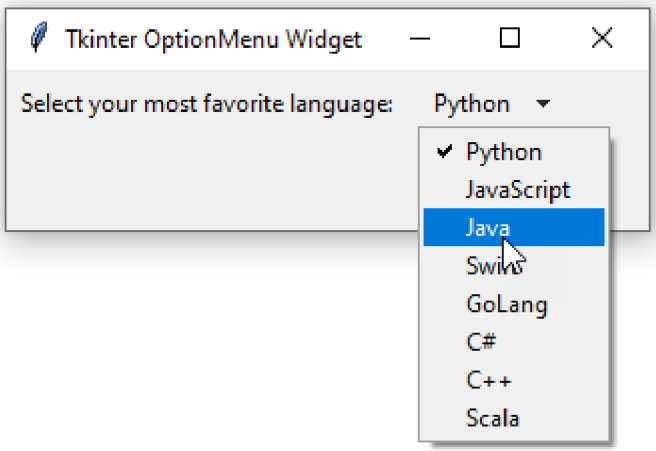
Tkinter OptionMenu

Summary: in this tutorial, you'll learn about the Tkinter `OptionMenu` widget to display a set of options in a drop-down menu.

Introduction to the Tkinter OptionMenu widget

The `OptionMenu` widget provides you with a predefined set of options in a drop-down menu.



To create a new `OptionMenu` widget, you use the `OptionMenu` constructor:

```
OptionMenu(container, variable, default=None, *values, **kwargs)
```

The `OptionMenu` constructor accepts a number of parameters:

- `container` is the parent widget of the `OptionMenu` widget.
- `variable` is a `tk.StringVar` object that holds the currently selected option of the `OptionMenu` .
- `default` is the default option that the widget displays initially.
- `values` is a list of values that appear on the drop-down menu.
- `kwargs` is the widget-specific configuration.

The `OptionMenu` allows you to change the direction of the drop-down menu via the `direction` option. The valid directions are `'above'` , `'below'` , `'left'` , `'right'` , or `'flush'` .

The `OptionMenu` widget also supports the `command` (https://www.pythontutorial.net/tkinter/tkinter-command/) option. This allows you to assign a callback that will be called after an item is selected.

Like other ttk widgets (https://www.pythontutorial.net/tkinter/tkinter-ttk/) , you can specify the style name for the `OptionMenu` using the `style` option.

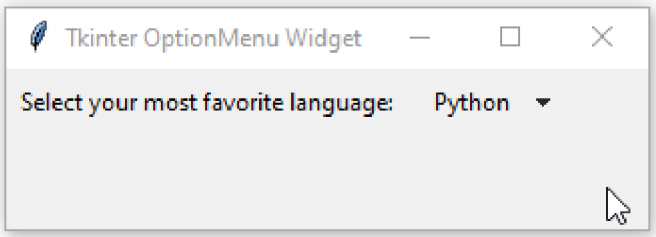
Tkinter OptionMenu widget example

The following example illustrates how to use an `OptionMenu` widget. When you select an item, it'll show your selection in a label:

```
import tkinter as tk
from tkinter import ttk


class App(tk.Tk):
    def __init__(self):
        super().__init__()
        self.geometry("320x80")
        self.title('Tkinter OptionMenu Widget')

        # initialize data
        self.languages = ('Python', 'JavaScript', 'Java',
                          'Swift', 'GoLang', 'C#', 'C++', 'Scala')
```

```
        # set up variable
        self.option_var = tk.StringVar(self)

        # create widget
        self.create_wigets()

    def create_wigets(self):
        # padding for widgets using the grid layout
        paddings = {'padx': 5, 'pady': 5}

        # label
        label = ttk.Label(self,  text='Select your most favorite language:')
        label.grid(column=0, row=0, sticky=tk.W, **paddings)

        # option menu
        option_menu = ttk.OptionMenu(
            self,
            self.option_var,
            self.languages[0],
            *self.languages,
            command=self.option_changed)

        option_menu.grid(column=1, row=0, sticky=tk.W, **paddings)

        # output label
        self.output_label = ttk.Label(self, foreground='red')
        self.output_label.grid(column=0, row=1, sticky=tk.W, **paddings)

    def option_changed(self, *args):
        self.output_label['text'] = f'You selected: {self.option_var.get()}'


if __name__ == "__main__":
    app = App()
    app.mainloop()
```

Output:



How it works.

First, define a list of strings used for displaying on the `OptionMenu` widget:

```
self.languages = ('Python', 'JavaScript', 'Java', 'Swift', 'GoLang', 'C#', 'C+
```

Second, define a `ttk.StringVar()` object that holds the currently selected item of the `OptionMenu` in the `__init__()` method:

```
self.option_var = tk.StringVar(self)
```

Third, create a new instance of the `OptionMenu` widget:

```
option_menu = ttk.OptionMenu(
    self,
    self.option_var,
    self.languages[0],
    *self.languages,
    command=self.option_changed)
```

Note that if you skip the default value `self.languages[0]`, the first item of the `OptionMenu` will vanish.

The `option_changed()` method will be executed after an item is selected. The method sets the text for the `output_label` to the selected item:

```
self.output_label['text'] = f'You selected: {self.option_var.get()}'
```

Summary

- Use Tkinter `OptionMenu` widget to provide users with a fixed set of choices in a drop-down menu.
- Always specify the default value for the `OptionMenu` constructor.