B Overview

B.1 Object-Oriented Programming

- Motivation
- Software design
- OOP — fundamental terms
  - Object
  - Method
  - Class
  - Inheritance
- Basic concepts
  - Abstraction
  - Hierarchy
  - Concurrency
  - Encapsulation
  - Typing
  - Persistence
  - Modularization
  - Polymorphism
- Objekt-orientierted 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