

Assignment 3: Goal Modeling with i^* (20% of the total grade)

Requirements Engineering (Summer 2021)

IMPORTANT DATES

Tuesday (7/20/2021), in class
Thursday (7/22/2021), 9am

Assignment 3 release
Assignment 3 report due

INPUT

- Fifteen (15) functional requirements (FRs) are provided in PDF format
- The lecture notes and in-class exercises provide hints and helpers

DESCRIPTION

This is an **individual** assignment. Assignment 3 asks you to understand the 15 FRs and build one i^* model in the SR (strategic rationale) view based on your understanding. You shall include all the five types of nodes (actors, goals, softgoals, tasks, and resources) and all the three types of edges (dependency, decomposition, softgoal contribution) in your i^* model. In addition, your i^* model shall (1) have no less than 3 softgoals, and (2) have both positive and negative contributions to some or all of the softgoals.

Note that requirements modeling shall **NOT** be carried out as a direct translation from the 15 FRs to an i^* model. You shall add i^* constructs (nodes and edges) to show your understanding; however, your addition shall be as faithful as possible, where “faithful” is best understood as the “narrow bridge” in Jackson’s “meaning of requirements”. You shall also ignore things mentioned in the 15 FRs in your i^* model; the practical guidelines of such ignoring are essentialness-to-your-chosen-stakeholders and softgoal-relevance.

For softgoals and their contributions, you shall practice both requirements elicitation and tradeoff analysis. The former will help you generate a non-trivial set of softgoals, and the latter will help you model softgoal’s positive and negative contributions.

SUBMISSION AND GRADING (20 POINTS IN TOTAL)

You shall write your Assignment 3 report by including:

- One i^* model having (1) all the 5 types of nodes, (2) all the 3 types of edges, (3) at least 3 softgoals, and (4) both positive and negative softgoal contributions – [15 points](#);
- A short report on your processes of (1) i^* modeling, and (2) softgoal tradeoff analysis – [5 points](#).

Keep in mind that your report shall have the title page that includes author, email, and date.

NOTES

- Your i^* model shall be mainly graphical; however, textual information (e.g., annotation) can be provided to assure a clear understanding.
- Either manually-drawn or computer-aided i^* model will be accepted. An online drawing tool that may be helpful is: <https://app.diagrams.net/> . No matter how you produce your i^* model, ensure readability.
- Your Assignment 3 report shall be in PDF format.
- Please email your Assignment 3 report to nan.niu@uc.edu before 9am, Thursday (July 22, 2021).
- The late penalty is 20% earned grade off for each day being late (up to two days). If you have difficulty in meeting the submission deadline (9am, Thursday, 7/22/2021), then please contact the instructor (nan.niu@uc.edu).