

Assignment 1 - bonus part

Some tips for **Option 2: Graphical Interface**

Pedram Pasandide

The Option 1, need some creativity and considering probabilities of different scenarios to achieve a higher change to solve the game automatically. Like I said the chances must be $(\text{number of bombs})\% < \text{Chance} < (100 - \text{number of bombs})\%$, which in this case $\text{number of bombs} = 15$. Closer to 15%, means less bonus!

About **Option 2**, download the files from my [GitHub](#) under the Assignment 1 folder, and follow the steps:

1. Install GTK:

On **Debian/Ubuntu**:

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

```
sudo apt-get install libgtk-3-dev
```

2. Make sure all the files (`bomb.png`, `unclicked.png`, and `GTK_sample.c`) are in the same directory.

3. Compile the source code `GTK_sample.c` with:

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

4. Run the object file `GTK_sample` with:

```
./GTK_sample
```

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_sample: 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 appears 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. Here are a couple of options.

Easiest way is just **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_sample
```

A small window will appear showing the image `unclicked.png`, and if you click on it will switch to show `bomb.png`.

Try to understand this code before you move on to `main.Graphic.c`. Read all the comment withing the code. Mostly, what you need to do is implement the logic that you developed in `main.c` into `main.Graphic.c`. At the end your code must be able to produce something like the picture `GraphicalSample.png`. Of course, feel absolutely free to ask any questions you may have! I want to assure you that successfully completing this course is within reach for just about anyone – it's quite manageable! Remember, I'm not here to push you into learning; instead, I encourage you to explore and go the extra mile. That's why there are various optional parts in this course. If you're eager to gain some truly valuable knowledge, consider going above and beyond the basics. One way to do this is by taking on bonus questions or diving into optional projects within the course!