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**Software Requirements Summary**

**Important Points from Article**

* “The process of eliciting, analyzing, validating, and managing requirements, often referred to as ‘requirements engineering’ plays a critical role in the success of software development projects.” [113]
* “Actual requirements practices vary broadly from organization to organization, according to the culture of the organization, its maturity in implementing software engineering processes, and the domain in which the software is being developed.” [113]
* “The requirement process can be described by the five primary disciplines of requirements elicitation, analysis, specification, validation and management.” [113]
* “A requirement is simply a property of the system or a constraint placed either upon the product itself or upon the process by which the system is created [4, 6, 7].” [114]
* “Requirements elicitation focuses on gathering knowledge about the needs of the stakeholders by helping them to understand and articulate their problems and, where possible, by describing their vision of what they would like the new system to do.” [115]
* “Furthermore, successful elicitation is facilitated if the selected stakeholders are representative of a specific group of people, empowered to make decisions for that group, able to work collaboratively with other stakeholders, and knowledgeable in the subject matter they represent.” [115-116]
* “Prior to committing to a project, the customer and business stakeholders should perform business analysis [18] to more fully understand the costs, risks, and anticipated benefits from the project.” [116]
* “The role of the elicitor is to learn the needs of the users and to communicate these needs effectively to the developers.” [117]
* “During the requirements analysis phase, the emphasis is on gaining an understanding of the product to be developed through requirements classification and conceptual modeling.” [118]
* “The requirements specification is a document that describes the system to be developed in a format that can be reviewed, evaluated, and approved in a systematic way [5].” [118]
* “These are the systems definition document, systems requirement document and the software requirements document [6].” [119]
* “The third document the software requirements specification (SRS), defines what the software component of the product is expected to do, and, where necessary, explicitly states what it should not do.” [119]
* “IEEE Standard 1012-1998 defines requirements validation as the process of evaluating an implemented system to determine whether it conforms to the specified requirements [35].” [120]
* “Reviews are conducted by the stakeholders with the intent of finding errors, conflicts, incorrect assumptions, ambiguities, and missing requirements.” [121]
* “If change is not managed well, the quality of the product will deteriorate and future changes will become increasingly difficult to accommodate.” [121]
* “In this paper, we have emphasized a more traditional approach to requirements engineering in which the requirements process involves elicitation, analysis, specification, validation, and management. Recently, there has been a trend toward adopting more agile development methods [42].” [122]

**Things I Didn't Agree With**

“Once stakeholders have been identified, the requirements elicitor must explore the problem that is to be solved. In addition to relying upon stakeholder knowledge, the software engineer should ideally acquire domain knowledge in order to more fully understand the needs of the stakeholders, whether those needs are articulated or not [9].”

I disagree with this statement because I feel a few of the stakeholders should have a slight understanding of the domain knowledge also. This would benefit the project because then the stakeholders would not ask for things which are not possible and they would have a slight understanding of what is possible.

An example of this from my internship happened when one of the stakeholders ask me to implement some social media item on a webpage I was working on. I did the research and soon found out it wasn’t possible. When trying to explain to the stakeholder why it couldn’t be done, I had a hard time because he didn’t understand some of the domain knowledge needed to understand the problem.

**Things I Did Not Understand**

I understood the entire article.