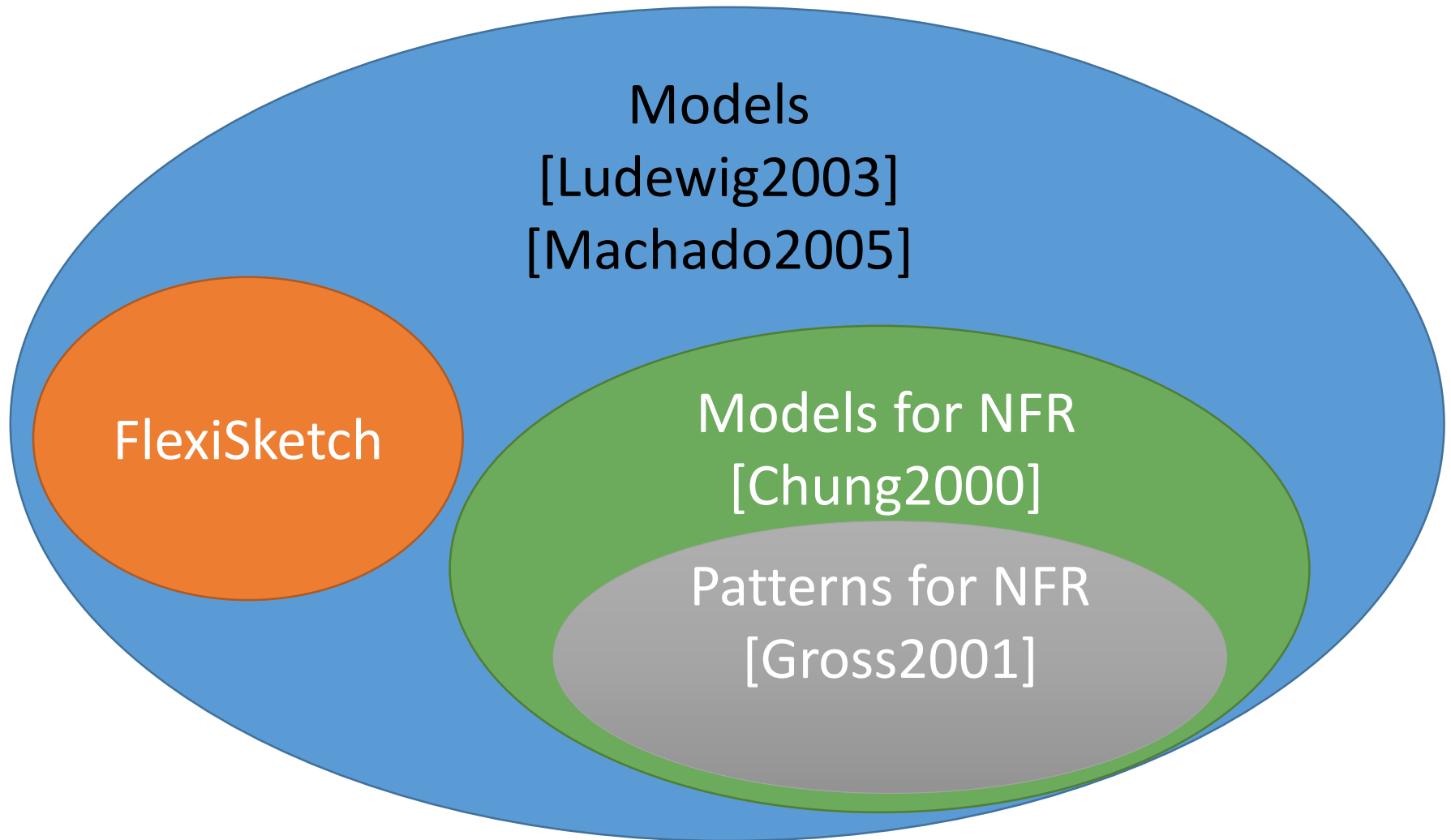


Assignment 4: Modeling in RE

Modeling Non-Functional Requirements (NFR) Using Soft Goals

(Philipp Huber, Michael Schneider & Emmanuel Twumasi)

Relate to Session Topic



The NFR Framework in Action

Approach for NFR / Softgoals:

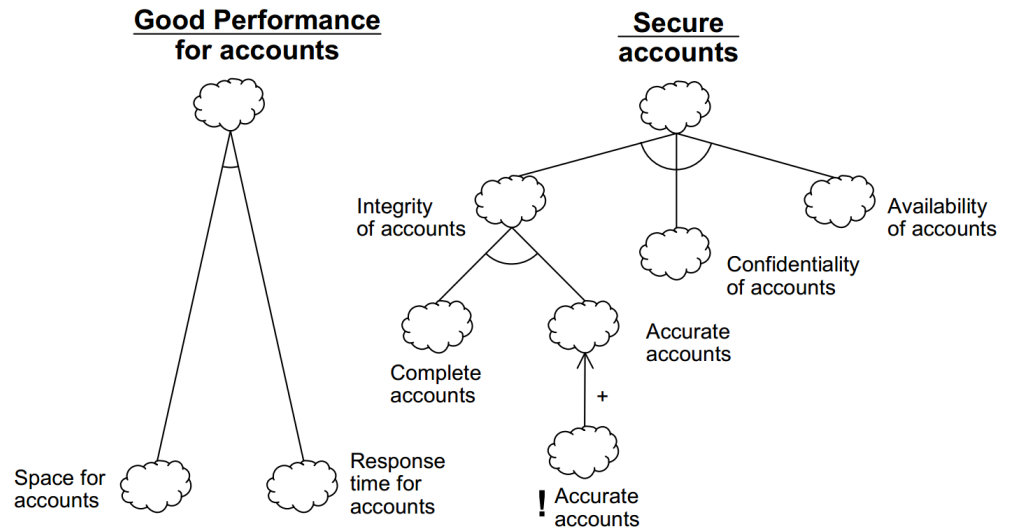
- Identify «Softgoals» and their interdependencies
- Operationalize Softgoals (technical solutions)
- Reuse existing (domain-) knowledge
 - For decomposing NFR
 - For interdependencies of Softgoals
- Argument about Softgoals and get justified decisions
- Get functional requirements out of Softgoals

What are Softgoals?

- NFR-Softgoals
- Operationalizing-Softgoals
- Claim-Softgoals

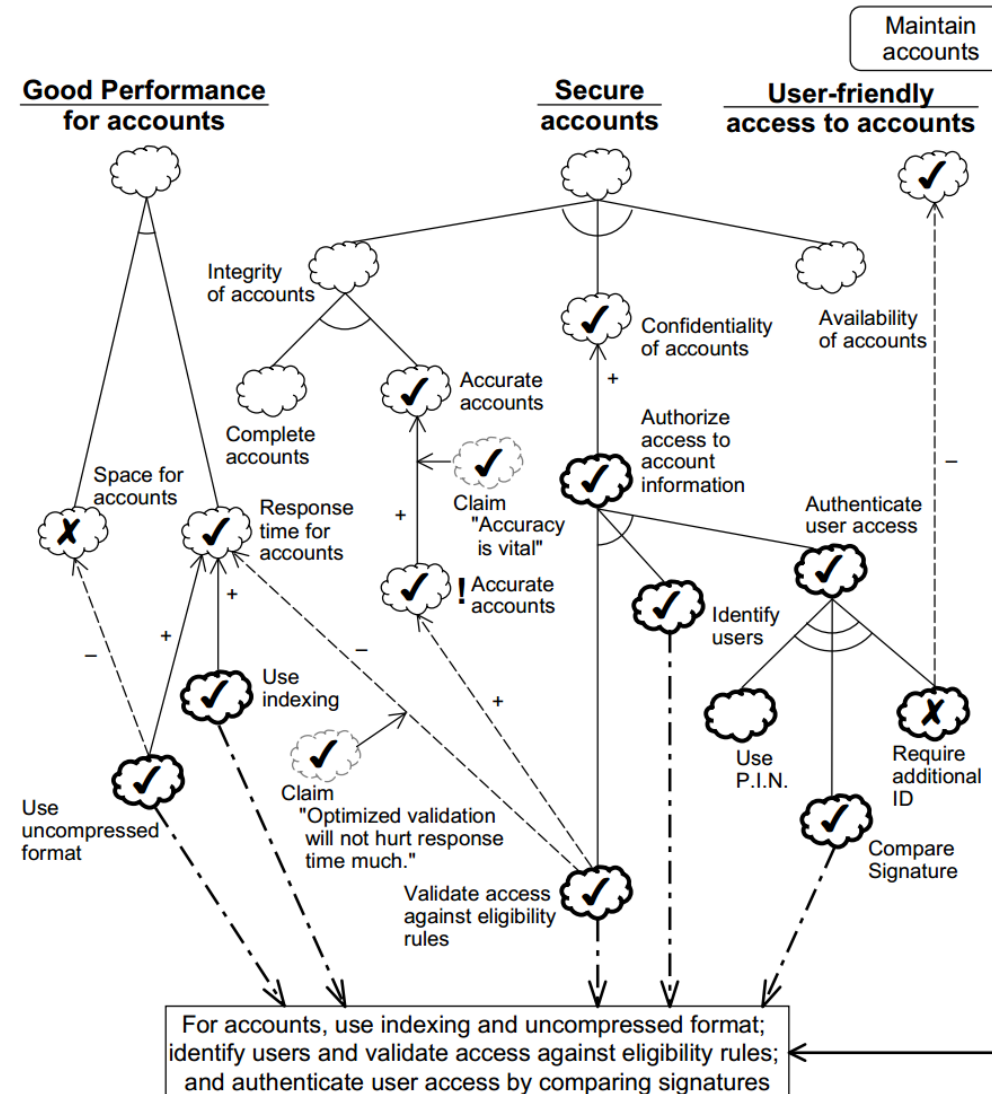
The NFR Framework in Action - Steps

1. Find and decompose NFR



The NFR Framework in Action - Steps

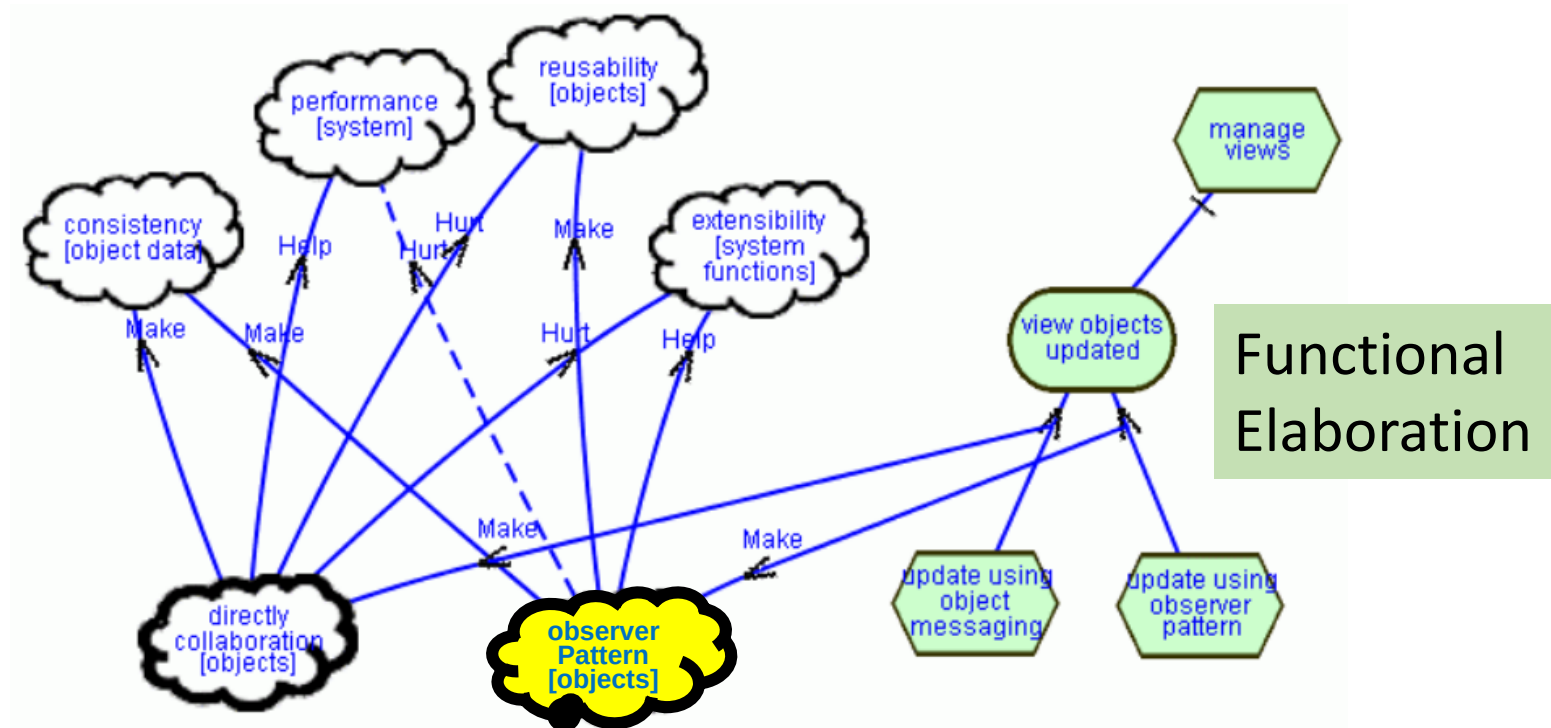
1. Find and decompose NFR
2. Identify operationalizations
3. Identify interdependencies
4. Select operationalizations and evaluate the Impact



From Non-Functional Requirements to Design through Patterns

→ Use Patterns to meet Softgoals

Example: **Observer Pattern** vs. Direct collaboration of objects



Discussion

- How can requirements guide a patterns-based approach to design?
- Can the design pattern-based approach for NFR work in all situations according to your opinion or your experiences?