The quality of software has varied meanings but is important to consider when creating, building, and testing software. Software quality can refer to desirable characteristics of software product's, the extent to which a particular software product possess those characteristics, and to processes, tools, and techniques used to achieve those characteristics (SWEBOK, 174).

The purpose of this software is to provide Cairn University with a database and user interface for its alumni. Cairn University would like to keep its alumni informed and up-to-date on University events and news while also gaining and keeping in contact with their alumni. Through this software, alumni are provided with a platform to be involved in many facets of life at Cairn University and opportunities to give back to the Cairn community. It provides Cairn University with a complete database of alumni’s information, including phone numbers and email addresses.

Testing of this software will have multiple phases. These phases are preliminary testing, security testing, and peer review testing. Preliminary testing is the initial testing of functionality while the code is being written, reviewed, and edited. This will improve later testing phases be eliminating any major coding issues. This phase of testing has been going throughout the coding period and will continue to occur until the end of the coding period. Having this preliminary testing ensure for greater dependability and integrity of the CairnConnect software.

Security testing is important due to the online user interface and the use of a database to store the user's information. Security testing will be performed on each page after its completion to ensure that each page remains secure and can only be used as it is intended to be used. SQL injection is especially dangerous for this type of application. SQL injection is a code injection technique that had the capability to destroy databases. It placed malicious code into SQL statements, via web page input. Security testing will ensure that these types of attacks cannot occur on any of the application pages where user input is needed.

Peer review testing will be that last phase of testing. I will have some peers review and give feedback once preliminary and security testing has been finished. This will also allow for any final additions or corrections to be made. My peers will also be able to review my actual code as well to reduce the number of potential errors and will make sure that my documentation makes sense to others.

These three phases will conclude my testing period. They will effectively and efficiently improve the quality of the software. Thus, ensuring that the software is at its peak and ready for use.