

# Software Engineering with Objects and Components 1

## Sixth Tutorial: Practical Work

**Please read this tutorial sheet before you arrive at the tutorial. You are required to do some preparation for the tutorial – please try to do it.**

*Before the tutorial:*

1. Ensure you have a copy of your deliverable 1 to bring along to the tutorial.
2. Get together with your group and try to incorporate any changes to the use cases that have been suggested by your tutor or tutorial group in response to deliverable 1.
3. Identify the set of use cases you think need not be implemented in a preliminary version of the system.
4. Identify the classes that realize the selected use cases.
5. Prepare 1(2) OHP slide(s) with:
  - (a) those use cases you think should be the basis for a preliminary implementation of the system
  - (b) the classes that realize the selected use cases
  - (c) an allocation of the responsibilities for the implementation of the identified classes.

The aim of this tutorial is to agree a subset of the requirements for each team that provide the basis for deliverable 2. Ideally:

1. This should be a small subset that would allow the rapid implementation of a basic system.
2. There should be agreement across the teams on the collection of selected use cases that will provide the basis for deliverable 2.
3. The outcome of the tutorial will be:
  - (a) An agreed set of use cases from each team that will be used as the basis for this part of the practical.
  - (b) Agreement with each team on the two classes that they should provide tests and implementations for.

*After the tutorial:*

1. You should begin to define the tests you need for your chosen classes.
2. You should review the use cases chosen to represent the preliminary implementation and attempt to identify inconsistencies.

## Team Resources

- 1 instruction sheet (this page)
- 1 or 2 blank OHP slides
- 1 non-permanent OHP pen
- 20 minutes preparation time
- 10 minutes presentation time

## Instructions

Each team brings along the slides with the use cases and classes they propose to address in their implementation work. The process you should follow is:

1. Each team presents their slide overviewing the use cases and classes they intend to address/implement. During the presentations a “secretary” to the group records potential issues to be resolved between the teams.
2. After the presentations, the “secretary” takes the group through the list of issues attempting to resolve them, this process will arrive at an agreed collection of use cases that will be considered for deliverable 2.
3. Teams consider the classes in their class diagram and propose two that they will implement. The tutor checks the proposal and approves it or negotiates a new pair of classes. Ideally the classes should be non-trivial and should both be involved in meeting at least one of the requirements expressed in the use cases.
4. If there is time available the teams should begin to identify potential tests for their chosen classes.

## Tutorial Outcomes

By the end of this tutorial your group should have:

1. Agreed a set of use cases that capture the preliminary implementation of the system
2. Ensured that each team has agreed the classes they will implement for deliverable 2 with their tutor
3. Begun to consider what tests are appropriate for their chosen classes.

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