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Requirements Engineering II

Assignment 2

Goal-Oriented Requirements Engineering



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Terminology

Goal – A desired state of affairs.

Intention – A goal plus the commitment to reach it.

Requirement – A condition or capability that must be met by or possessed by a system [to satisfy some stakeholders' desires or needs / to satisfy a contract or another formally imposed document]

Actor – A person or system component that can perform actions (with the intention to reach a goal)

Agent – 1. A person or system component that works on behalf of an actor or another agent 2. Synonym for actor

GORE – Goal-Oriented Requirements Engineering

Goals vs. requirements

- **Goal:**
 - a desired state

- **Requirement:**
 - a desired or needed property
 - typically describes a condition or capability of a system that is necessary for reaching a goal

Problems and challenges

- How can we decompose goals? Are goals always satisfiable?
 - ⇒ AND-OR trees, soft goals, NFR framework
- How can we get from business/organizational goals to system requirements systematically?
 - ⇒ Goal analysis and decomposition, KAOS approach
- Who are the stakeholders and which goals do they have? What do they do for reaching their goals? To whom do they delegate sub-goals for fulfillment? An what or whom do they depend?
 - ⇒ Actor dependency and rationale models, i^* approach
- Can the ideas of stakeholder/goal networks be extended towards a process for building agent-oriented software?
 - ⇒ Tropos

Tasks

Individual tasks:

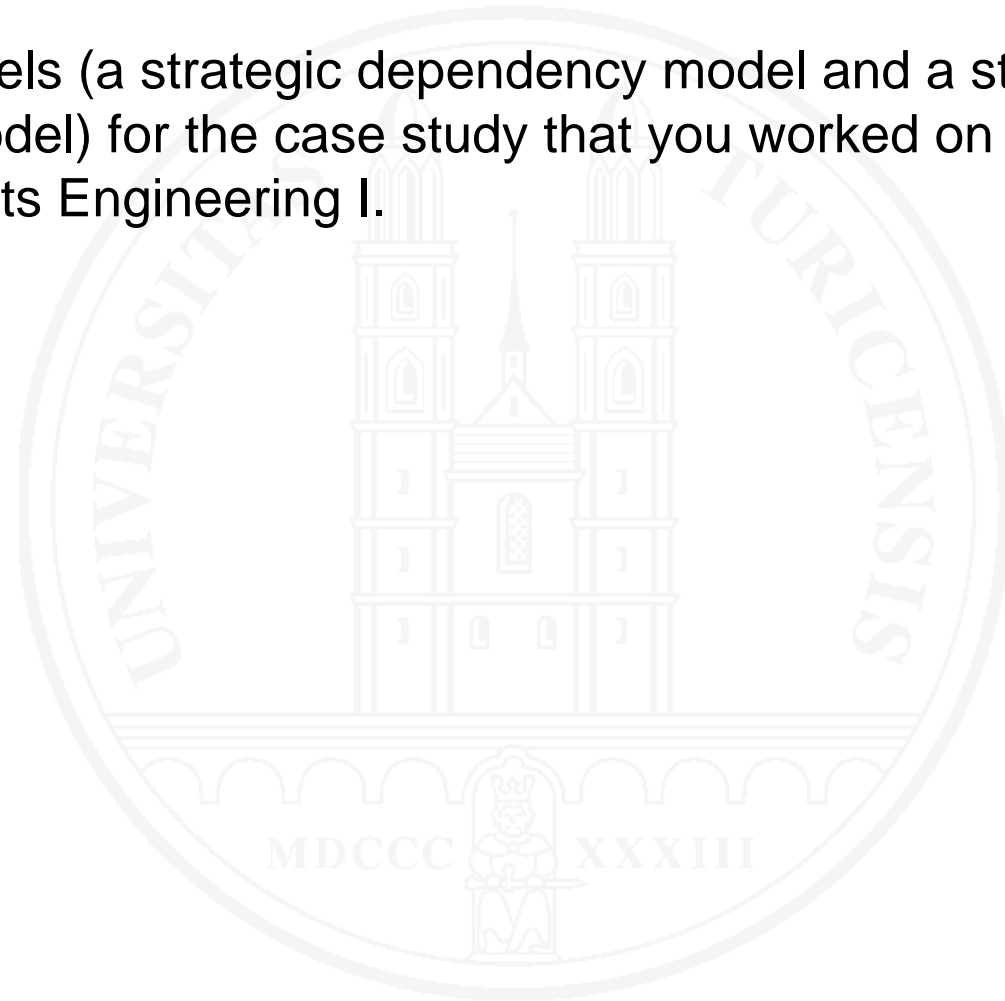
- Read the mandatory items in the reading list
- Be prepared to answer the assignment questions in class

Group tasks:

- Prepare a 15 minutes presentation (5-10 slides) on the theme assigned to your group. Browse/read additional papers and/or web pages where necessary. The themes are:
 - A. An overview of goal-oriented Requirements Engineering and goal-oriented requirements elicitation
 - B. The KAOS approach to goal-oriented Requirements Engineering
 - C. i^* and related approaches to goal-oriented Requirements Engineering

Tasks (continued)

- Build i^* models (a strategic dependency model and a strategic rationale model) for the case study that you worked on in Requirements Engineering I.



Reading list and other details

- See assignment description at
http://www.unizh.ch/req/courses/re_II
- Papers download is password-protected
 - User name: re2ws0607
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