In order to implement the graphical user interface portion of the project we must become familiar with some addition libraries external to C++. Unlike some other languages C++ does not have built in support for creating graphical front ends for programs. There are several options to choose from when picking external libraries for GUI development with C++. Of these libraries, Qt seems to be the best option for multiple reasons. First Qt is cross platform compatible; the only requirement is that the source be compiled on the desired OS before it can be used. Qt is also open source so it benefits from a very large community of developers. It is also has very robust documentation that cover a very large number of examples as well as many tutorials available online. Qt also has its own IDE, which caters to the construction of graphical interfaces. This IDE includes tools that allow the user to create interfaces by using click and drag type tools.