

The Unified Software Development Process

„A software development process is the set of activities needed to transform a user's requirements into a software system.“

[Booch, Jacobsen, Rumbaugh: The Unified Software Development Process Addison Wesley 1999]

Basic properties:

- use case driven
- architecture centric
- iterative and incremental

Use case driven

Use cases

- capture requirements of the user,
- divide the development project into smaller subprojects,
- are constantly refined during the whole development process
- are used to verify the correctness of the implemented software

Architecture-centric

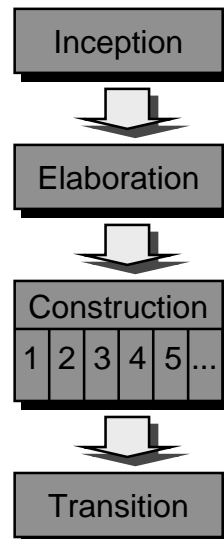
- Find structures which are
 - suitable to achieve the function specified in the use cases,
 - understandable,
 - maintainable,
 - reusable for later extensions or newly discovered use cases.
- ... and describe them, so that they can be communicated between developers and users.

Summary

3

The Unified Software Development Process

- Inception **establishes** the **business rationale** for the project and **decides** on the **scope** of the project.
- Elaboration is the phase where you **collect** more detailed **requirements**, do high-level **analysis** and **design** to establish a baseline **architecture** and create the **plan** for construction.
- Construction is an **iterative** and **incremental** process. Each iteration in this phase builds production-quality software **prototypes**, tested and integrated as subset of the requirements of the project.
- Transition contains beta **testing**, performance **tuning** and user **training**.



Summary

4

