Software Requirements Specifications Checklist

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| **Item** | **Yes/No** |
| **CLARITY** |  |
| 1. Is the terminology consistent with the users' and/or sponsors' terminology? | Yes |
| 2. Are software requirements clear and unambiguous? | Yes |
| 3. Have requirements been stated in terms of inputs, outputs, and processing for each function? | Yes |
| **COMPLETENESS** |  |
| 1. Are required attributes, assumptions, and constraints of the program set completely listed? | Yes |
| 2. Have all requirements and constraints been assigned a priority? | Yes |
| 3. Have criteria for assigning requirement priority levels been defined? | Yes |
| **COMPLIANCE** |  |
| 1. Does documentation follow project and/or DoD standards? | Yes |
| **CONSISTENCY** |  |
| 1. Are requirements consistent with each other and with other requirements in related documents? | Yes |
| 2. Are requirements consistent with the actual operating environment and system specification? | Yes |
| **DATA USAGE** |  |
| 1. Have critical values for all internal data items been specified? (e.g., data type, rate, units, accuracy, resolution, limits, range) | Yes |
| 2. Have data objects and their component parts been specified? | Yes |
| **FUNCTIONALITY** |  |
| 1. Are all described functions necessary and sufficient to meet the mission/system objectives? | Yes |
| 2. Are all inputs/processing/outputs to a function necessary and sufficient to perform requirements? | Yes |
| **INTERFACE** |  |
| 1. Are inputs and outputs for all interfaces necessary and sufficient? | Yes |
| 2. Are interface requirements between hardware, software, personnel, and procedures included? | Yes |
| **LEVEL OF DETAIL** |  |
| 1. Have functional requirements been described in sufficient detail for design work to begin? | Yes |
| 2. Have performance requirements been described in sufficient detail for design work to begin? | Yes |
| **MAINTAINABILITY** |  |
| 1. Are requirements weakly coupled (i.e., changing a function will not have adverse/unexpected effects throughout system)? | Yes |
| 2. Have system specification maintainability requirements been levied to software functional requirements? | Yes |
| **PERFORMANCE** |  |
| 1. Have resource and performance margin requirements been allocated to each function? | Yes |
| **RELIABILITY** |  |
| 1. Have quality factors been specified as measurable requirements or prioritized design goals? | Yes |
| 2. Are undesired events considered and their required responses specified? | Yes |
| **TESTABILITY** |  |
| 1. Can the program set be tested, demonstrated, analyzed, or inspected to show that it satisfies requirements? | Yes |
| 2. Have test methods (test, demonstration, analysis, or inspection) been stated for each software requirement? | Yes |
| **TRACEABILITY** |  |
| 1. Are all functions, structures, and constraints traced to requirements, and vice versa? | Yes |
| **CLARITY** |  |
| 1. Are goals of the system defined? | Yes |
| 2. Are requirements specified in an implementation-free way that does not obscure the original requirements? | Yes |
| 3. Are implementation method and technique requirements kept separate from functional requirements? | Yes |
| 4. Is the terminology consistent with the user and/or sponsor's terminology? | Yes |
| 5. Are requirements clear and unambiguous or are there aspects of requirements that you do not understand? | Yes |
| **COMPLETENESS** |  |
| 1. Are requirements stated completely addressing relevant aspects, yet tolerant of temporary incompleteness? | Yes |
| 2. Has a feasibility analysis been performed and documented? | Yes |
| 3. Is the impact of not achieving the requirements documented? | Yes |
| 4. Have trade studies been performed and documented? | Yes |
| 5. Have the security issues of hardware, software, operations personnel and procedures been addressed? | Yes |
| 6. Has the impact of the project on users, other systems, and the environment been assessed? | Yes |
| 7. Are required functions, external interfaces, and performance specifications prioritized by the needed date? | Yes |
| **COMPLIANCE** |  |
| 1. Does this document follow project's system documentation standards? DoD standards? | Yes |
| **CONSISTENCY** |  |
| 1. Are requirements stated consistently without contradicting themselves/other system's requirements? | Yes |
| **FUNCTIONALITY** |  |
| 1. Are all functions clearly and unambiguously described and alphabetized? | Yes |
| 2. Are all described functions necessary and enough to meet mission/system objectives? | Yes |
| **INTERFACES** |  |
| 1. Are all external interfaces clearly defined? | Yes |
| 2. Are all internal interfaces clearly defined? | Yes |
| 3. Are all interfaces necessary, sufficient, and consistent with each other? | Yes |
| **MAINTAINABILITY** |  |
| 1. Have the requirements for system maintainability been specified? | Yes |
| 2. Are requirements written to be as weakly coupled as possible? | Yes |
| **PERFORMANCE** |  |
| 1. Are all required performance specifications and margins listed? | Yes |
| **RELIABILITY** |  |
| 1. Are there reliability requirements? | Yes |
| 2. Are there error detection, reporting, and recovery requirements? | Yes |
| 3. Are undesired events considered and their required responses specified? | Yes |
| 4. Have assumptions about the intended sequence of functions been stated? | Yes |
| 5. Do these requirements adequately address survivability of the system? | Yes |
| **TESTABILITY** |  |
| 1. Can the system be tested, demonstrated, inspected, or analyzed to show that it satisfies requirements? | Yes |
| 2. Are requirements stated precisely to facilitate specification of system test success criteria and requirements? | Yes |
| **TRACEABILITY** |  |
| 1. Are all functions, structures, and constraints traced to mission/system objectives? | Yes |
| 2. Can all requirements be allocated to hardware, software, and operations personnel, and procedures? | Yes |