

**Software Engineering with Objects and Components 1**  
**Group Tutorial Project: Deliverable 1**  
**September 2005**

## ***Secure Coursework Submission System: Requirements***

Your software company (tutorial group) has now received initial requirements documentation from *The School of Informatics*. You have separated into three teams, each dealing with different facets of the overall system tendered by the *School of Informatics*. Your first project deliverable is a report to the *School of Informatics* detailing your initial requirements specification, a preliminary outline of your proposed implementation (i.e. class model). In this phase you will have had the opportunity to interview some of the stakeholders to clarify the requirements for the system.

**Deadline for Deliverable 1: 5pm Monday 31st October 2005**

### **Documents to submit**

Your team should submit: a completed cover sheet (blank cover sheets are available from the SEOC1 practical web page); a requirements specification based on one of the template documents available online, this document should include: a collection of use case diagrams and accompanying specifications; the class model for your team's view of the system; validation of the class model wrt the use cases.

The cover sheet records the software company (tutorial group) to which you belong, and your team details (team responsibility and membership). In addition there is a *team-contribution form* on the cover sheet that allows the team to assess the level of contribution given by each team member. This should be arrived at in the team by consensus. Details of this form, and how it affects individual marks, are given on a separate handout.

Your overall document should be structured according to one of the supplied templates. The incorporate UML components should conform tho the following requirements.

### **Use Case Model**

You should provide use case diagrams where the primary actors are in your aspect of the system. Try to be as comprehensive as possible, it is likely that there will be some overlap in use cases considered by each team. Include actors from all the relevant aspects of the system where they interact with the main actor drawn from your facet of the system. Your use case diagrams should be accompanied by informal descriptions of the tasks they specify. These should be brief (typically a few sentences) and informative.

## Class Model

You may provide more than one class diagram, but ensure that all classes and associations in your class model are included. Class attributes and methods should be provided, but bear in mind that you do not as yet have sufficient information to define all of these precisely. It is your responsibility to clearly identify any *speculative* assumptions and design decisions you may have made.

## Validation of Class Model

You must justify that your proposed class model can realise your use case model. You may use any suitable technique to identify which classes (and their methods) collaborate in realising each of your use cases, although the use of CRC cards is the recommended technique. Furthermore, you must clearly set out how your chosen technique validates the class model. Again, you must clearly identify the impact of any speculative assumptions on these realisations.

## Assessment

Marks will be awarded by team. The three parts of the deliverable (use case model (35%), class model (35%) and validation (30%)) each contribute almost equally to the final mark. Allocation of marks to individual team members will be as described in the separate hand-out.

While your reports are assessed as individual teams, it is expected that all four of the groups' reports will be consistent (i.e. wrt terminology, shared use cases, shared classes, etc.)

Marks for this deliverable constitute 50% of the practical marks for this course. That is, 12.5% of the overall course mark.

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