P python
TUTORIAL

Tkinter Radio Button

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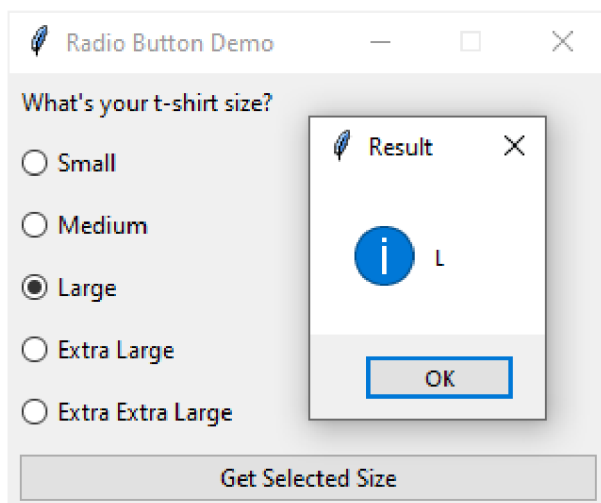**to help us ❤️ pay for the web hosting fee and CDN to keep the website running.**

Summary: in this tutorial, you'll learn how to use the Tkinter radio button widget to allow users to select between one of a number of mutually exclusive choices.

Introduction to Tkinter radio buttons

Radio buttons allow you to select between one of a number of mutually exclusive choices.

Typically, you use radio buttons together in a set. They're a good option if you have a few choices that you want users to select.

To create radio buttons, you use the `Radiobutton` widget. The following shows how to create radio buttons using the `tk.Radiobutton` constructor:

```
selected = tk.StringVar()
r1 = ttk.Radiobutton(container, text='Option 1', value='Value 1', variable=sel
r2 = ttk.Radiobutton(container, text='Option 2', value='Value 2', variable=sel
r3 = ttk.Radiobutton(container, text='Option 3', value='value 3', variable=sel
```

Each radio button has a different value. However, radio buttons in the same group share the same variable.

The `container` is the parent widget which you place the radio buttons on.

The `text` argument specifies the text that appears on the radio button.

The `value` argument specifies the value that the radio button will hold.

The `variable` must be a `tk.StringVar()` .

Tkinter radio button example

The following program illustrates how to use radio buttons. It returns the selected size once you click the **Get Selected Size** button.

```
import tkinter as tk
from tkinter import ttk
from tkinter.messagebox import showinfo


# root window
root = tk.Tk()
root.geometry('300x220')
root.resizable(False, False)
root.title('Radio Button Demo')


def show_selected_size():
    showinfo(
```

```python
        title='Result',
        message=selected_size.get()
    )


selected_size = tk.StringVar()
sizes = (('Small', 'S'),
         ('Medium', 'M'),
         ('Large', 'L'),
         ('Extra Large', 'XL'),
         ('Extra Extra Large', 'XXL'))


# label
label = ttk.Label(text="What's your t-shirt size?")
label.pack(fill='x', padx=5, pady=5)


# radio buttons
for size in sizes:
    r = ttk.Radiobutton(
        root,
        text=size[0],
        value=size[1],
        variable=selected_size
    )
    r.pack(fill='x', padx=5, pady=5)


# button
button = ttk.Button(
    root,
    text="Get Selected Size",
    command=show_selected_size)


button.pack(fill='x', padx=5, pady=5)
```
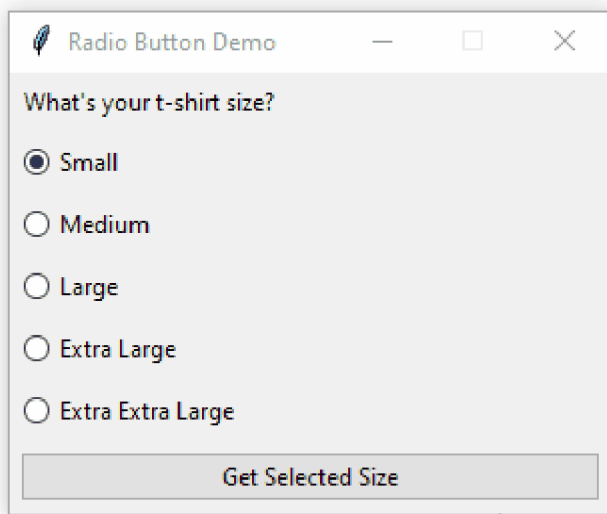
```
root.mainloop()
```

Output:

Summary

- Use `ttk.Radiobutton(text, variable)` to create a radio button; the variable should be a `tk.StringVar()`

- A set of radio buttons share the same `variable`.