Ben Woodfield Tkinter GUI Basics

First Tkinter GUI / A simple Window

Ok, so if you open up Python, and open up an Edit window (for longer code writing) if you type in this exactly you should see a simple GUI:

(NOTE If you are using any Python 2 version, you will need to refer to tkinter with a Capitol T – Tkinter – so below is for Python3, for python 2 you type: from Tkinter import *)

```
from tkinter import *

top = Tk()
top.minsize(400,400)

top.mainloop()
```

Now – after every example, SAVE and then RUN your code. Once you have saved it you can select Run from the menu, or hit F5 – if you have many windows open, your small new program may be lost behind others.

I will explain this code line by line:

- from tkinter import * Imports the parts of Tkinter that we need to make this GUI. I do not know exactly what the * imports, but if you just type import tkinter you will be limited to what features you can use. Now if you were to import Everything in to Python it would start to run a little slowly.
- top = Tk(): Tk() is the name for your ROOT window. It is the main window that you will see when you run the program. You can have more windows (sub-windows) but this will always be the main one. Some people call it a Parent window. I have called it "top" as it is the top-level window. You can replace top for any word name, just keep it simple to use and if you change it in the future you will need to change everything-else named top.
- top.minsize (400, 400): This line tells Python that we want to make the window a certain size. 400 x 400 is a fairly standard size. The two numbers represent WIDTH and HEIGHT. You can change these values and play around with the size to suit your GUI. If we REMOVE this line, you will get a very small square window! There are other ways to set the width and height, but for now this is the simplest way to explain.
- top.mainloop(): This is a loop that makes your program run. Without this line Python will not make the GUI window appear. This loop makes Python display your GUI window until told not to (until you close it)

When you run this program from Python you should see a small grey window with a title called "Tk" on the top-bar of the GUI.

If you have any problems, send me a copy of the specific error, or try to take a screenshot of the Error message, and we will try and resolve it from there.

NEXT: The next document will be a Tkinter GUI very similar to this first one, but we will add some features. We will change the title and add a QUIT button to exit the GUI cleanly and easily without any errors!