

Software Modelling, fall 2009, exercise 6

This week's main topic, *object design* is based on chapters 10-14, 17 and 18.5 of Larman's book. The topic is not easy and the amount of reading material from Larman is rather large. Actually nearly the whole Larman book is about object design and if you really want to know about the topic, you should read the entire book.

In this exercise we will design operations for the extended Monopoly game that we modeled last week.

Larman has also a design of the Monopoly, but our Monopoly will be a bit different. In Larman's book the game is only a simulation that is entirely played by computer. In our version human users are involved in the game.

1. Design use cases for playing Monopoly.

The game should allow at least the following:

Game can be started after many enough players are registered to the game. Players take turns. In each turn a player throws the dice and moves the piece to the new location. In location some actions are taken.

So there should be at least a use case for the activity related to starting a game and a use case defining what happens when a player is taking a turn.

2. Draw system sequence diagrams (see chapter 10 of Larman) from the use cases. List the system operations that you find from the system sequence diagrams.
3. Do the object design that takes care of the start of the game (registration of players).
4. Do the object design that takes care of a player's turn (throwing the dice, moving piece and taking actions).
5. Answer the course feedback at the address
<http://ilmo.cs.helsinki.fi/kurssit/servlet/Valinta?kieli=en>