



pyGTK



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What GTK+

- ❖ GTK (GIMP Toolkit) is basically a toolkit for creating Graphical User Interfaces
- ❖ It works on a wide range of platforms including (but not limited to) Windows, Linux, mobile, and MacOS
- ❖ Additionally, supports a wide-ass range of languages:
 - C#
 - C++
 - Python
 - Java
 - AND MORE



Why GTK+

- ❖ GTK+ allows for relatively easy data visualization within a GUI
- ❖ Comprehensive object oriented structure allows for versatile yet relatively simple implementations
- ❖ Cross platform with bindings for pretty much most languages you might need



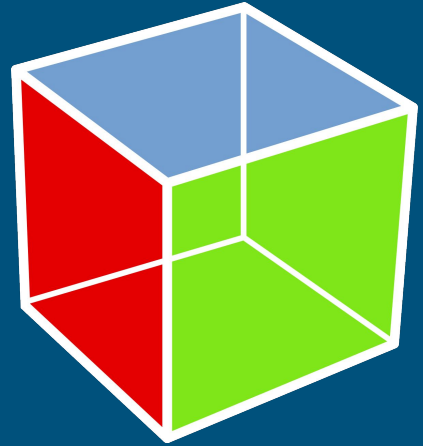
Tutorial: Goal

- ❖ Our goal will be to create an application that allows us to view, sort, and filter data.
- ❖ Have the option of selecting file to interpret
 - We won't actually interpret it because I am inept
- ❖ Display it in at least a par formatting



Tutorial: Widgets/Windows/Box

- ❖ An application consists of a window(s) with widgets.
- ❖ These Widgets are the buttons, text entry, data display, etc.
- ❖ They communicate through sending/receiving signals and invoking callback functions
- ❖ Properties describe the state and configuration of the widgets.
- ❖ Finally, the widgets are placed inside layout containers (many kinds of containers) which are then placed in the window



Tutorial: Code

❖ The code for the full application was written by me with various snippets and information drawn from:

- [GTK+ 3 Reference](#)
- [Python GTK+ 3 Tutorial](#)
- [GTK+ 3](#)



Challenges

❖ I mainly faced two challenges whilst working on this project:

- Some functions and options had deprecated from GTK+ 2 to 3 so sometimes, the tutorials would give deprecation warnings
- Installing the damn thing was a HUGE pain as command line methods of instal would not work on windows and I had to download and install a miniature GNN for Windows 64 (MingW-w64) but could not get Anaconda to recognize the location where GTK was (so I couldn't use Jupyter). Then I couldn't get it Mingw64 to also install Pandas, thus why the program is only a proof of concept. At some point I went and bought another hard drive to install linux but ended up basically in the same place, except it was because jhbuild was trying to install the necessary libraries using Python 2, but I only had Python 3 installed, thus causing an error. I also could not find help online as people often had different problems. Point is, installation was rather complicated.

