Charakteristiky kvality

ISO 25011

Quality Characteristic

Functional suitability
Functional completeness
Functional correctness
Functional appropriateness

Performance efficiency
Time behaviour
Resource utilization
Capacity

Compatibility
Co-existence
Interoperability

Usability
Appropriateness recognizability
Learnability
Operability
User error protection
User interface aesthetics
Accessibility

Reliability
Maturity

Availability
Fault tolerance
Recoverability

Security
Confidentiality
Integrity
Non-repudiation (nepopiratelnost)
Accountability
Authenticity

Maintainability
Modularity
Reusability
Analysability
Modifiability
Testability

Portability
Adaptability
Installability
Replaceability

ISO 25011 SW Quality Characteristics

Functional suitability

Functional completeness

Functional correctness

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Performance efficiency

Time behaviour

Resource utilization

Capacity

functional suitability
degree to which a product or system provides functions that meet stated and implied needs when used under specified conditions
Note 1 to entry: Functional suitability is only concerned with whether the functions meet stated and implied needs, not the functional specification.
functional completeness
degree to which the set of functions covers all the specified tasks and user objectives
functional correctness
degree to which a product or system provides the correct results with the needed degree of precision
functional appropriateness
degree to which the functions facilitate the accomplishment of specified tasks and objectives

Na SOA to moc nepasuje (úplnost?)

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maintainability

degree of effectiveness and efficiency with which a product or system can be modified by the intended maintainers

Modifications can include corrections, improvements or adaptation of the software to changes in environment, and in requirements and functional specifications. Modifications include those carried out by specialized support staff, and those carried out by business or operational staff, or end users. Maintainability includes installation of updates and upgrades. Maintainability can be interpreted as either an inherent capability of the product or system to facilitate maintenance activities, or the quality in use experienced by the maintainers for the goal of maintaining the product or system

modularity

degree to which a system or computer program is composed of discrete components such that a change to one component has minimal impact on other components[viz: ISO/IEC/IEEE 24765]

reusability

degree to which an asset can be used in more than one system, or in building other assets

analysability

degree of effectiveness and efficiency with which it is possible to assess the impact on a product or system of an intended change to one or more of its parts, or to diagnose a product for deficiencies or causes of failures, or to identify parts to be modified

Implementation can include providing mechanisms for the product or system to analyze its own faults and provide reports prior to a failure or other event.

modifiability

degree to which a product or system can be effectively and efficiently modified without introducing defects or degrading existing product quality
 Implementation includes coding, designing, documenting and verifying changes.
 Modularity (and **analysability** can influence modifiability
Modifiability is a combination of changeability and stability.
testability

degree of effectiveness and efficiency with which test criteria can be established for a system, product or component and tests can be performed to determine whether those criteria have been met

ISO 25011 kvalita pro užívání

Effectiveness

Efficiency

Satisfaction

Usefulness

Trust

Pleasure

Comfort

Freedom from risk

Economic risk mitigation (zmírnění, redukce)

Health and safety risk mitigation

Environmental risk mitigation

Context coverage

Context completeness

Flexibility