

# Software Engineering with Objects and Components

## Practical Work: Tutorial 8

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. Get together with your team and pull together your work on the **sequence (communication) diagrams**, **activity (statechart) diagrams**, **unit tests** for your chosen classes and your **integration plan**. This should be a draft, readable by other teams, of your deliverable 2 - it needs not to be complete or polished. You should bring **3 copies** to your tutorial.
2. Prepare a presentation of your preliminary deliverable 2. Your presentation should include the following:
  - The name of the tutorial group; the team identifier (i.e., S, T or A).
  - The names of each of your team members.
  - A brief update of your class diagrams: Did you change anything since deliverable 1? Did you take into account any feedback/comment? - **[1-2] OHP slides**
  - **[3-4] OHP slides**
    - the sequence (communication) diagrams for your classes
    - the activity (statechart) diagrams for your classes
    - the unit tests for your chosen classes
    - your integration test plan.

This tutorial is to identify implementation issues (e.g., conflicting definitions, missing information, etc.) that inhibit the collaboration between teams in order to realise high-level and complex use cases. The goals of this tutorial are:

1. To review your deliverable 2 draft
2. To discuss any feedback for your Deliverable 2
3. To identify conflicts (in terms of classes) among your implemented classes
4. To solve conflicting classes
5. To review complex use cases - a small subset that would allow a preliminary validation of your implemented system
6. To agree on the collection of selected use cases that will provide the basis for deliverable 2.

### Team Resources

- 3 copies of your Deliverable 2
- 10 minutes for review and inspection
- 10 minutes for presentations
- 10 minutes for questions

## Instructions

**Inspection.** Each team will have 10 minutes to review and inspect the deliverable 1 draft of someone else's system facet. Take notes of any questions or inconsistencies with respect to your system facet. The review should concentrate on assessing:

- how accurately the sequence (communication) diagrams capture the classes
- how accurately the activity (statechart) diagrams capture the classes
- how adequate the unit tests are, in particular, are the unit tests representative of the use of the classes in the communication diagrams?
- how the planned integration tests differ from the unit tests and how they are directed to checking the interfaces between classes are correct.

**Presentation.** Each team will have 10 minutes to present their work on the **sequence (communication) diagrams, activity (statechart) diagrams, unit tests** for your chosen classes and your **integration plan**.

**Question Time.** The tutor will moderate questions after the presentations. However, you should be prepared to take questions while presenting.

## Activities

### Inspection [10 mins]

Each team reviews the deliverable 2 draft of another team.

### Presentations [10 mins]

Each team will present their **sequence (communication) diagrams, activity (statechart) diagrams, unit tests** and **integration plan**.

### Question Time [10 mins]

Once the review and presentations are complete, you should highlight and discuss with the rest of the group any outcome of the reviews and presentations. The tutor will moderate further 10 minutes of questions. The feedback should be as constructive as possible and should concentrate on identifying the main areas of strength and weakness in the deliverables. **Hint:** Take notes of any question/discussion during the tutorial. After the tutorial, you should review your work according to the tutorial feedback (e.g., questions, errors, clarifications, changes, etc.).

## Tutorial Outcomes

The outcome of the tutorial will be a feedback for your deliverable 2.

*After the tutorial:*

1. You should finalise the tests you need for your chosen classes.
2. You should take into account any feedback to your deliverable 2.
3. You should finalise deliverable 2.

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