Practical software quality measures, product versus process quality management

Introduction to Practical software quality measures

- Each project needs to devise its own measures to meet its specific need
- The measures described relate to the final software products of a project

Practical software quality measures(Cont..)

Reliability

- Availbility
- Mean time between failures
- Failure on demands
- Support activity

Practical software quality measures(Cont..)

Maintainability

- A key component of this is changeability which relates to the ease with which software can be modified
- Maintainability is changeability plus new quality, analysability

Practical software quality measures(Cont..)

Extendibility

- it has two aspects one is ease with which existing code can be changed while another could be the ease with which new functionality can be added

product versus process quality management

- The system development process is made up of a number of activities that are linked together so that the output from one activity is the input to the next
- Thus program testing will depend on there being a program to test which will be the deliverable from the program coding stage

product versus process quality management

- Error can enter the process at any stage.
- They can either be introduced because of a defect in the way a process is carried out, as when the software developers makemistakes in the logic of their software

product versus process quality management

- Error that creep in the early stages are more expensive to correct at later stages for the following reasons
- The later the error is found , the more rework at more stages of development will be needed
- The general tendency is for each successive stage of development to be more detailed and less capable to absorb change.

product versus process quality management

- Following process requirements should be specified
- Entry requirement
- Implementation requirement
- Exit requirement