

## **OVERVIEW ON REQUIREMENTS MODELLING FOR A SOFTWARE PROJECT**

**Requirements** - Descriptions and specifications of a system.

### **Requirements engineering/Requirements Modelling**

- The process of establishing the services that the customer requires from a system and the constraints under which it operates and is developed.
- The requirements themselves are the descriptions of the system services and constraints that are generated during the requirements engineering process.

**NB:** System developers use the requirements to understand what system is to be developed

### **Functional and non-functional requirements Definitions**

**Functional requirements:** Statements of services the system should provide, how the system should react to particular inputs and how the system should behave in particular situations.

Examples (The requirements can be defined as follows)

- The user shall be able to search either all of the initial set of databases or select a subset from it.
- The system shall provide appropriate viewers for the user to read documents in the document store.
- Every order shall be allocated a unique identifier (ORDER\_ID) which the user shall be able to copy to the account's permanent storage area

**Non-functional requirements:** They define system properties and constraints like reliability, response time and storage requirements. They also include Constraints on the services or functions offered by the system such as timing constraints, constraints on the development process, standards, etc.

**Domain requirements:** Requirements that come from the application domain of the system and that reflect characteristics of that domain.

### **Types of requirements**

#### **1. User requirements**

Statements in natural language plus diagrams of the services the system provides and its operational constraints. Written for customers

#### **2. System requirements**

A structured document setting out detailed descriptions of the system services. Written as a contract between client and contractor

#### **3. Software specification**

A detailed software description which can serve as a basis for a design or implementation. These set of requirements are written for developers