**Python GUI Programming**

we will learn how to develop graphical user interfaces by writing some Python GUI examples using Tkinter package.

Tkinter package is shipped with Python as a standard package, so we don’t need to install anything to use it.

Tkinter package is a very powerful package. If you already have installed Python, you may use IDLE which is the integrated IDE that is shipped with Python, this IDE is written using Tkinter.

window.geometry('350x200')

## Create GUI application

|  |  |
| --- | --- |
|  | from tkinter import \*  window = Tk()  window.title("Welcome to GUI Application")  window.mainloop() Create a label widget   from tkinter import \*  window = Tk()  window.title("Welcome to GUI Application")  lbl = Label(window, text="Hello",font=("Arial Bold", 50)))  lbl.grid(column=0, row=0)  window.mainloop() |
|  | Adding a button widget  |  |  | | --- | --- | |  | from tkinter import \*  window = Tk()  window.title("Welcome to GUI Application")  window.geometry('350x200')  lbl = Label(window, text="Hello")  lbl.grid(column=0, row=0)  def event():     lbl.configure(text="Button was clicked !!")    btn = Button(window, text="Click Me" bg="orange", fg="red",command=event)  btn.grid(column=1, row=0)  window.mainloop() | |

## Get input using Entry class

|  |  |
| --- | --- |
|  | from tkinter import \*  window = Tk()  window.title("Welcome to GUI Application")  window.geometry('350x200')  lbl = Label(window, text="Hello")  lbl.grid(column=0, row=0)  txt = Entry(window,width=10)  txt.grid(column=1, row=0)  def clicked():      res = "Welcome to " + txt.get()        lbl.configure(text= res)  btn = Button(window, text="Click Me", command=clicked)  btn.grid(column=2, row=0)  window.mainloop() |

## combobox widget

from tkinter import \*

from tkinter.ttk import \*

window = Tk()

window.title("Welcome to GUI app")

window.geometry('350x200')

combo = Combobox(window)

combo['values']= (1, 2, 3, 4, 5, "Text")

combo.current() #set the selected item

combo.grid(column=0, row=0)

def clicked():

res = "Welcome to " + combo.get()

print(res)

btn = Button(window, text="Click Me", command=clicked)

btn.grid(column=2, row=0)

window.mainloop()

**Check Box:**

from tkinter import \*

from tkinter.ttk import \*

window = Tk()

window.title("Welcome to GUI app")

window.geometry('350x200')

chk\_state = BooleanVar()

chk\_state.set(True) #set check state

chk = Checkbutton(window, text='Choose', var=chk\_state)

chk.grid(column=0, row=0)

print(chk\_state.get())

window.mainloop()

### radio button

from tkinter import \*

from tkinter.ttk import \*

window = Tk()

window.title("Welcome to LikeGeeks app")

selected = IntVar()

rad1 = Radiobutton(window,text='First', value=1, variable=selected)

rad2 = Radiobutton(window,text='Second', value=2, variable=selected)

rad3 = Radiobutton(window,text='Third', value=3, variable=selected)

def clicked():

print(selected.get())

btn = Button(window, text="Click Me", command=clicked)

rad1.grid(column=0, row=0)

rad2.grid(column=1, row=0)

rad3.grid(column=2, row=0)

btn.grid(column=3, row=0)

window.mainloop()

**Scroll Bar**

from tkinter import \*

from tkinter import scrolledtext

window = Tk()

window.title("Welcome to GUI App")

window.geometry('350x200')

txt = scrolledtext.ScrolledText(window,width=40,height=10)

txt.grid(column=0,row=0)

window.mainloop()

## MessageBox

from tkinter import \*

from tkinter import messagebox

window = Tk()

window.title("Welcome to LikeGeeks app")

window.geometry('350x200')

def clicked():

    messagebox.showinfo('Message title', 'Message content')

btn = Button(window,text='Click here', command=clicked)

btn.grid(column=0,row=0)

window.mainloop()

## Add a Menu bar

from tkinter import \*

 from tkinter import Menu

 window = Tk()

 window.title("Welcome to GUI Application")

 menu = Menu(window)

 new\_item = Menu(menu)

 new\_item.add\_command(label='New')

 new\_item.add\_separator()

 new\_item.add\_command(label='Edit')

 menu.add\_cascade(label='File', menu=new\_item)

 window.config(menu=menu)

 window.mainloop()

### widgets to Notebooks

from tkinter import \*

from tkinter import ttk

window = Tk()

window.title("Welcome to LikeGeeks app")

tab\_control = ttk.Notebook(window)

tab1 = ttk.Frame(tab\_control)

tab2 = ttk.Frame(tab\_control)

tab\_control.add(tab1, text='First')

tab\_control.add(tab2, text='Second')

lbl1 = Label(tab1, text= 'label1')

lbl1.grid(column=0, row=0)

lbl2 = Label(tab2, text= 'label2')

lbl2.grid(column=0, row=0)

tab\_control.pack(expand=1, fill='both')

window.mainloop()