## Remove all unused code

You can use **-ffunction-sections** and **-fdata-sections** on static libraries, which will increase the size of the static library, as each function and global data variable will be put in a separate section.

And then use **-Wl,--gc-sections** on the program linking with this static library, which will remove unused sections.

Thus, the final binary will be smaller thant without those flags.

Be careful though, as **-Wl,--gc-sections** can break things.

So if you had one file called test.cpp that had two functions declared in it, but one of them was unused, you could omit the unused one with the following command to gcc(g++):

gcc -Os -fdata-sections -ffunction-sections test.cpp -o test -Wl,--gc-sections

(Note that -Os is an additional compiler flag that tells GCC to optimize for size)