

Defining software quality, ISO 9126

Defining Software quality

For any software system there should be three specification

- Functional specification describing what the system is to do
- Quality specification concerned with how well the function are to operate
- Resource specification concerned with how much is to be spent on the system

Defining Software quality(Cont..)

When there is concerned about the need for a specific quality characteristics in a software product then a quality specification with the following minimum details should be drafted

- Definition/description : definition of the quality characteristics
- Scale : the unit of measurement

Defining Software quality(Cont..)

- Minimally acceptable : the worst value which might be acceptable if other characteristics compensated for it, and below which the product would have to be rejected out of hand
- Target range: the range of values within which it is planned the quality measurement
- Now: the value that applies currently

ISO 9126

- ISO 9126 standards was first introduced in 1991 to tackle the question of the definition of software quality
- THE ORIGINAL 13 page document was designed as a foundation upon which further more detailed standard could be built.
- ISO9126 documents are now very lengthy

- Motivation might be
- Acquires who are obtaining software from external suppliers
- Developers who are building a software product
- Independent evaluator who are accessing the quality of a software product, not for themselves but for a community of user

ISO 9126(Cont..)

- ISO 9126 also introduces another type of elements – quality in use- for which following element has been identified
- Effectiveness
- Productivity
- Safety
- satisfaction

ISO 9126(Cont..)

ISO 9126 identifies six major software quality characteristics

- Functionality
- Reliability
- Usability
- Efficiency
- Maintainability
- portabilitu

ISO 9126 (Cnt..)

- Once the requirements for the software product have been established, the following steps are suggested
- Judge the importance of each quality characteristic for the application
- Select the external quality measurements within the ISO 9126 framework relevant to the qualities prioritized
- Many measurement onto ratings that reflect user satisfaction