Programming for AI

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BS(AI)-IV

Changing the properties using dictionary method and config method

```python
from tkinter import *

window = Tk()
window.title("My First GUI Program")
window.minsize(width=500, height=300)

#Label

my_label = Label(text="I Am a Label", font=("Arial", 24, "bold"))
my_label.pack(side="left")

my_label["text"] = "New Text"
my_label.config(text="New Text")

#Button

button = Button(text="Click Me")
button.pack()
```

Adding event handler

```
#Button

def button_clicked():
    print("I got clicked")


button = Button(text="Click Me", command=button_clicked)
button.pack()
```

Input Field

```python
#Entry

input = Entry(width=10)
input.pack()
print(input.get())
```

Pack has following properties

padx= horizontal space before the widget

pady= vertical space afert the widget
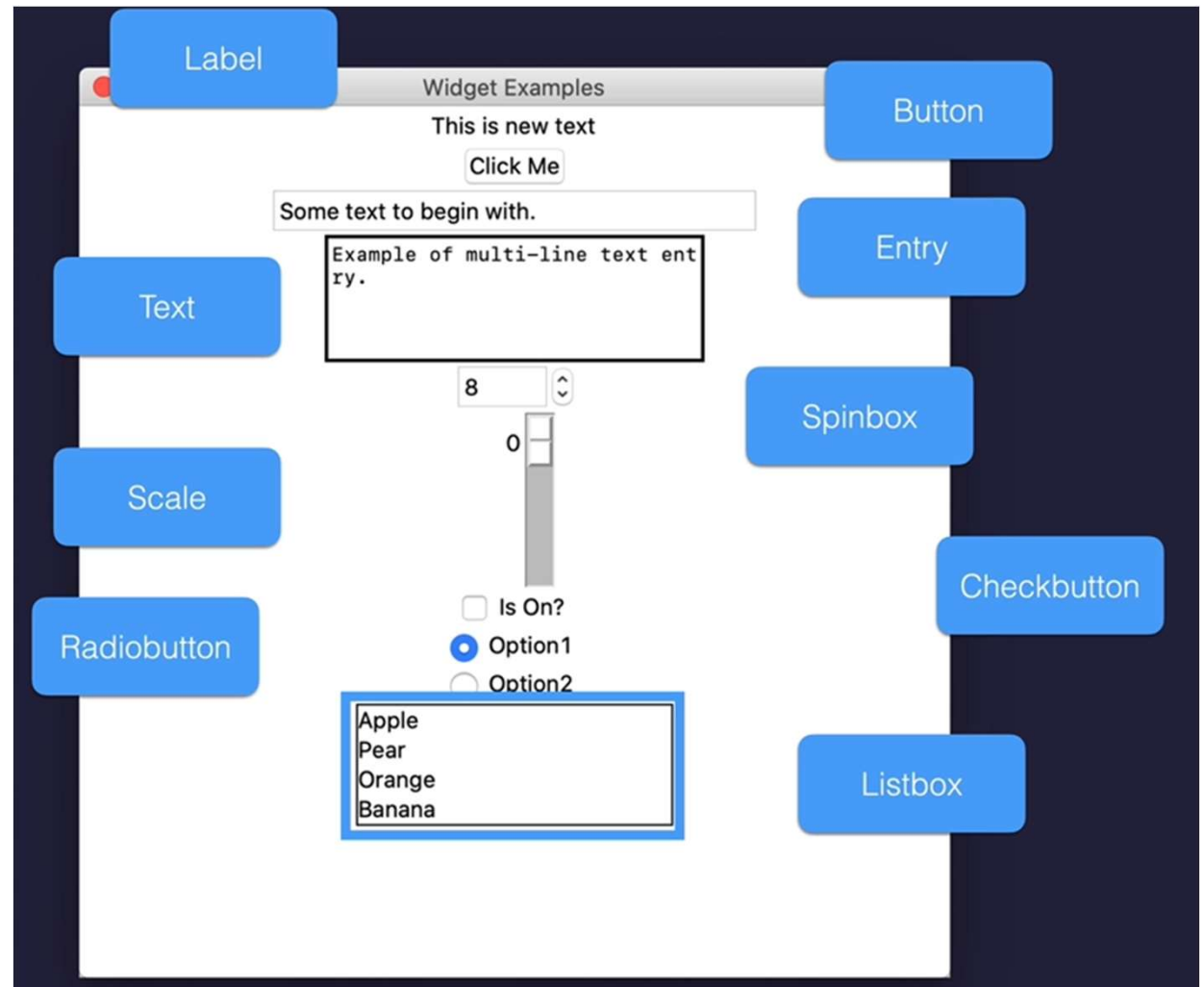
side: left/right/top/bottom

Task: Add an Event handler method

Type something in input field

Clicking on button will change the label text to Input field text

Some other Widgets

Text Widget

text=Text(height=30, width=40)

text.focus(),

text.insert(END, "Example")

text.get("1.0",END) //Starting from first line at character zero

Spin Box

```python
def spin_get():
    print(spin.get())

spin=Spinbox(from_=0, to=15, width=5, command=spin_get)
spin.pack()
```

Scale

```
def scale_get(value):
    print(value)


scale=Scale(from_=0, to=15, width=5, command=scale_get)
scale.pack()
```

Check Box

```python
def get_State():
    print(checked_state.get())



checked_state=IntVar()

checkb=Checkbutton(text="Yes",variable=checked_state,
command=get_State)
checkb.pack()
```

Radio Button

```
def get_State():
    print(radio_state.get())


radio_state=IntVar()

radiob1=Radiobutton(text="Male", value=1 ,variable=radio_state, command=get_State)
radiob2=Radiobutton(text="Male", value=2 ,variable=radio_state, command=get_State)

radiob1.pack()
radiob2.pack()
```

List Box

```python
def listbox_used(event):
    # Gets current selection from listbox
    print(listbox.get(listbox.curselection()))

listbox = Listbox(height=4)
fruits = ["Apple", "Pear", "Orange", "Banana"]
for item in fruits:
    listbox.insert(fruits.index(item), item)
listbox.bind("<<ListboxSelect>>",
listbox_used)
listbox.pack()
window.mainloop()
```