

10/10/07

## ***Java Enterprise Edition and Design Patterns***

### ***Exercise 6 – The Course Manager***

For the rest of the JEE exercises you will realize a bigger enterprise application. The system you will plan and develop in groups, will be used to manage students, courses, groups and deliverables. Your system has to fulfill the following tasks:

- Manage student data including pcn, firstname, lastname, email and cohort
- Manage course data including id, name, description, tutor
- Manage group lists of students
- Manage deliverables, e.g. source code and PDFs

There will be two different kinds of clients. First a webclient for students to attend to courses, take part in groups and deliver documents. And second a Java Swing client for the tutor to view and manage the data and work with the deliverables.

In the last exercise you made up a UML Class diagram containing the EJBs, Entity Beans and Utility Classes needed in the Business Tier of the application.

In this exercise you will implement all Entity Beans you designed, including the Entity Relationships. Before you start programming, check and revise your class diagram if necessary. ***The diagram has to contain the relationships between the beans including the directions!*** It could be helpful for you to provide some test code to check the Entities.

Your deliverables for this exercise are the **revised UML class diagram** as PNG-file and the **source code** of the EntityBeans.

***Have fun!***