# In-Person Interview and Modeling Session

for "Evaluating the Utility of Goal Model Construction"

Note: Prior training videos are available at:

http://www.cs.toronto.edu/~amgrubb/archive/RE17-Supplement/. We are currently in the process of developing videos for our updated tool, but the content will be the same.

#### Part 0 - Informed Consent

- 1. Does participant satisfy eligibility requirements? (Y/N)
- 2. Signed and reviewed informed consent? (Y/N)
- 3. On the above scale rate your familiarity with requirements engineering.
- 4. On the above scale rate your familiarity with the i\* (or iStar) modeling language.

## Part 1 - Introduction / Training

Review or introduce goal modeling and the "Leaf" goal modeling tool (Video 1A - Welcome-Video see <a href="http://www.cs.toronto.edu/~amgrubb/archive/RE17-Supplement/">http://www.cs.toronto.edu/~amgrubb/archive/RE17-Supplement/</a> for example).

- 1. Do you have any questions about the video, goal modeling or the leaf tool? Load Model 1 Trusted Computing
  - 1. Name all the actors in the model.
  - 2. Name all the leaf nodes in the model (nodes without incoming dependencies).
  - 3. Name all the top-level nodes in the model (nodes that do not contribute to other nodes and/or no outgoing dependencies).
  - 4. Which is the stronger relationship, "++" or "+"?
  - 5. Identify a contribution link in the model and describe what kind of contribution link it is.
  - 6. Identify decomposition links in the model.
  - 7. Identify a contribution relationship in the model.

## Part 2 - Participants Creates their own Model (TC-Paper / TC-Tool)

In this part we co-facilitate participants creating their own model and may ask the following questions during model building:

## For choosing a major

- a. What do you consider yourself good at?
- b. What are your current interests?
- c. What are some resources that will help you become better at your interests, and how tangible are those resources? (e.g., online lectures, industrial publication, family connections, etc.)

- d. How would you imagine your financial situation in 20 years?
- e. How would you imagine your social circumstance?
- f. How much time or what kind of work schedule do you prefer?

## For study abroad

- a. Are you missing out anything when studying abroad?
- Is there anything to get prepared for studying abroad? (e.g., language classes, the major requirement for certain program, financial situations, etc)
- c. For those preparations, do any of those contradicts each other?
- d. For those people and organizations that affect your choice of study abroad, do they make it easier or harder for you to study abroad, and how?
- e. Does study abroad achieve any of your higher order goals?

## For finding internships

- a. For the different options of internship, do some of them contribute to the values you have in life?
- b. Do any of the things needed to be completed to get one internship to contribute(positively or negatively) to getting another internship?
- c. Does any task you need to complete to get one internship contributes (positively or negatively) to your larger goals for life?
- d. Where would you like to see yourself professionally in 5 years?
- e. What are some resources that will help you get there?

## Questions to facilitate participants to extend the model

- a. Would you add or remove any elements?
- b. What decisions are you considering in this model?
- c. Are there any connections between X and Y? Can we decompose Z?

## Part 3 - Reviewing the Auto-Generated Model (TC-Auto)

Show users the model we created and ask them to update it. Questions to facilitate participants to extend the model:

- a. Would you add or remove any elements?
- b. What decisions are you considering in this model?
- c. Are there any connections between X and Y? Can we decompose Z?

## Part 4 - Participant chooses to extend a model

- a. Which of the models (i.e., TC-Auto or (TC-Paper / TC-Tool) do you prefer?
- b. If you can extend one model which would you extend?
- c. Ask the user to extend their chosen model. Repeat process in Part 2.

## Part 5 - In-person Debrief

Questions for comparing TC-Auto and (TC-Paper / TC-Tool)

- a. What functions of (respective tool) were the easiest to grasp?
- b. Which aspects of (tool) were the most difficult to understand or use?
- c. Which aspects of (tool) did you use most often?
- d. What relationships (++,-,+S, or, etc) did you use most with (model/tool)?
- e. Which relationships did you have the most trouble with in (model/tool)?
- f. Compare and contrast -- Which model (TC-Auto or your own) do you prefer? Why?
- g. Did different treatments yield different outcomes?
- h. What suggestions or changes would you recommend to the developers of this goal modeling language (and tool)?

Thank participant and remind them that they will receive a followup email and kindly ask them to reply. Explain to participants regarding the nature of the study of comparing the utility of BloomingLeaf goal modeling tool on paper or online by randomly assigning each participant to one of the two groups. Answer any questions that the participants have.

Give participants compensation.