NETWORKZ SYSTEMS
AN ISO 9001:2015 CERTIFIED COMPANY
CHINNAKADA , KOLLAM

GUI IN PYTHON

A GUI (graphical user interface) makes the program easier to use. It allows you, as the programmer, to create screens, text boxes and buttons to help the user navigate through the program in a more user-friendly way. Tkinter is a library of features in Python that allows you to do this.

Tkinter is so lightweight and relatively easy to use for simple tasks compared to other toolkits.

Creating a GUI application using Tkinter is an easy task.

- **Import the Tkinter module.**
- **Create the GUI application main window.**
- **Add one or more of the widgets like labels, buttons, frames, etc. to the GUI application.**
- **Enter the main event loop to take action against each event triggered by the user**

Tkinter Widgets

- Button
- Canvas
- Checkbutton
- Entry
- Frame
- Label
- Listbox
- Menubutton
- Menu
- Message
- Radiobutton
- Text

Button

Python allows us to configure the look of the button according to our requirements.

W = Button(parent, options=value)

Parameters:

Activebackground:It represents the background of the button when the mouse hover the button.

Activeforeground:It represents the font color of the button when the mouse hover the button.

Command:It is set to the function call which is scheduled when the function is called.

Fg:Foreground color of the button.

Font:The font of the button text

Canvas

The canvas widget is used to add the structured graphics to the python application. It is used to draw the graph and plots to the python application.

w = canvas(parent, options=value)

bd	**Represents the border width. The default width is 2.**
bg	It represents the background color of the canvas.
height	It represents the size of the canvas in the vertical direction.
highlightcolor	It represents the highlight color when the widget is focused.
width	It represents the width of the canvas.

Checkbutton

It is used to implement the on/off selections.

w = checkbutton(master, options)

Entry

To accept the text strings from the user. It can only be used for one line of text from the user.

w = Entry (parent, options)

Frame

It acts like a container which can be used to hold the other widgets. The rectangular areas of the screen are used to organize the widgets to the python application.

w = Frame(parent, options)

Label

To provide the message to the user about other widgets used in the python application.

w = Label (master, options)

Listbox

To display the list items to the user. We can place only text items in the Listbox and all text items contain the same font and color.

w = Listbox(parent, options)

Menu Button

The Menubutton is used to implement various types of menus in the python application. A Menu is associated with the Menubutton that can display the choices of the Menubutton when clicked by the user.

w = Menubutton(Top, options)

Menu

The Menu widget is used to create various types of menus (top level, pull down, and pop up) in the python application

w = Menu(top, options)

Radio Button

It shows multiple choices to the user out of which, the user can select only one out of them

w = Radiobutton(top, options)

Tkinter geometry

The Tkinter geometry specifies the method by using which, the widgets are represented on display. The python Tkinter provides the following geometry methods.

The pack() method
The grid() method
The place() method

pack()

The pack() widget is used to organize widget in the block. The positions widgets added to the python application using the pack() method can be controlled by using the various options specified in the method call.

widget.pack()

Grid()

The grid() geometry manager organizes the widgets in the tabular form. We can specify the rows and columns as the options in the method call.

widget.grid(options)

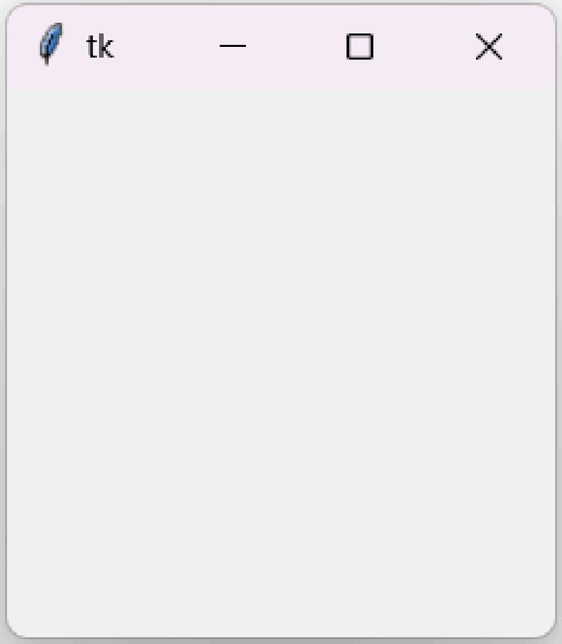
Place()

The place() geometry manager organizes the widgets to the specific x and y coordinates.

widget.place(options)

"create window"

```
from tkinter import*
window=Tk()
mainloop()
```



THANK YOU

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