

Quality Model

Characteristic	Sub-characteristic
Functionality	Functionality Accuracy Interoperability
Usability	Learnability Operability Aesthetics
Security	Confidentiality Integrity Non-repudiation
Reliability	Fault Tolerance Availability Recoverability Co-existence
Efficiency	Resource Utilisation Performance
Sustainability	Testability Changeability Supportability Reusability

Functionality

The capability of the solution to provide functions which meet stated and implied needs.

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The capability of the solution to provide an appropriate set of functions for specified tasks and user objectives.

Accuracy

The capability of the solution to provide the right results or effects with the needed degree of precision.

Interoperability

The capability of the solution to interact with one or more specified systems.

Usability

The capability of the solution to be understood, learned, used and attractive to the user.

Learnability

The capability of the solution to enable service the user to learn its application.

Operability

The capability of the solution to enable the user to operate and control it.

Aesthetics

The capability of the solution to be attractive to the user.

Security

The degree to which the solution protects information and data so that persons or other systems have the degree of data access appropriate to their types and levels of authorisation.

Confidentiality

The degree to which the solution ensures that data are accessible only to those authorised to have access.

Integrity

The degree to which the solution prevents unauthorised access to, or modification of, computer programs or data.

Non-repudiation

The degree to which actions or events can be proven to have taken place, so that the events or actions cannot be repudiated later.

Reliability

The capability of the solution to maintain a specified level of performance when performed under specified conditions.

Fault Tolerance

The capability of the solution to maintain the required level of performance in cases of solution faults or infringement of its specified interface.

Availability

The capability of the solution to remain available to users in the event of solution faults.

Recoverability

The capability of the solution to re-establish a specified level of performance and recover the data directly affected in the case of a failure.

Co-existence

The degree to which the solution can perform its required functions efficiently while sharing a common environment and resources with other solutions, without detrimental impact on any other solution.

Efficiency

The capability of the solution to provide appropriate performance, relative to the amount of resources used, under stated conditions.

Resource Utilisation

The capability of the solution to use appropriate amounts and types of resources when the solution performs its function.

Performance

The capability of the solution to provide appropriate response and processing times and throughput rates when performing its function.

Sustainability

The capability of the solution to be sustained, maintained and modified. Modifications may include corrections, improvements or adaptation of the solution to changes in environment, and in requirements and functional specifications.

Testability

The capability of the solution to enable solution modifications to be validated.

Changeability

The capability of the solution to enable a specified modification to be implemented.

Supportability

The capability of the solution to be maintained and supported.

Reusability

The degree to which the solution, or components of the solution, can be used in more than one system, or in building other solutions.