

Software Requirements Engineering (SE2001)



Dr. Syed Muazzam Ali Shah

HEC Approved Ph.D. Supervisor

(Assistant Professor)

Department of Software Engineering
NUCES-FAST Karachi

Contact#: (021) 111-128-128 Ext. 130

Website: sites.google.com/view/muazzam-kazmi/home

Official page: <https://khi.nu.edu.pk/personnel/dr-syed-muazzam-ali-shah-2/>

Google Scholar: <https://scholar.google.com.tw/citations?hl=en&user=OvcfR-IAAAAJ>



Requirements Negotiation -² 1

- ❖ Disagreements about requirements are inevitable when a system has many stakeholders.
- ❖ Conflicts are not 'failures' but reflect different stakeholder needs and priorities.
- ❖ Requirements negotiation is the process of discussing requirements conflicts and reaching a compromise that all stakeholders can agree to.

Requirements Negotiation -³ 2

- ❖ In planning a requirements engineering process, it is important to leave enough time for negotiation.
- ❖ Finding an acceptable compromise can be time-consuming.

Requirements Negotiation -⁴ 3

❖ The final requirements will always be a compromise which is governed by:

- The needs of the organization in general,
- The specific requirements of different stakeholders,
- Design and implementation constraints,
- And the budget and schedule for the system development



Requirements Negotiation Stages

5

- ❖ Requirements discussion
- ❖ Requirements prioritization
- ❖ Requirements agreement

Requirements Negotiation

Stages - 2

6

❖ Requirements discussion:

- Requirements which have been highlighted as problematic are discussed and the stakeholders involved present their views about the requirements.

Requirements Negotiation ⁷

Stages - 3

❖ Requirements Prioritization:

- Disputed requirements are prioritized to identify critical requirements and to help the decision making process.

Requirements Negotiation 8

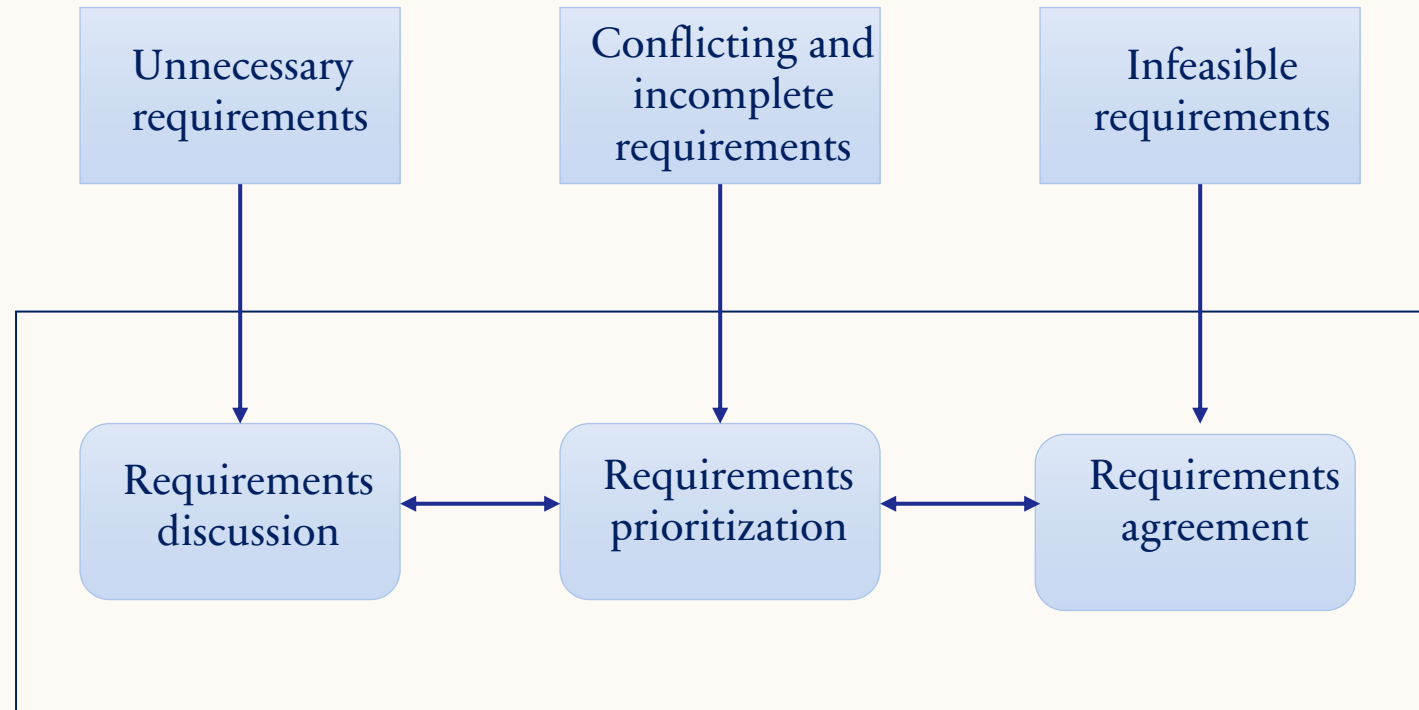
Stages - 4

❖ Requirements Agreement:

- Solutions to the requirements problems are identified and a compromised set of requirements are reached.
- Generally, this will involve making changes to some of the requirement.

Requirements Negotiation Stages - 4

9



Requirements Negotiation



Resolution of requirements₁₀ conflicts

- ❖ Meetings are the most effective way to negotiate requirements and resolve requirements conflicts.
- ❖ All requirements which are in conflict should be discussed individually.
- ❖ Negotiation meetings should be conducted in three stage.



Stages of Negotiation Meetings

11

- ❖ Information stage
- ❖ Discussion stage
- ❖ Resolution stage

Stages of Negotiation Meetings

12

❖ Information stage:

- An information stage where the nature of the problems associated with a requirement is explained.

Stages of Negotiation Meetings

13

❖ Discussion stage:

- A discussion stage where the stakeholders involved discuss how these problems might be resolved.
 - All stakeholders with an interest in the requirement should be given the opportunity to comment.
 - Priorities may be assigned to requirements at this stage.

Stages of Negotiation Meetings

14

❖ Resolution stage:

- A resolution stage where actions concerning the requirement are agreed.
 - These actions might be to delete the requirement.
 - To suggest specific modifications to the requirement
 - Or to elicit further information about the requirement.



THANK YOU

Dr. Syed Muazzam Ali Shah
muazzam.ali@nu.edu.pk