

Smith College • Northampton, MA

Title of Study: Representing and Merging Diverse Goal Models in Requirements Engineering

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Introduction and Purpose of Study

- Goal modeling is used to facilitate stakeholders evaluating potential scenarios and making decisions for projects. A goal modeling language provides users with visualizations of related tasks and resources that contribute to high-level objectives and goals.
- You are being asked to be in a research study investigating the utility of different methods of goal-modeling. We are examining the process of building goal models and the challenges and benefits offered by various methods of model construction and analysis. As part of this study, you are being asked to do a presession questionnaire, a single in-person session, and a brief post-study questionnaire. You will have the option of providing your contact information for a future follow-up study.
- You were selected as a possible participant for this study because you meet our inclusion criteria:
 - o applied to participate in the study,
 - · have proficiency in English,
 - o be currently enrolled at Smith College,
 - be known to NOT have a color vision deficiency (i.e., you are NOT color blind), and
 - passed CSC 212 or CSC210 Programming With Data Structures.
- You may be excluded from the study if you are a current or past member of The Grubb Lab or have already participated in a previous offering of this study.
- We ask that you read this form and ask any questions that you may have before agreeing to be in the study.
- Ultimately, this research will be submitted to Requirements Engineering publication venues.

Description of the Study Procedures

- If you agree to be in this study, you will be asked to do the
 following things: you will be asked to complete an online
 questionnaire, a single in-person modeling session, and a brief
 follow-up via email. It is expected that you can complete the
 questionnaires in under ten minutes. The in-person session will
 take 60 minutes.
- The questionnaire will ask you questions about a topic of your choosing (e.g., study abroad, job search), and the in-person session will first teach you a basic introduction to goal modeling and then will ask you to use the basic training to extend an original model. There are no correct answers and we will not be evaluating the correctness of your individual responses, as the purpose of this study is to explore the utility of each approach. If you choose to participate, you should complete the information at the end of this consent letter.
- Upon collection, Prof. Grubb will store all collected data
 (interview transcripts, written notes, electronic data, and survey
 responses) until the data is anonymized and coded for
 analysis. All electronic data will be stored securely on a Smith
 College server (including Smith College's Qualtrics server), and
 all physical data will be stored in a locked filing cabinet in Prof.
 Grubb's office at Smith College. Upon publication, anonymized
 data will be permanently archived in a repository on Smith
 ScholarWorks (https://scholarworks.smith.edu). All raw
 information will be destroyed after 7 years.
- If you would like to participate and require materials to be presented in an alternative format (e.g., large font), please contact Alicia M. Grubb at amgrubb@smith.edu.

Risks/Discomforts of Being in this Study

There are no foreseeable (or expected) risks in this study. There may be unknown risks.

Benefits of Being in the Study

 As someone who uses goal models, you may benefit from the results of this investigation as we discover which methods of goal-modeling are most beneficial.

Confidentiality

The records of this study will be kept strictly confidential. Research records will be kept in a locked file, and all electronic information will be secured using a password protected file. Audio recordings of the interviews conducted during this study will be securely stored on a Smith server until analysis is completed. We will archive the anonymized data in a repository on Smith ScholarWorks. We will not include any information in any report we may publish that would make it possible to identify you.

Payments

 All qualified respondents will have the option to receive a \$20 USD cash distributed at the close of the survey.

Right to Refuse or Withdraw

The decision to participate in this study is entirely up to you. You may refuse to take part in the study at any time without affecting your relationship with the investigators of this study or Smith College. Your decision to refuse will not result in any loss of benefits to which you are otherwise entitled. You have the right not to answer any single question, as well as to withdraw completely from the study at any point during the process; additionally, you have the right to request that the researcher not use any of your study material, prior to completing the in-person session. Participants who withdraw prior to completion will not receive compensation.

Right to Ask Questions and Report Concerns

- You have the right to ask questions about this research study and to have those questions answered by me before, during or after the research. If you have any further questions about the study, at any time feel free to contact Prof. Alicia M. Grubb at amgrubb@smith.edu. If you like, a summary of the results of the study will be sent to you. If you have any other concerns about your rights as a research participant that have not been answered by the investigators, you may contact the Smith College Institutional Review Board at irb@smith.edu or (413) 585-3562.
- If you have any problems or concerns that occur as a result of your participation, you can report them to the IRB using the contact information above. Alternatively, concerns can be reported by completing a Participant Complaint Form, which can be found on the IRB website at https://www.smith.edu/academics/institutional-reviewboard/compliance

Consent

Your digital signature below indicates that you have decided to volunteer as a research participant for this study, and that you have read and understood the information provided above.
I confirm that I satisfy the eligibility requirements for this study described above. I agree to participate in this study. I agree to the recording of audio and the computer screen during this study.
I agree to participate in this study. I agree to the recording of the computer screen during this study, but do not agree to audio recording. I do not agree to participate and will be excluded from the remainder of the questions.
Please enter your name as your digital signature.