

# The `tkinter` Package

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Reference:

- [Docs](#)
- [Index of Tutorials](#)
- [An unofficial, but most helpful, guide:](#)
  - `Button`
  - `CheckBox`
  - `Entry`
  - `ListBox`
  - `Message`
  - `RadioButton`
  - `MessageBox`
  - `Menu`

The `tkinter` package provides an application with a graphical user interface capable of being run on a personal computer.

## Installation

The `tkinter` package is most likely already pre-installed in your Python installation.

## Usage

Usage example:

```
import tkinter

#
# INITIALIZE A NEW GUI WINDOW
#

window = tkinter.Tk()

#
# INITIALIZE SOME USER INTERFACE COMPONENTS
#

# MESSAGE

my_message = tkinter.Message(text="Hi. Welcome to my Example GUI
Application!", width=1000)

# ENTRY (TEXT INPUT) WITH LABEL
```

```
my_label = tkinter.Label(text="Input something here:")
entry_value = tkinter.StringVar()
my_entry = tkinter.Entry(textvariable=entry_value)
```

#### # RADIO BUTTONS

```
my_radio_label = tkinter.Label(text="Please selection one of the following
options:")
my_radio_value = tkinter.StringVar()
my_radio_a = tkinter.Radiobutton(text="Option A", value="A",
variable=my_radio_value)
my_radio_b = tkinter.Radiobutton(text="Option B", value="B",
variable=my_radio_value)
my_radio_c = tkinter.Radiobutton(text="Option C", value="C",
variable=my_radio_value)
```

#### # CHECKBUTTONS

```
my_checkbox_group_label = tkinter.Label(text="Please check one or more of the
following boxes:")
my_checkbox_a_val = tkinter.StringVar()
my_checkbox_a = tkinter.Checkbutton(text="Box A", variable=my_checkbox_a_val)
my_checkbox_b_val = tkinter.StringVar()
my_checkbox_b = tkinter.Checkbutton(text="Box B", variable=my_checkbox_b_val)
my_checkbox_c_val = tkinter.StringVar()
my_checkbox_c = tkinter.Checkbutton(text="Box C", variable=my_checkbox_c_val)
```

#### # LISTBOX (DROPDOWN SELECT)

```
my_select_label = tkinter.Label(text="Please select an item from the
dropdown:")
my_select = tkinter.Listbox()
my_select.insert(1, "First Item")
my_select.insert(2, "Second Item")
my_select.insert(3, "Third Item")
my_select.insert(4, "Fourth Item")
my_select.insert(5, "Fifth Item")
my_select.insert(6, "Sixth Item")
```

#### # BUTTON

```
def handle_button_click():
    print("-----")
    print("NICE. YOU CLICKED THE BUTTON")
    print("THE ENTRY'S INPUT VALUE IS:", my_entry.get())
    print("THE SELECTED RADIO BUTTON'S VALUE IS:", my_radio_value.get())
    print("THE CHECKBOX ON/OFF VALUES FOR A, B, C, RESPECTIVELY, ARE:",
[my_checkbox_a_val.get(), my_checkbox_b_val.get(), my_checkbox_c_val.get()])
    print("THE SELECTED DROPDOWN ITEM IS:",
```

```
my_select.get(my_select.curselection()))

my_button = tkinter.Button(text="Click Me", command=handle_button_click)

#
# BIND THE INDIVIDUAL COMPONENTS TO THE GUI WINDOW (PACK)
# ... THEN LAUNCH THE GUI WINDOW (MAINLOOP)
#

my_message.pack()

my_label.pack()
my_entry.pack()

my_radio_label.pack()
my_radio_a.pack()
my_radio_b.pack()
my_radio_b.pack()

my_checkbox_group_label.pack()
my_checkbox_a.pack()
my_checkbox_b.pack()
my_checkbox_c.pack()

my_select_label.pack()
my_select.pack()

my_button.pack()

window.mainloop()
```

