

Python GUIs

Using Tkinter with the ttk library to program basic graphical user interfaces in vanilla Python

Tkinter

- Tkinter is a GUI package included with Python
- It's the “inter”face with Tk, which is the GUI toolkit for TCL (Tool Command Language)
- TCL and Tk are both interpreted and are platform-independent
- C and Perl also have native Tk bindings
- Other common libraries are WxPython, PyQt, PyGtk

The ttk library

- included in Tk 8.5
- automatically replaces the default TK Button, Checkbutton, Entry, Frame, Label, LabelFrame, Menubutton, PanedWindow, Radiobutton, Scale, and Scrollbar widgets
- ttk widgets not included in Tk are Combobox, Notebook, Progressbar, Separator, Sizegrip and Treeview

Example

```
percSpin = Spinbox(parent, from_=0.0, to=20.0,  
format='%3.1f', increment=0.1, width=4,  
textvariable=interest)
```

```
percSpin.pack()
```

Functions

```
def calculate():  
    try:  
        ln = loans.get()  
        i = intr.get()  
        yr = years.get()  
        final = compound(ln, i, yr)  
        pay = round(final/yr/12, 2)  
        sal = round(pay*10*12, 2)  
        interestPaid = final - ln  
        total.set("$"+str(round(final, 2)))  
        payment.set("$"+str(pay))  
        salary.set("$"+str(sal))  
        interest.set("$"+str(round(interestPaid, 2)))  
    except ValueError:  
        pass
```