Training Gathering needs in a systems approach (Ref IS102)

The system approach is a process of study and development of systems that allows to control the complexity.

The people interested in the system are end-users, but also the maintenance, the logistics ... whose needs are just as binding as those of the end users.

Capturing stakeholder needs is one of the most challenging activities in Requirements Engineering. While, these needs are the foundation for the development of products and services.

The needs capture, object of the training, is system oriented (and not software) and uses the Systems Modeling Language (SysML) formalism as support and the concepts of System Engineering.

At the end of this training, you will have acquired the necessary knowledge to collect the needs of the various stakeholders and formalize them as requirements in a set of specifications. Practical exercises are implemented throughout the training.

Duration:

2 days

Goal :

- Identify the stakeholders generating needs for a system
- Collect needs from different points of view
- Formalize and structure these needs in a set of specifications

Concerned public :

- Project managers
- Analysts
- Designers
- Quality managers

Content:

- Collection of needs
  - Background
  - The focus of collection work in the Requirements Engineering process
  - UML formalism needs collection and exploitation approach (Unified Modeling Language)

- UML Basics Concepts
  - Object, Class and Inheritance Concepts o Concept of Polymorphism
  - Concept of association
  - Concept of encapsulation
  - Concept of state and transition

- The collection of needs and their formalization into requirements in a set of specifications
  - Definition of the perimeter of the system and the interfaces
  - The collection of requirements and functions according to the scenario point of view
  - The collection of functions according to the point of view of the business or business process
  - The collection of interfaces from a point of view data manipulated
  - Definition of behavioral system requirements

- Global approach to requirements management
  - Chaining collection activities
  - The pivotal role of risk management

Educational, technical and coaching resources implemented

Participatory pedagogy alternating the presentation of formal presentations illustrated with a documentary support with interactive exchanges and discussions around case studies and tutorials.