



Specification of information systems

Transforming business needs to specification blueprints information for systems development or procurement of standard systems.

Length: 3 days

Course description

Development of precise, complete and unambiguous specifications that matches the business needs is the key to successful development or procurement of information systems. Specifications of high quality also enable development of cost efficient realization with low risk. Precise specifications are also the base for correct estimates of systems size and development effort and enables well-founded investment decisions and unambiguous verification of delivery.

The course primary focus is practical application of the Unified Modeling Language (UML) to produce blueprints for systems development or procurement of standard systems. The course also discusses how to calculate system size with Function Points (FP) based on UML blueprints. Function Points is an implementation independent measure of an information systems functional size and is regarded as the most efficient approach to measure system size, development costs and delivery time.

UML has a high precision and information density compared to traditional text based requirement specifications and enable precise specification of complex logic. UML enable early verification of correctness and completeness of requirements and system specifications. In addition UML enable seamless integration of business process models/ blueprints with the information system blueprints. UML also have a wide acceptance as an industry standard for information system blueprints.

Specifications with UML are a superior basis for procurement and calculation of information systems and as an interface between the customer and supplier that can be an internal IT-department, an external contractor or a supplier of standard systems.

The course also introduces Function Point (FP) analysis for estimation of the functional size of information systems and to evaluate and prioritize desired functions. Function point calculation is straightforward based on UML specifications/ blueprints and enables high accuracy on estimates of system size. Function points have a wide acceptance as the most accurate unit for measurement of information system size and to form the basis for economical decisions. Function points can be compared to other units like m², m³, watt etc. and is regarded as the most fair and technology neutral unit for ordered and delivered "goods" (i.e. functionality).

The course focuses on practical application of UML for business mapping, requirements specification and system specification for information systems but also discusses architecture, procurement, visual modeling (CASE-tools), CMM (Capability Maturity Model) etc. The course includes both theory and practical exercises.

Objectives

Upon completion you have a good practical understanding how to develop requirement and system specifications with UML to produce precise and formal blueprints for information systems. You have also got an introduction to Function Point analysis and knowledge how to apply UML for bid specifications, procurement and planning of investments in information systems.

Audience

Customers, business analysts, system analysts, project managers, project leaders, systems developers and all that are interested in specification and planning of investments in information systems.