

Checklist for Inspecting Requirements Specification

Organization and Completeness

- Are all internal cross-references to other requirements correct?
- Are all requirements written at a consistent and appropriate level of detail?
- Do the requirements provide an adequate basis for design?
- Is the implementation priority of each requirement included?
- Are all external hardware, software, and communication interfaces defined?
- Have algorithms intrinsic to the functional requirements been defined?
- Does the specification include all of the known customer or system needs?
- Is the expected behavior documented for all anticipated error conditions?

Correctness

- Do any requirements conflict with or duplicate other requirements?
- Is each requirement written in clear, concise, unambiguous language?
- Is each requirement verifiable by testing, demonstration, review, or analysis?
- Is each requirement in scope for the project?
- Is each requirement free from content and grammatical errors?
- Is any necessary information missing from a requirement? If so, is it identified as TBD?
- Can all of the requirements be implemented within known constraints?
- Are any specified error messages unique and meaningful?

Quality Attributes

- Are all performance objectives properly specified?
- Are all security and safety considerations properly specified?
- Are other pertinent quality attribute goals explicitly documented and quantified, with the acceptable tradeoffs specified?

Traceability

- Is each requirement uniquely and correctly identified?
- Is each software functional requirement traceable to a higher-level requirement (e.g., system requirement, use case)?

Special Issues

- Are all requirements actually requirements, not design or implementation solutions?
- Are all time-critical functions identified, and timing criteria specified for them?
- Have internationalization issues been adequately addressed?