

Gib

Quality Requirements

Specific Non-Functional (Quality) Requirements

- Expected response time from the user's point of view, specified for all necessary operations.
- Are other timing considerations specified, such as processing time, data-transfer rate, and system throughput?
- Is the level of security specified?
- Is the reliability specified, including the consequences of software failure, the vital information that needs to be protected from failure, and the strategy for error detection and recovery?
- Is maximum memory specified?
- Is the maximum storage specified?
- Is the maintainability of the system specified, including its ability to adapt to changes in specific functionality, changes in the operating environment, and changes in its interfaces with other software?
- Is the definition of success included? Of failure?
- Are the requirements written in the user's language? Do the users think so?
- Does each requirement avoid conflicts with other requirements?
- Are acceptable trade-offs between competing attributes specified—for example, between robustness and correctness?
- Do the requirements avoid specifying the design?
- Are the requirements at a fairly consistent level of detail? Should any requirement be specified in more detail? Should any requirement be specified in less detail?
- Are the requirements clear enough to be turned over to an independent group for construction and still be understood?
- Is each item relevant to the problem and its solution? Can each item be traced to its origin in the problem environment?
- Is each requirement testable? Will it be possible for independent testing to determine whether each requirement has been satisfied?
- Are all possible changes to the requirements specified, including the likelihood of each change?