

Software Quality Requirements based on ISO 9126

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| Characteristics | Subcharacteristics | Definition | required | | | | assessed | | | | Action Items |
|-----------------|--------------------|---|----------|--------|-----|-----|----------|--------|-----|-----|--------------|
| | | | high | normal | low | n/a | high | normal | low | n/a | |
| Functionality | Suitability | appropriateness (to specification) of the functions of the software | | x | | | | x | | | |
| | Accuracy | correctness of the functions | x | | | | x | | | | |
| | Interoperability | ability of a software component to interact with other components or systems | | x | | | | x | | | |
| | Compliance | compliant capability of software | | x | | | | x | | | |
| | Security | possible unauthorized access to the software functions | x | | | | x | | | | |
| Reliability | Maturity | frequency of failure of the software | x | | | | x | | | | |
| | Fault tolerance | ability of software to withstand (and recover) from component, or environmental, failure | x | | | | x | | | | |
| | Recoverability | Ability to bring back a failed system to full operation, including data and network connections | x | | | | x | | | | |
| Usability | Understandability | Determines the ease of which the systems functions can be understood, relates to user mental models in Human Computer Interaction methods | | | x | | x | | | | |
| | Learnability | Learning effort for different users, i.e. novice, expert, casual etc | | x | | | x | | | | |
| | Operability | Ability of the software to be easily operated by a given user in a given environment | x | | | | x | | | | |
| Efficiency | Time behavior | response times for a given thru put, i.e. transaction rate. | x | | | | x | | | | |
| | Resource behavior | resources used, i.e. memory, cpu, disk and network usage. | | | x | | x | | | | |
| | Analyzability | ability to identify the root cause of a failure within the software. | x | | | | x | | | | |
| Maintainability | Changeability | amount of effort to change a system. | x | | | | | x | | | |
| | Stability | potential negative impact that may be caused by system changes | x | | | | x | | | | |
| | Testability | effort needed to verify (test) a system change | | x | | | | | x | | |
| | Adaptability | ability of the system to change to new specifications or operating environments | x | | | | x | | | | |
| Portability | Installability | effort required to install the software | | | x | | x | | | | |
| | Conformance | compliance for portability | | x | | | x | | | | |
| | Replaceability | how easy is it to exchange a given software component within a specified environment | x | | | | x | | | | |