

Advanced Java Programming

Description

The purpose of the course is to acquire knowledge on, and enhance competence in, Java Standard Edition, beyond the fundamental language concepts and standard libraries:

Generic definitions

Annotations

Reflection

Multithreading

Memory management, garbage collection

Input-output, serialization

Database management and persistence: JDBC and the fundamentals of JPA

Network programming: TCP and UDP; HTTP

Program design principles and best practices

Exceptions, assertions

Logging and testing

Literature

- James Gosling, Bill Joy, Guy Steele, Gilad Bracha. The Java Language Specification, Third Edition. Addison-Wesley, 2005. ISBN 0-321-24678-0
- Linda DeMichiel, Michael Keith. JSR 220: Enterprise JavaBeans, Version 3.0, Java Persistence API. Sun Microsystems, Inc., 2006.