

Advanced Aspects of Object-Oriented Programming (SS 2009)

Practice Sheet 11

Date of Issue: 07.07.09
Deadline: 13.07.09
(until 10 a.m. as PDF via E-Mail)

Exercise 1 Programming with CoBoxes

- a) Inform yourself about programming in JCoBox from the following page:
<http://softtech.informatik.uni-kl.de/Homepage/JCoBox>
- b) Implement the scenario of Exercise 2, Practice Sheet 10, with CoBoxes.

Exercise 2 Distributed Programming with RMI

- a) Have a look at the Sun RMI tutorial at
<http://java.sun.com/docs/books/tutorial/rmi/index.html>
- b) Summarise the differences between an „old-style“ (Java version prior to 5.0) and a „new-style“ RMI application.
- c) Write a client program that accesses the remote "fasoop" object located in the RMI registry (default port) on the server `rees.cs.uni-kl.de`. The object stored in the registry contains a password. Try to extract the password.
Hint: You do not know the interface to the object but you can analyze it using introspection.
- d) Write the corresponding server and remote object which implements the behavior of the object in the previous part of this exercise. Access the remote object without using reflection.
- e) Can RMI programs handle callbacks? What is the advantage of RMI over Web Services?

Exercise 3 MVC Pattern

Refactor the Java Swing Calculator application provided on the FASOOP homepage according to the MVC pattern.