

PySimpleGUI: GUI for dummies

`pip3 install pysimplegui`

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Introduction

- What is it?
PySimpleGUI is a module that wraps several packages to create an easy and fast to use Guided User Interface (although you can easily complicate it!)

In resume it allows you to:

1. Create an interface: Logic structure, automatic positioning of elements
2. Handle events: Pop-up windows, error messages, plot results...

- 200+ Demo programs & Cookbook for rapid start.
- Main doc is www.PySimpleGUI.org.

Negative points:

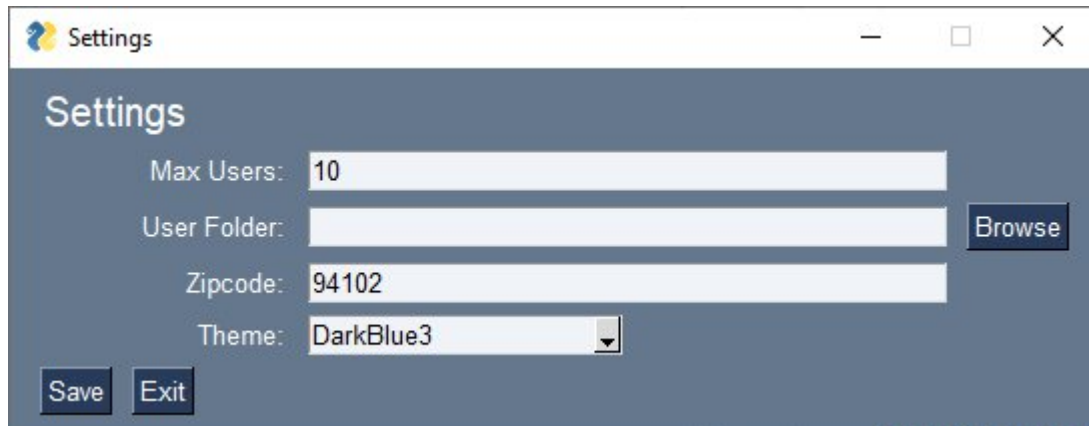
- Sometimes is tricky to find the how-to-dos: many examples but... very diverse!

Starting:

- Code: The GUI is an infinite loop that reads the window

```
while True: # Event Loop
    event, values = window.read()
    if event == sg.WIN_CLOSED or event == 'Exit':
        break
```

- The layout is an n x m matrix
Example from the **Demo** "Save and Load Program Settings"



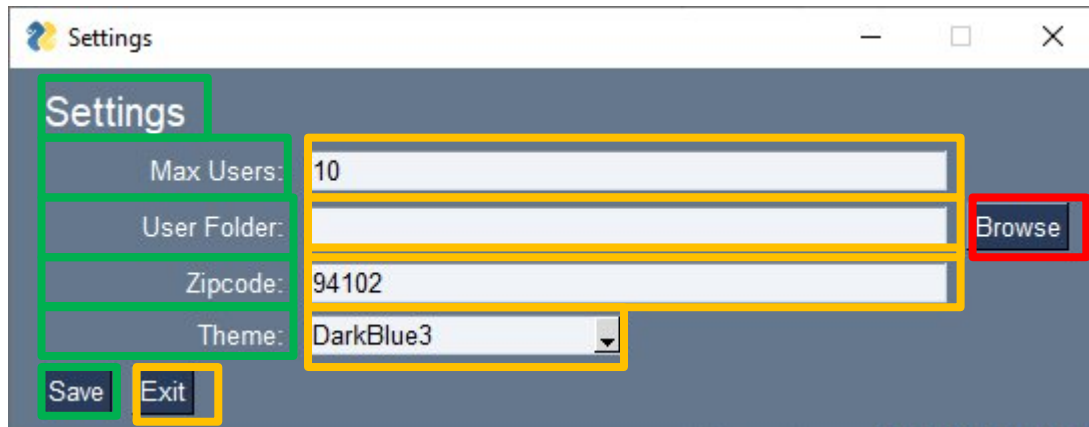
Starting:

- Code: The GUI is an infinite loop that reads the window

```
while True: # Event Loop
    event, values = window.read()
    if event == sg.WIN_CLOSED or event == 'Exit':
        break
```

- The layout is a list of lists

Example from the **Demo** "Save and Load Program Settings"



```
layout = [[ el11 ],
           [ el21 , el22],
           [el31, el32, el33],
           [el41, el42],
           [el51, el52],
           [el61, el 62]]
```

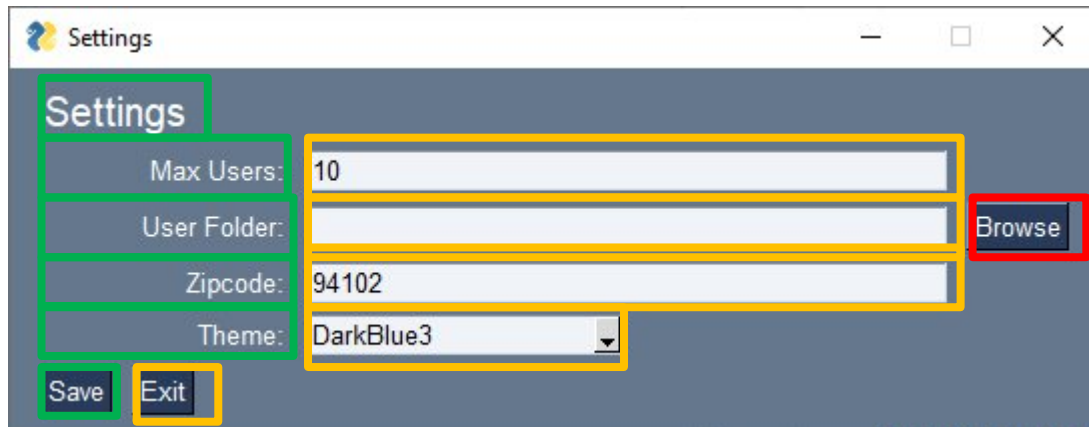
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size of elements
is automatically
assigned, but we
can always
specify it

Elements, events and values

Elements: text,checkboxs, buttons, input text, output text...

Events: Activated by buttons (usually)

Values: A dictionary with the data of every element in the GUI.
The values dictionary allows us to 'read' the GUI

Examples

- `demoGUI.py`: basic layout, referencing
- `demoplotGUI.py`: How to plot matplotlib figures
- `democomplexGUI.py`: Using interactive matplotlib plots
- `democlickGUI.py`: Example using the Graph element to plot and play with data points