Chapter 19
**Quality Concepts**

Software Quality: Software quality can be defined as 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.

The American Heritage Dictionary defines quality as "a characteristic or attribute of something."

User satisfaction = compliant product + good quality + delivery within budget and schedule
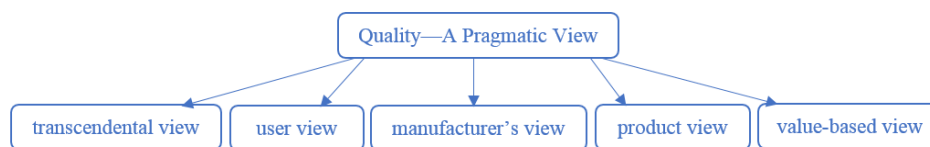
"Good Enough" Software: Good enough software delivers high quality functions and features that end-users desire, but at the same time it delivers other more obscure or specialized functions and features that contain known bugs.
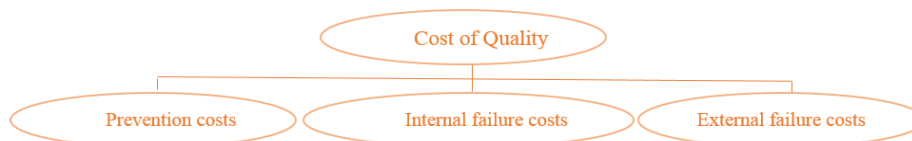
Impact of Management Decisions:

1)Estimation decisions, irrational delivery date estimates cause teams to take short-cuts that can lead to reduced product quality.
2) Scheduling decisions, failing to pay attention to task dependencies when creating the project schedule.
3) Risk-oriented decisions, reacting to each crisis as it arises rather than building in mechanisms to monitor risks may result in products having reduced quality.

How to Achieving Software Quality?
- Software quality is the result of good project management and solid engineering practice.
- To build high quality software you must understand the problem to be solved and be capable of creating a quality design the conforms to the problem requirements.
- Eliminating architectural flaws during design can improve quality.
- Project management – project plan includes explicit techniques for quality and change management.
- Quality control - series of inspections, reviews, and tests used to ensure conformance of a work product to its specifications.
- Quality assurance - consists of the auditing and reporting procedures used to provide management with data needed to make proactive decisions.