

# University of Toronto

## Department of Computer Science

CSC340S - Information Systems Analysis and Design

February 13, 2004

John Mylopoulos

### Assignment 2: Requirements Analysis

***Due Date: 5:10pm, Monday March 8***

***This assignment counts for 15% of the final grade***

Work on the assignment is to be undertaken by *teams of three*.

### The Assignment

The objective of this assignment is to give you practice in gathering information and completing a requirements analysis for an organizational information system. The problem you will be working on has to be a problem you or someone else in the class worked on for assignment 1.

This assignment has *6 steps*. They are:

1. Review the feasibility study for the problem you have chosen.
2. Discuss the feasibility study with the domain experts and get their feedback. Get additional information for the alternative recommended in the feasibility study.
3. Gather functional and non-functional requirements on the basis of the information you have assembled.
4. Model key aspects of the problem (such as the functional requirements for the proposed system) using use cases, class diagrams, state and/or activity diagrams and sequence diagrams.
5. Use CL to define invariants for classes, also pre-conditions and post-conditions for their operations.
6. Write a report that includes a requirements specification document and UML models of the functional requirements for your system.

Your report should contain the following information:

- Introduction;
- The problem;
- Alternative selected, described in English;
- Requirements specification, covering both functional and non-functional requirements;
- Appendices (UML diagrams, meetings held, other documentation.)

## What to Hand In

Please submit your assignment *in hardcopy form only* to your tutor at the beginning of the tutorial.

## Marking Scheme

**Requirements Specification (40%):** Do the functional and non-functional requirements make sense? Do they address the problem? Is your specification clear, well-structured, unambiguous, complete, easy to change, traceable etc.? (See slides on Requirements Specification)

**UML Diagrams (40%):** To what depth do they model functional requirements? Are they correct, complete, consistent? Are invariants and pre/post-conditions formalized using CL?

**Report (10%):** Overall structure and presentation of your report.

**Style (10%):** The style of your presentation, including language, grammar, clarity, etc.

# Team Report Form

(***must*** be submitted with assignment hardcopy)

Description of roles and contributions of each team member:

Name	% of team Effort

