

## **Requirement analysis Specification:**

The requirements analysis and specification phase starts once the feasibility study phase is complete and the project is found to be technically sound and feasible. The goal of the requirements analysis and specification phase is to clearly understand customer requirements and to systematically organize these requirements in a specification document. This phase consists of the following two activities:

- Requirements Gathering And Analysis
- Requirements Specification

The analyst starts requirements gathering and analysis activity by collecting all information from the customer which could be used to develop the requirements of the system. He then analyses the collected information to obtain a clear and thorough understanding of the product to be developed, with a view to removing all ambiguities and inconsistencies from the initial customer perception of the problem. The following basic questions pertaining to the project should be clearly understood by the analyst in order to obtain a good grasp of the problem:

- What is the problem?
- Why is it important to solve the problem?
- What are the possible solutions to the problem?
- What exactly are the data input to the system and what exactly are the data output by the system?
  - What are the likely complexities that might arise while solving the problem?
- If there are external software or hardware with which the developed software has to interface, then what exactly would the data interchange formats with the external system be?

After the analyst has understood the exact customer requirements, he proceeds to identify and resolve the various requirements problems. The most important requirements problems that the analyst has to identify and eliminate are the problems of anomalies, inconsistencies, and incompleteness. When the analyst detects any inconsistencies, anomalies or incompleteness in the gathered requirements, he resolves them by carrying out further discussions with the end users and the customers.