text="Norte", text_color="white",
9                                              variable= radioVariable, value="Norte")
10 radiobutton1.place(x=20, y=70)
11 radiobutton2 = customtkinter.CTkRadioButton(frameRadioButtons, text="Sul", text_color="white",
12                                              variable= radioVariable, value="Sul")
13 radiobutton2.place(x=20, y=120)
```



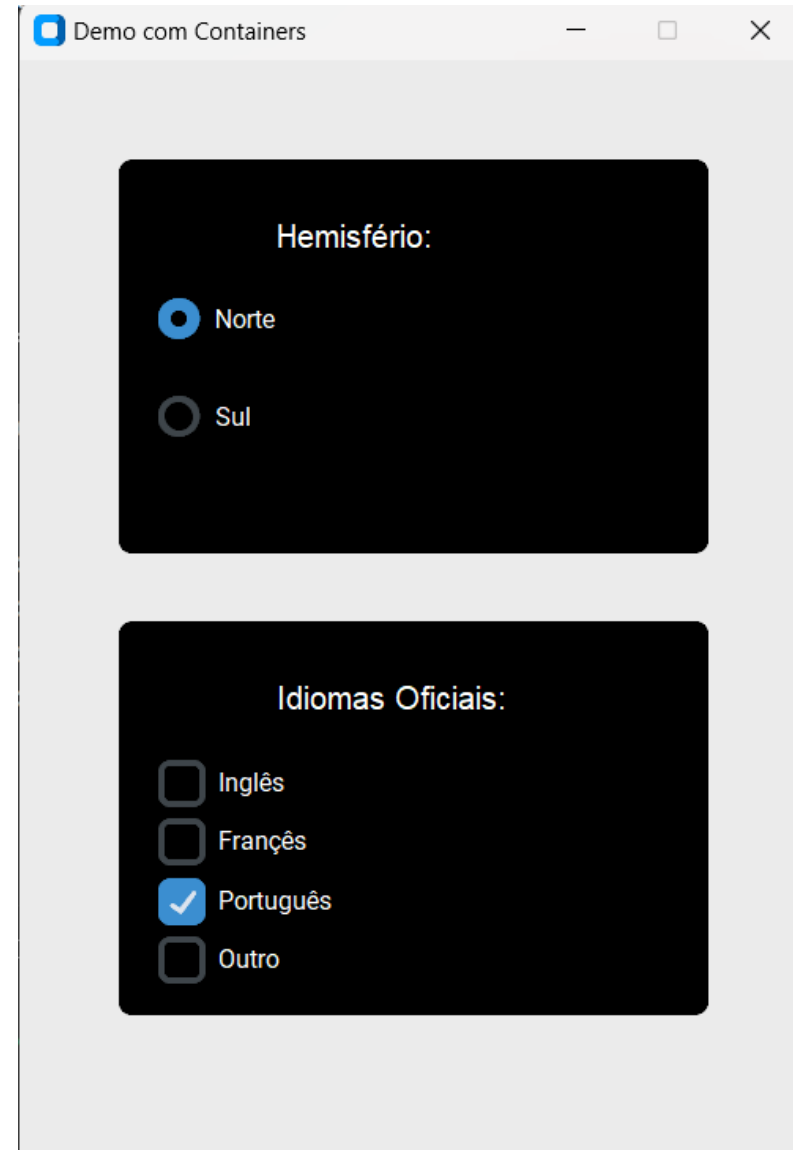
❖ Containers

❑ Frame

- ❑ width
- ❑ height
- ❑ border_width, border_color
- ❑ fg_color, bg_color



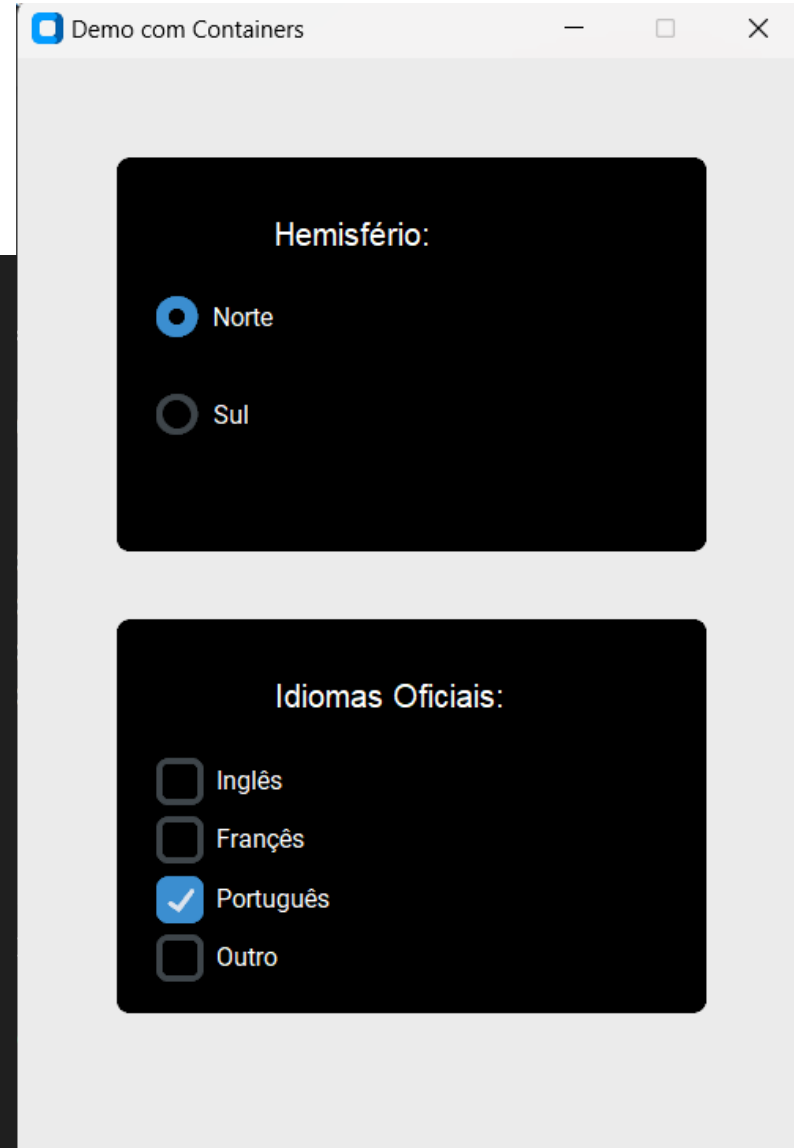
```
1 # FRAME 2
2 frameIdiomas = customtkinter.CTkFrame(app, width=300, height=200, fg_color="black")
3 frameIdiomas.place(x=50, y=285)
4
```



❖ Containers

❏ Frame

```
1  # Label
2  labelIdioma = customtkinter.CTkLabel(frameIdiomas, text= "Idiomas Oficiais:", text_color="white",
3                                     bg_color="transparent", font=("Helvetica", 16))
4  labelIdioma.place(x=80, y=25)
5
6  # CheckBox - Idioma Oficial
7  checkVar1 = customtkinter.StringVar(value="off")
8  checkVar2 = customtkinter.StringVar(value="off")
9  checkVar3 = customtkinter.StringVar(value="on")
10 checkVar4 = customtkinter.StringVar(value="off")
11
12 checkboxEN = customtkinter.CTkCheckBox(frameIdiomas, text="Inglês", text_color="white",
13                                     variable=checkVar1, onvalue="on", offvalue="off")
14 checkboxFR = customtkinter.CTkCheckBox(frameIdiomas, text="Français", text_color="white",
15                                     variable=checkVar2, onvalue="on", offvalue="off")
16 checkboxPT = customtkinter.CTkCheckBox(frameIdiomas, text="Português", text_color="white",
17                                     variable=checkVar3, onvalue="on", offvalue="off")
18 checkboxOT = customtkinter.CTkCheckBox(frameIdiomas, text="Outro", text_color="white",
19                                     variable=checkVar4, onvalue="on", offvalue="off")
20
21 checkboxEN.place(x=20, y= 70)
22 checkboxFR.place(x=20, y= 100)
23 checkboxPT.place(x=20, y= 130)
24 checkboxOT.place(x=20, y= 160)
```

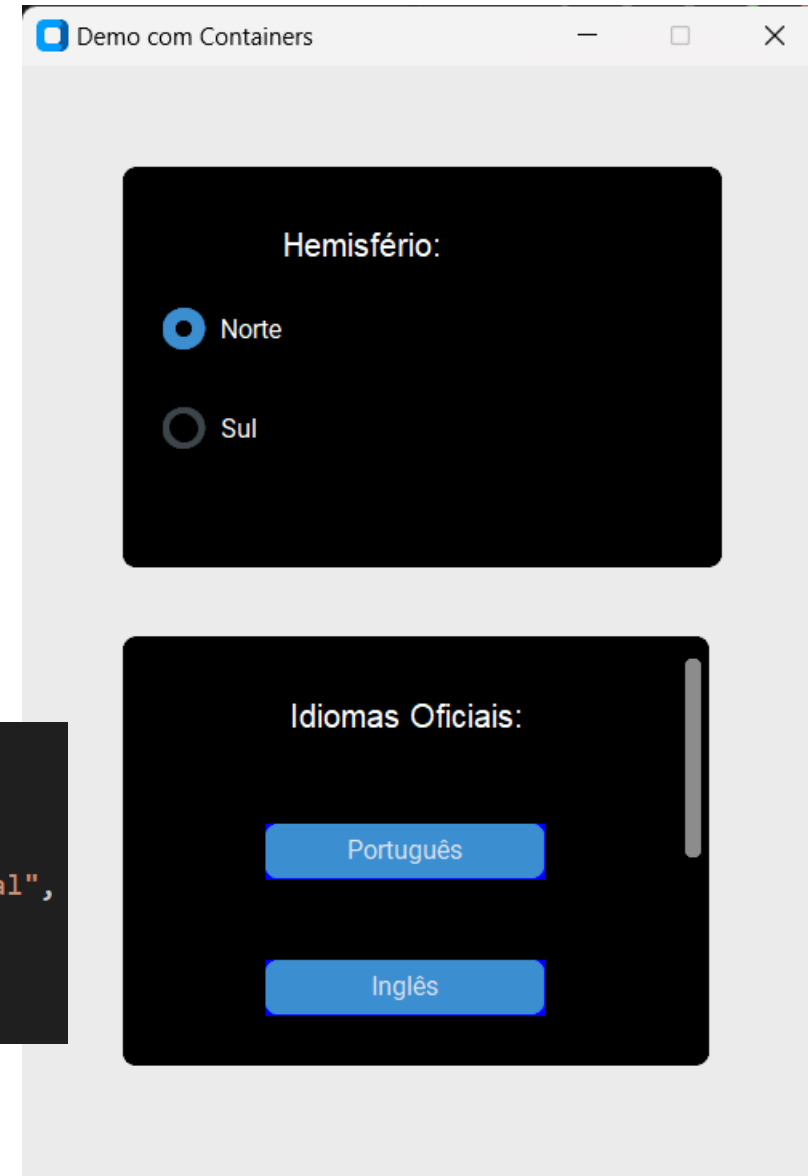


❖ Containers

❑ ScrollableFrame

- ❑ width
- ❑ height
- ❑ border_width, border_color
- ❑ fg_color, bg_color
- ❑ orientation ("horizontal", "vertical")

```
1 # FRAME 2
2 frameIdiomas = customtkinter.CTkScrollableFrame(app, width=270, height=200, orientation="vertical",
3                                                    fg_color="black")
4 frameIdiomas.place(x=50, y=285)
5
```



❖ Containers

❑ ScrollableFrame

- ❑ width
- ❑ height
- ❑ border_width, border_color
- ❑ fg_color, bg_color
- ❑ orientation ("horizontal", "vertical")

```
1 # Label
2 labelIdioma = customtkinter.CTkLabel(frameIdiomas, text= "Idiomas Oficiais:", text_color="white",
3                                     bg_color="transparent", font=("Helvetica", 16))
4 labelIdioma.pack(pady=20)
5
6 listIdiomas= ["Português", "Inglês", "Francês", "Mandarim", "Alemão"]
7 for i in range (len(listIdiomas)):
8     customtkinter.CTkButton(frameIdiomas, bg_color="blue", text=listIdiomas[i],
9                             width= 200, height=40).pack(pady=10)
10
```

