

Software Engineering with Objects and Components 1

Eighth Tutorial: Practical Work

Please read this tutorial sheet before you arrive at the tutorial. You are required to do some preparation for the tutorial.

Before the tutorial you should prepare by getting a copy of your draft deliverables together, in particular

- the collaboration (sequence) diagrams for your classes
- the activity (statechart) diagrams for your classes
- the unit tests for your chosen classes
- your integration test plan.

The aim of this tutorial is to identify implementation issues (e.g., conflicting definitions, missing information, etc.) that inhibit the collaboration between teams in order to realize high-level and complex use cases. 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 collaboration diagrams from each team that will be used as the basis for this part of the practical.
 - (b) Agreement with each team on the classes that they should provide tests and implementations for.
 - (c) An agreed set of (unit as well as integrated) test cases.

After the tutorial:

1. You should finalize the collaboration diagrams of the main classes that will provide the basis for deliverable 2.
2. You should finalize the tests you need for your chosen classes.

Team Resources

- 1 instruction sheet (this page)
- 1(2) blank OHP slides
- 1 non-permanent OHP pen
- 30 minutes preparation time
- 5 minutes presentation time

Instructions

In the tutorial you should:

- Rotate your draft deliverables so a new group can review them.
- Each group should review the deliverables they have been given taking approx 20 minutes to read the deliverables and 10 mins to prepare a couple of slides to provide feedback. The feedback should be as constructive as possible and should concentrate on identifying the main areas of strength and weakness in the deliverables. The review should concentrate on assessing:
 - how accurately the collaboration (sequence) 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 collaboration diagrams
 - how the planned integration tests differ from the unit tests and how they are directed to checking the interfaces between classes are correct.
- Once the review is complete, each group should present the results of their review and discuss them with the rest of the group. Take approx 5 minutes for each presentation.

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