Requirements Analysis
- Introduction
Requirements Analysis

• Most IT projects that fail do so because of unclear requirements definitions. The consequences are:
  – anxiety and frustration on the side of the users
  – loss of customer confidence
  – loss of revenue and reputation

• The term ‘requirements analysis’ is used to describe the activity of investigating and analyzing an initial set of requirements that have been gathered
Requirements Analysis

• ”A requirement is a statement about an intended product that specifies what it should do or how it should perform. One of the aims of the requirements activity is to make the requirements as specific, unambiguous, and clear as possible.”

Requirements Analysis

- There are two kinds of requirements:
  - functional requirements, which say what the system should do or how it should work
  - non-functional requirements, which say what constraints there are on the system and its development
Requirements Analysis

• Non-functional requirements are:
  – data requirements, e.g. the amount of required data, persistence, accuracy, value of data
  – environmental requirements (context of use), e.g. physical, social, and organizational environment
  – user requirements: characteristics of the intended user group, a profile with typical characteristics of the user
  – usability requirements: goals and measures for a particular product
Requirements Analysis

• Data gathering is an important part of the requirements analysis
• Basic techniques for data gathering are
  – questionnaires
  – interviews (individuals)
  – focus groups (group interviews)
  – workshops with stakeholders
  – naturalistic observation (with and without involvement of the observer)
  – studying documentation and marketing material