

Project Requirements Evaluation

General Comment

The purpose of the requirements specification is to first capture and then analyze what the system is supposed to do. The goal is to elicit a comprehensive specification of the system. Each assumption, requirement and constraint needs to be identified and described. Requirements analysis refines and structures the list of wants and needs. Clear statements, organization by relationship, and prioritization are all beneficial. Consistent patterns of organization and description improve clarity and a method of tracking each assumption, requirement, and constraint will aid design and further development. Requirements analysis is not design and should be focused on "what" not "how". Traditional specifications (meaning lots of prose) are a start. Analysis methods will help describe what the system does systematically, often graphically. A requirements specification will typically contain Use Cases and scenario descriptions of intended system behavior.

Specific Comments

Area	Evaluation	Notes
Motivation	Very Good	Well motivated, economics as well as entertainment. Citations good. Scope setting to clarify how much of the vision will be developed this time.
Models	Good	Scenarios (sec 3) seem more like application descriptions and further extension of the motivation and value of the system. Use Cases (sec 4) model could be made richer by looking again at scenarios (sec 4.1-4.6) of what the system must do—don't get hung up on system decomposition. Section 4.1-4.6 are scenarios. The Summaries could use further development.
Non-Functional Requirements	Good	Good use of cross referencing.
Functional Requirements	Good	Some of the requirements are "descriptions" and compound multiple requirements. They need to be decomposed into concise, measurable items.
Assumptions	Very good	Provide important constraints. Organized and tagged for reference—although none yet made?
Requirements Prioritization	Very Good	Good scheme.
Requirement Completeness	Good	Initial set seems thorough, probably a few more to come.
Level of Detail	Good	Many requirements need to be decomposed. Could you hand this off to another team for design?
Traceability	Very Good	Good scheme, Might organize requirements by functional area as well as FR vs NFR.
Engineering Practices	Excellent	
Readability/ Organization	Very Good	Executive Summary works. Descriptions well written but dense.

Refer to the Requirements Evaluation Rubric for interpretation of the Evaluation and for indication of how to correct or improve weaker evaluations.

Requirements Specification Rubric

	Missing	Poor	Fair	Good	Excellent
Motivation	Motivation undescribed.	Motivation is inconsistent or unclear.	Motivation is stated but has significant holes.	Motivation covers all aspects of the project and is specified clearly and concisely.	Motivation is especially compelling and well communicated.
Model	No model present to describe the function (e.g. use cases, context diagram).	A model is included, but it is minimal or not graphical.	A basic model is included.	A thorough model is included but from only a single perspective.	Multiple models are included with significantly different perspectives.
Non-Functional Requirements	No non-functional requirements specified.	Functional confused with non-function requirements or the non-functional requirements do not help to specify the system.	Some significant non-functional requirements are missing.	Non-functional requirements specify quality goals, but some are inconsistent or impractical	Non-functional requirements do an excellent job of specifying the performance required in a measurable way. All requirements are practical.
Functional Requirements	No functional requirements specified	Functional confused with non-function requirements or the non-functional requirements do not help to specify the system.	Functional requirements specify the system but many areas are missing.	Functional requirements specify the basic operation of the exhibit, but some areas are ill defined.	Functional requirements do an excellent job of specifying the operation of the exhibit and tie in to the model(s).
Assumptions	No assumptions listed.	Assumptions listed are either not reasonable or irrelevant.	Some reasonable assumptions are listed but some may not be reasonable or missing.	Most assumptions are reasonable and guide the requirements definition.	Assumptions are reasonable and clearly stated.
Requirements Prioritization	No priorities are specified for the requirements.	Many priorities missing or inconsistent.	Some priorities missing.	Most requirements have appropriate priorities.	Clear priorities are specified for all requirements.
Requirement Completeness	The document is blank.	Requirements do very little to limit the design space.	Requirements shape the design space but many areas are underspecified.	Requirements do a reasonable job of defining the design space, but a few areas still exist that are underspecified.	Requirements completely cover the problem and effectively constrain the design space to a level appropriate for the project.
Level of Detail	No requirements included.	Requirements are either too vague or so detailed that only one obvious design will be possible.	Many requirements are either too specific or too vague, but they still specify the design space well enough to have some wiggle room.	Requirements generally have an appropriate level of detail but a few are too specific and lead to a particular design.	Requirements are specified with enough detail to guide the design, but not imply a specific solution.
Traceability	Requirements are not labeled.	Requirements are labeled but the labeling scheme is confusing and arbitrary.	Requirements are labeled with a logical scheme but there is no traceability from requirements to their justification.	Some requirements include justification, but some are missing.	All requirements include a motivation/justification unless it is obvious.
Engineering Practices	Document does not contain a revision history or any referencing.	Document is either missing a revision history or nothing is referenced.	Document contains a revision history and some references exists, but they are minimal.	Document contains a revision history but references are a little light.	Document contains a revision history, and proper references to both external documents and internal sections.
Readability/ Organization	Document is a jumble and impossible to follow.	Document is legible, but there are many spelling, grammatical or logical errors making it very difficult to follow.	Organization of document is confusing or prose is too convoluted, making the document more difficult to read and understand.	Document is well organized, but there are some areas that are confusing. Also, document could be too long and repetitive.	There is a logical flow to the document and prose is clear and concise.