Abstract

Software systems developed now-a-days are by and large more complicated than the existing software. There are certain foundational activities for a system development like the objective of the system, operational requirements, role of hardware and software, the people working in it, database used and the procedures. On understanding the foundational activities based on the System Engineering principle to transform an operational need into more descriptive and will lead to build a right and good product with customer satisfaction. The operational requirements of software system engineering have been classified already. In this paper, the functional requirements classified is common for all the software system developed. Also, it brought out the important role of functional requirements which can effectively be used to elicit information from the customers more precisely and accurately through Genetic Algorithmic approach. The GA approach identifies, classifies and prioritizes the functional requirements which will provide an insight into the system architecture, also helps to communicate the operational and behavioral characteristics of the new system.

References
An Approach to Analyse and Quantify the Functional Requirements in Software System Engineering

- Eushiuan Tran, "Requirements & Specification;" Requirements & Specification;
- Quantifying Software Reliability Readiness Astana, A.; Olivieri, J.; Alcatel - Lucent, Westford, MA, USA
- Eric C. Honour, "Understanding the Value of System Engineering;"
- Introduction to Systems Engineering;
- Dr. Judith Dahmann, "Importance of systems engineering in Early Acquisition;"
- www.ofnisystems.com/Validation/Functional_Requirements.htm
- Prof. Dr. Oscar Nierstrasz, Dr. St´ephane Ducasse Michele Lanza, "Recovering the Evolution of Object Oriented Software Systems Using a Flexible Query Engine;", June 2001.
- Ruth Malan and Dana Bredemeyer "Functional Requirements and Use Cases;"

Index Terms

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