Assignment 2 - bonus part

Some tips for **Graphical Interface**

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Here's a brief guide on installing GTK on Debian/Ubuntu and macOS, and how to compile and run a simple GTK example (`Gtk_example.c`).

1   Installing GTK

- Installing GTK on Debian/Ubuntu:

  1. Open a terminal and Update the packages:
     `sudo apt update`
     `sudo apt upgrade`

  2. Install the GTK development package:
     `sudo apt install libgtk-3-dev`

- Installing GTK on macOS:

  1. Install Homebrew if you haven't already.

  2. Install GTK using Homebrew:
     `brew install gtk+3`

2   Compiling and running `Gtk_example.c`

Open a terminal. Navigate to the directory containing `Gtk_example.c`. Compile the program using gcc and link against the GTK library:

`gcc -o Gtk_example Gtk_example.c ‘pkg-config --cflags --libs gtk+-3.0‘`

If you have MacOS, you have add a few more things probably. Once compiled successfully, run the executable:

`./Gtk_example`

If you run the code using VScode, probably you will see the following error:

```
/snap/core20/current/lib/x86_64-linux-gnu/libstdc++.so.6:
version 'GLIBCXX_3.4.29' not found
(required by /lib/x86_64-linux-gnu/libproxy.so.1)

Failed to load module:
/home/pedram/snap/code/common/.cache/gio-modules/libgiolibproxy.so

./Gtk_example: symbol lookup error:

/snap/core20/current/lib/x86_64-linux-gnu/libpthread.so.0:
undefined symbol: __libc_pthread_init, version GLIBC_PRIVATE
```

The error message you're encountering indicates that there are compatibility issues with your system's libraries. It says that you are using a snap version of Visual Studio Code (/snap/code/-common/.cache/ gio-modules/libgiolibproxy.so), which may have its own set of libraries that are conflicting with your system libraries.

To resolve this issue, you can try running your GTK application in a different environment or outside of the snap version of Visual Studio Code. Easiest way is just to **Run the Application Outside of Snap**. Instead of running your GTK application from within the snap version of Visual Studio Code, try running it from a regular **terminal**. This will execute your application in your system's environment rather than the snap environment. First, navigate to the directory where your compiled program is located:

`cd /path/to/your/compiled/program`

Then, run your program:

`./GTK_example`

A small window will appear with two boxes that you can type in, and every time you click on "Submit" it will print them in the terminal environment.