

B Overview

B.1 Object-Oriented Programming

- Motivation
- Software design
- OOP — fundamental terms
 - ◆ Object
 - ◆ Class
 - ◆ Method
 - ◆ Inheritance
- Basic concepts
 - ◆ Abstraction
 - ◆ Encapsulation
 - ◆ Modularization
 - ◆ Hierarchy
 - ◆ Typing
 - ◆ Polymorphism
 - ◆ Concurrency
 - ◆ Persistence
- Objekt-orientiert analysis and design, design patterns

B Overview (2)

B.2 Distributed Systems

- Motivation
- Properties (advantages and disadvantages)
- Transparency and scalability
- Selected problems
- Distributed and object-oriented systems
 - ◆ Remote Invocation
 - ◆ Object Mobility

B Overview (3)

B.3 Programming Distributed Systems with CORBA

- Motivation
- Survey of the CORBA architecture
- Object Request Broker (ORB)
 - ◆ Interface Description Language (IDL)
 - ◆ Remote invocation
 - ◆ Dynamic invocation
 - ◆ Components of the ORB
- CORBA Services
- CORBA Facilities

B Overview (4)

B.4 Java — OO Language + Virtual Machine for Objects

- Architecture of the Java VM
- JavaOS
- Java processors
- Security concepts
- Java in distributed systems

B Overview (5)

B.5 Frameworks

- Concepts
- Examples

B.6 Research on Distributed Object-Oriented Systems

- Case studies