***ACHIEVING SOFTWARE QUALITY:***

High quality of software is an important goal to be accomplished in the development of a new software

project. It is the result of good project management and solid software engineering practice.

Management and practice are applied within the context of four broad activities that help a software

team achieve high software quality: software engineering methods, project management techniques,

quality control actions, and software quality assurance.

* Software Engineering Method:

An effective software process applied in a manner

that creates a useful product that provides measurable value for those who produce it

and those who use it. An effective software process establishes the infrastructure that supports any effort at building a high-quality software product. A useful product delivers the content, functions, and features that the end user desires, but as important, it delivers these assets in a reliable, error-free way. There are many factors a software must abide to achieve software quality:

1. Garvin’s Quality Dimensions: Our project of “The online auction system” abides by these dimensions by following performance, feature, reliability, and conformance qualities.
2. McCall’s Quality Factors: The auction system focuses on operational qualities, its ability to undergo changes and to adapt to new environments. This is achieved by correctness, efficiency, usability and integrity. The interface can be specified to the needs of the user as per required.
3. ISO 9126 Quality Factors: Our project identifies six key attributes of software, functionality, usability, efficiency, reliability, maintainability and portability.

The software is usable for a considerable amount of audience.

1. Targeted Quality Factors: The interface layout of the project is conductive to easy understanding. The operations such as logging in, getting the price of a particular article, etc. are easy to locate and initiate. The inputs are taken through the mouse clicks.

* Project Management Techniques:

This comprises of three parts, estimation decisions, scheduling decisions and risk-oriented decisions. A particular date is set to deliver the project. The tasks to be accomplished in the auction(project) are sequenced based on dependencies.

* Quality Control:

It encompasses a set of software engineering actions that help to ensure work meets quality goals. The code for the online auction system is reviewed and inspected to cover errors. A series of testing steps are applied.

* Quality Assurance:

In this, a set of auditing and reporting functions that assess the completeness of the project are encompassed.