CS 6361 — Advanced Requirements Engineering, Spring 2008
Project Phase II: Second Iteration –
Product Specification + Process Specification

Due date:

April 17 (Thursday): Presentation on Interim Progress (max 13 minutes/team); A hardcopy of the presentation should be submitted, and a softcopy posted on the team web site.

April 25 (Friday) – April 29 (Tuesday): Submission of the specifications and demo of the running prototype (Each team needs to set up a time with the TA to do a demo; A hardcopy should be submitted at the time of the demo.)

To be and Not to be

I. Summary

Your team shall continue with the problem analysis from the first phase of the course project, but this time using more advanced notations with richer ontologies. For this phase of problem analysis, you will continue to further carry out your elicitation, analysis and specificaiton of the SDMS – Synergy Distributed Meeting Scheduler system, while accommodating some new changes to the preliminary definition of the sytem.

More specifically, your team's task is to develop:

- Product Specification: a UML-based and Softgoal Interdependency Graph-based requirements specification. This will involve reflecting the changes on the dependency-based specification and mapping the new dependency-based specification into a final specification. Use the spirit of RML/Telos when using the UML for the functional part; at least some essential NFRs should be modelled using a Softgoal Interdependency Graph (SIG).

- Process Specification: a UML-based, or at least IDEF-based, and Softgoal Interdependency Graph-based process specification, which should describe the process whereby your team has done, through 2 iterations, the modelling and prototyping of your own SDMS.

II. Changes to the Preliminary Definition

Various marketing surveys have shown that a product, including SDMS, cannot be sold unless it provides the best security and context-awareness that is possible currently and will be in the foreseeable future.

III. The Deliverable

Your description should be elegant and comprehensible. Your deliverable should be available as both on-line and off-line specifications (submission of one hardcopy per team). You can choose to use an IEEE-style format for the deliverable, in which the major sections typically include: Introduction, Main

Body (items below, for this project), Glossary (Definitions and Acronyms) and References (See, for example, " Document Templates - general IEEE" on the course web site).

1. **The Process Specification:** Your process specification should show all the iterations your team has gone through, each involving the modelling and prototyping of your own SDMS.

   In other words, specify who have been involved in carrying out the course project phases I and II, what inputs have been consumed in each of the two phases, and by what activities, what outputs have been generated by them, etc.; and also model the data part too (e.g., showing class hierarchies for the data part).

2. **Issues:** As with the first part of the course project, discuss any issues (e.g., incompleteness, inconsistency, ambiguity, redundancy) that you have encountered in further carrying out the problem analysis, while using ontologically richer notations.

   As with the first deliverable, discuss how you have resolved the issues by describing options considered, tradeoffs analysed, and decisions made. In order to resolve the issues, you might need to use your own "creative imagination" but based on your teamwork.

3. **The Product Requirements Models and Specification:** Develop an enterprise model and a requirements specification using the UML in the spirit of RML/Telos and SIG (possibly together with some informal specifications for non-essentail NFRs).

4. **A prototype:** Develop a running prototype, based on the mockup prototype which you constructed as part of the deliverable I. Your prototype should be more fully functional, and with enhanced quality.