GettingStartedwith Raspberry Pi GUI

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Agenda

- → What is a GUI
- --> Introduction to Tkinter
- → Tkinter Widgets
- --> Geometry Management
- --> Organizing Layouts and Widgets
- → Binding Functions
- → Introduction of PiRelay
- → Project Home Automation GUI

What is a GUI?

GUI is a desktop app which helps you to interact with the computers

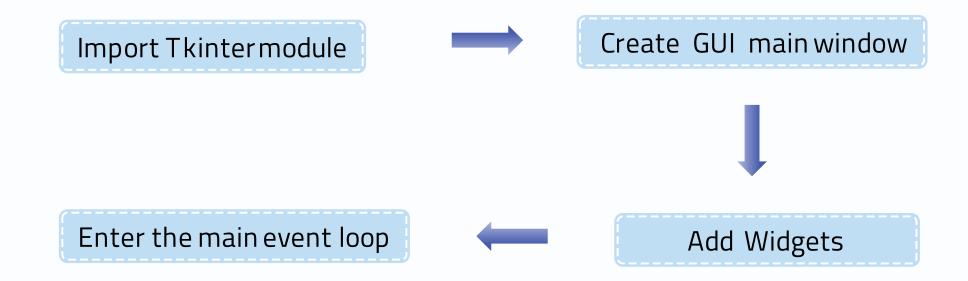
GUI apps like **Text-Editors** are used to create, read, update and delete different types of files

GUI apps like Sudoku, Chess and Solitaire are games which you can play

GUI apps like Google Chrome and Firefox are used to browse through the Internet.

What is Tkinter?

Tkinter is an inbuilt python module used to create GUI apps



TkinterWidgets

Tkinter provides various controls, such as buttons, labels and text boxes used in a GUI application. These controls are commonly called widgets.

 Label
 Button
 Entry
 Frame

 Menu
 Radiobutton
 Toplevel
 & manu more...

Label Widget

It refers to the display box where you can put any text or image which can be updated any time as per the code.

```
w = Label(master, option=value)
Master - It is the parameter used to present the
    parent window
```

- **bg ->** background color
- **bd** -> size of the border. Default is 2
- **fg ->** foreground color i.e. the text
- image -> to display image in label

- text -> label text
- **height ->** height of the label
- width -> width of the label
- Many more.....!!

ButtonWidget

The Button widget is used to display buttons in your application.

```
w = Button(master, option=value)
Master - It is the parameter used to present the
    parent window
```

- **bg** -> background color
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GeometryManagement

All Tkinter widgets have access to specific geometry management methods, which have the purpose of organizing widgets throughout the parent widget area.

Pack

It organizes the widgets in the block, which mean it occupies the entire available width

Grid

It organizes the widgets in table-like structure

Place

It's used to place the widgets at a specific position you want.

Any Questions?

Share your feedback at: rd@sb-components.co.uk



66 Thank you for watching...! 77