

Software Engineering with Objects and Components

Practical Work: Tutorial 2

Note that you are required to do some preparation for the tutorial. Before the tutorial:

1. Get together with your team and pull together your work on the requirements and use cases for your facet of the system. This should be readable by other teams, it needs not to be complete or polished. You should bring this description to your tutorial. *Hint: use the templates (i.e., Volere and Use case) tailored for your purposes.*
2. Prepare a presentation of your use cases. Your presentation should include the following: the name of the tutorial group; the team identifier (i.e., O, P or D), the names of each of your team members and the use cases you have produced.

The aims of this tutorial are:

1. To presents your initial work on collecting the system requirements and representing the use cases.
2. To provide some diverse input to other teams in your tutorial group on the structure of their use cases for their subsystem.
3. To practice creating class models from use cases
4. To begin to identify the responsibilities for the classes in your class model.

Team Resources and Instructions

Team Resources:

- 1 instruction sheet (this page)
- 1 blank OHP slide
- 1 non-permanent OHP pen
- a preliminary requirements/use cases document (of another team)
- 25 minutes preparation time (Activity 1)
- 5 minutes presentation time (Activity 2)
- 10 minutes discussion time (Activity 3)

Instructions: Each team will give its presentation in order as specified by the tutor. Your presentation should include the following:

- The name of the tutorial group; the team identifier (i.e., O, P or D).
- The names of each of your team members.
- The use cases you have produced (before the tutorial).
- The class model you have produced (in the tutorial).

Tutorial Activities

Activity 1 - Review/Design [25 mins]

Each team will have 10 minutes to review their use cases and to prepare a preliminary class model. You need to prepare a short presentation for your class model. **Note that you have to prepare the presentation of the use cases before the tutorial.**

A Preliminary Class Model

The activity is structured in the following way (note that this is very tightly timed – your tutor will enforce these so the activity fits in the available time):

1. Preliminaries: Get into your teams.
2. Individually each member of the team attempts to identify the main classes by analysing the noun phrases used in the use case.
3. The whole team merges the individual lists to create a consolidated list of classes for the system. Consider the list of classes – try to identify associations between the classes. Include the associations only if your team agrees.
4. The whole team constructs one OHP slide with the constructed class diagram.

Activity 2 - Presentation [15 mins]

Each team will have 5 minutes to present their use cases and preliminary class model.

Activity 3 - Discussion [10 mins]

Identify / discuss open issues or changes that you need to address into your use cases and class models. At the end of the tutorial, each group should have a list of issues and changes that need to be addressed.

Tutorial Outcomes

By the end of this tutorial your group should

1. Have some feedback on your use cases.
2. Experienced some of the issues in constructing class models.
3. Have a preliminary class model for your part of the system.
4. Have some feedback from the other teams.
5. Your team should also begin to identify the responsibilities of each class in the model.

After the tutorial:

1. Next week, each of the teams will have review and present their class models for the system.
2. You should begin to prepare this as early as possible. Again, the use cases and class model need not be complete or very polished but you should be close to completing deliverable 1.

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