

Technical University of Denmark DTU Informatics Assoc. Prof. H. Baumeister Spring 2013 Exercise Nr. 3 March 19, 2013

# 02291: System Integration

#### OCL Constraints and MUD Game Validation

The task of this exercise is to validate the design from last exercise with respect to the requirements from the first exercise.

#### 3.1 OCL constraints

- Provide any necessary class invariants for classes in the detailed class design using OCL constraints.
- Specify the contract of non trivial operations in the class diagram using OCL constraints (pre:/post:).

#### 3.2 MUD Game Validation

Choose one, at most two, non-trivial use cases. For each use case scenario (default as well as alternative and exceptional scenario) of the use case(s), provide a sequence diagram showing how this scenario can be realised with the design developed in the last exercise.

#### 3.3 Documenting the MUD game design

- Extend the report from last exercise with a section on the test of the MUD game. Thus the overall report should have the following structure:
  - 1. A title page
    - 1.1. Contains title of the report and authors
  - 2. Requirements
    - 2.1. Domain analysis
    - 2.2. Functional requirements
    - 2.3. Non-Functional requirements
    - 2.4. Acceptance test Fit tables
  - 3, Design
    - 3.1. (User Interface Design)
    - 3.2. Rough System Design (contains the result of the CRC card session)
    - 3.2. Component Design
    - 3.3. Detailed Class Design (OCL constraints)

## 3.4. Behaviour Design

### 4. Validation

#### 4.1. Use Case Realisation

- Important: Update your requirements and design documentation to include the knowledge gained when creating the tests and the use case realisation
- The PDF version of the paper should be submitted through CampuNet
  - The filename needs to be of the form sxxxxx\_03.pdf (i.e. the student number of one of the group members, followed by an underscore, followed by 03, the number of the exercise with a prepended 0)