

# Requirement Engineering

## Requirement Engineering Processes

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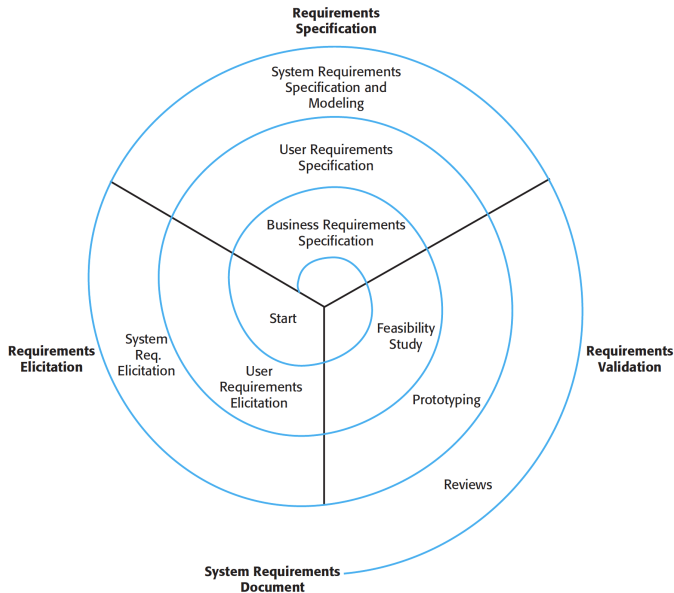


# Requirement Engineering Processes

Includes four high-level activities.

- **Feasibility study:** Assess if the system is useful to the business
- **Elicitation and analysis:** Discover requirements
- **Specification:** Convert these requirements into some standard form
- **Validation:** Check that the requirements actually define the system that the customer wants

# The Spiral View

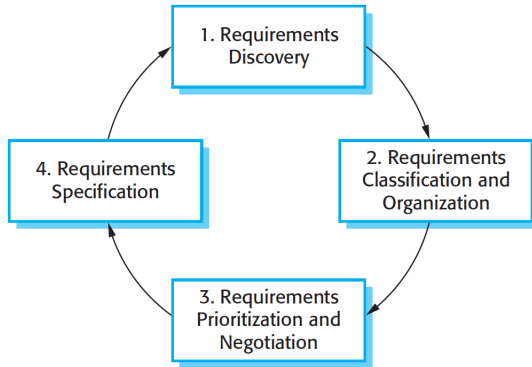


- Does the system contribute to the overall objectives of the organization?
- Can the system be implemented within schedule and budget using current technology?
- Can the system be integrated with other systems that are used?

# Requirement Elicitation and Analysis

- Software engineers work with customers and system end-users to find out about
  - the application domain
  - what services the system should provide
  - the required performance of the system
  - hardware constraints
  - ...
- People involved (stakeholders) are
  - end-users who will interact with the system
  - engineers who are developing or maintaining other related systems
  - business managers
  - domain experts
  - trade union representatives

# Requirement Elicitation and Analysis Process



# Challenges

- Stakeholders' vague understanding of the requirements
- Lack of domain experience of the requirement engineers
- Repeating and conflicting requirements from different stakeholders
- Political factors in the organization
- Dynamism of the economic and business environment

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