

# CSC3354 — Software Engineering, Fall 2004

## Project Phase 3: Detailed Design and Implementation

Due: 1:00pm Monday November 22 (in class; softcopy on web)

### I. Summary

Your team's task is to build a detailed design and implementation of *SafeHome\**, based on your own software architecture which resulted from the Project Phase II. More specifically, you are to build: i) a detailed design using UML and ii) an implementation based on i).

### II. The Deliverable

Your description should look professional.

- 1. Methodology for Your Team Work:** Describe how your team members were divided up in carrying out your own detailed design tasks, and why each took the particular roles.
- 2. Issues:** Discuss any issues that you have encountered in mapping your software architecture into a detailed design, and the detailed design into a code. Also discuss how you have resolved the issues. Included in your discussion should be: i) selection of data structures, e.g., why a queue instead of a stack or a graph; and ii) selection of processing algorithms, if any, e.g., why depth-first as opposed to breadth-first search, why a single queue as opposed to priority queues, etc.
- 3. Detailed Design** Present a UML specification of a detailed design.
- 4. (Partial) Implementation:** Choose an object-oriented programming language of your own and implement a system which corresponds to **3** above. Your source program should have good internal comments, and accompanied by test data and test runs.

*How about thanking your great team members?*

*Best wishes with your career!*