

An Aspect-Oriented Implementation Method

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Characteristics:

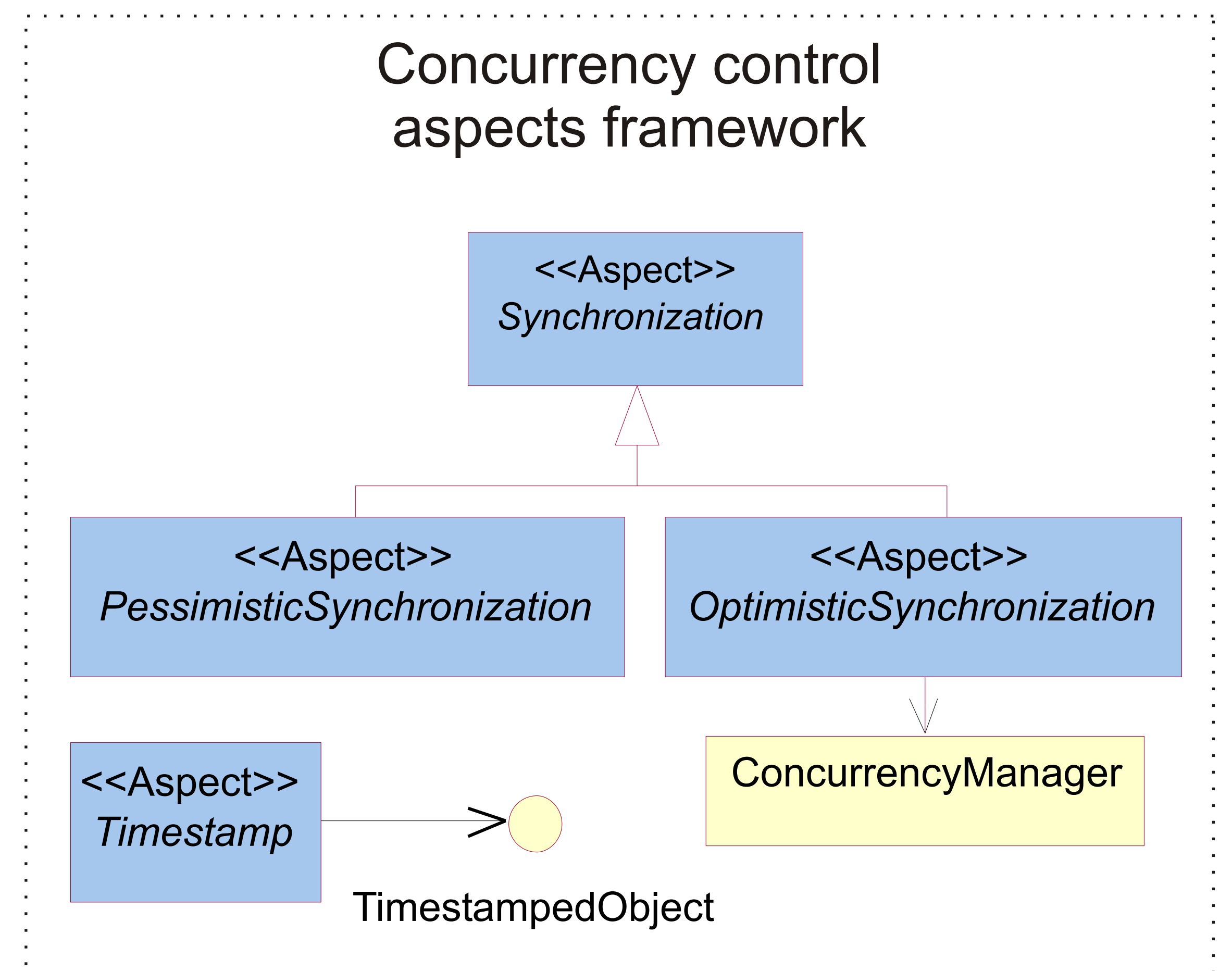
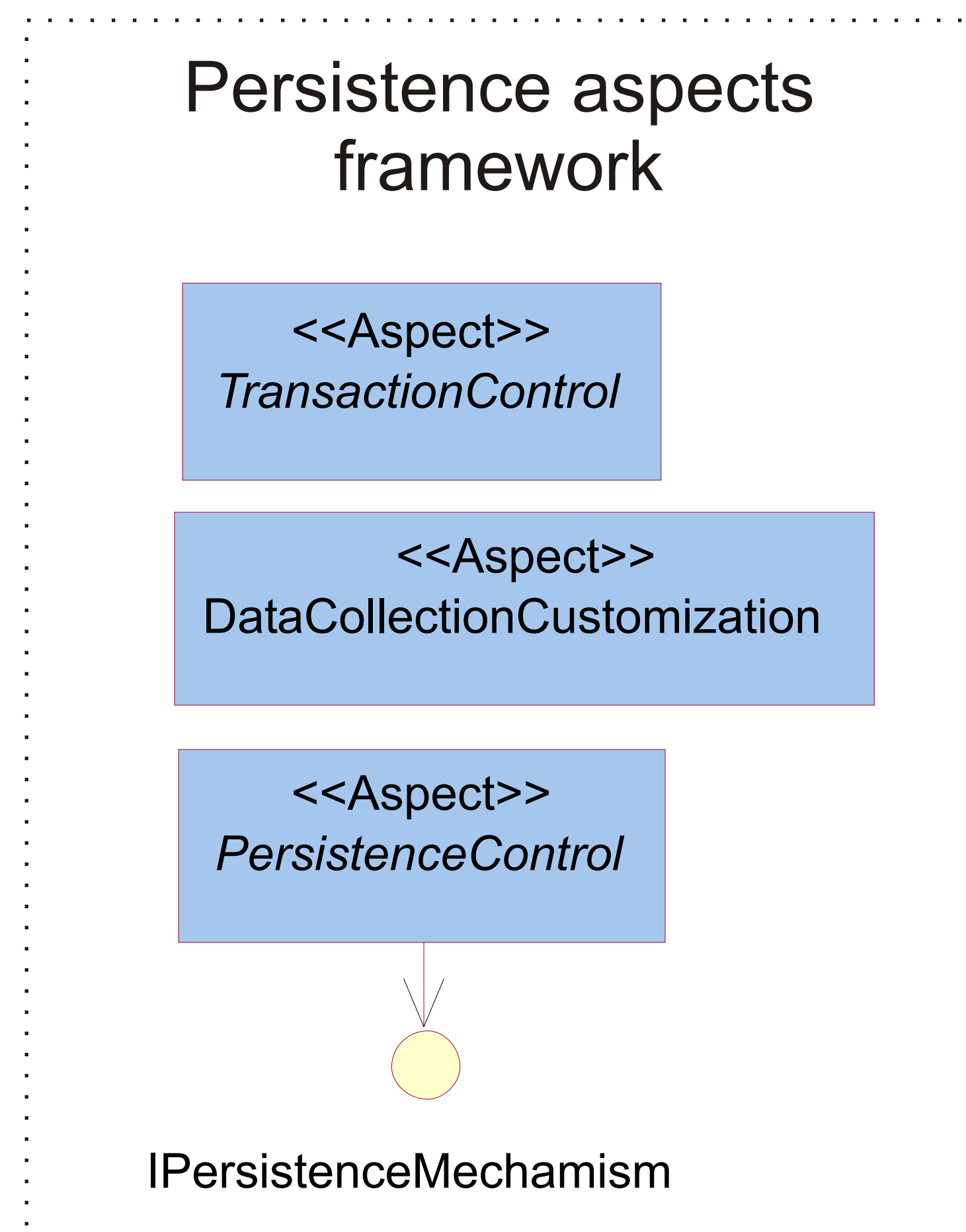
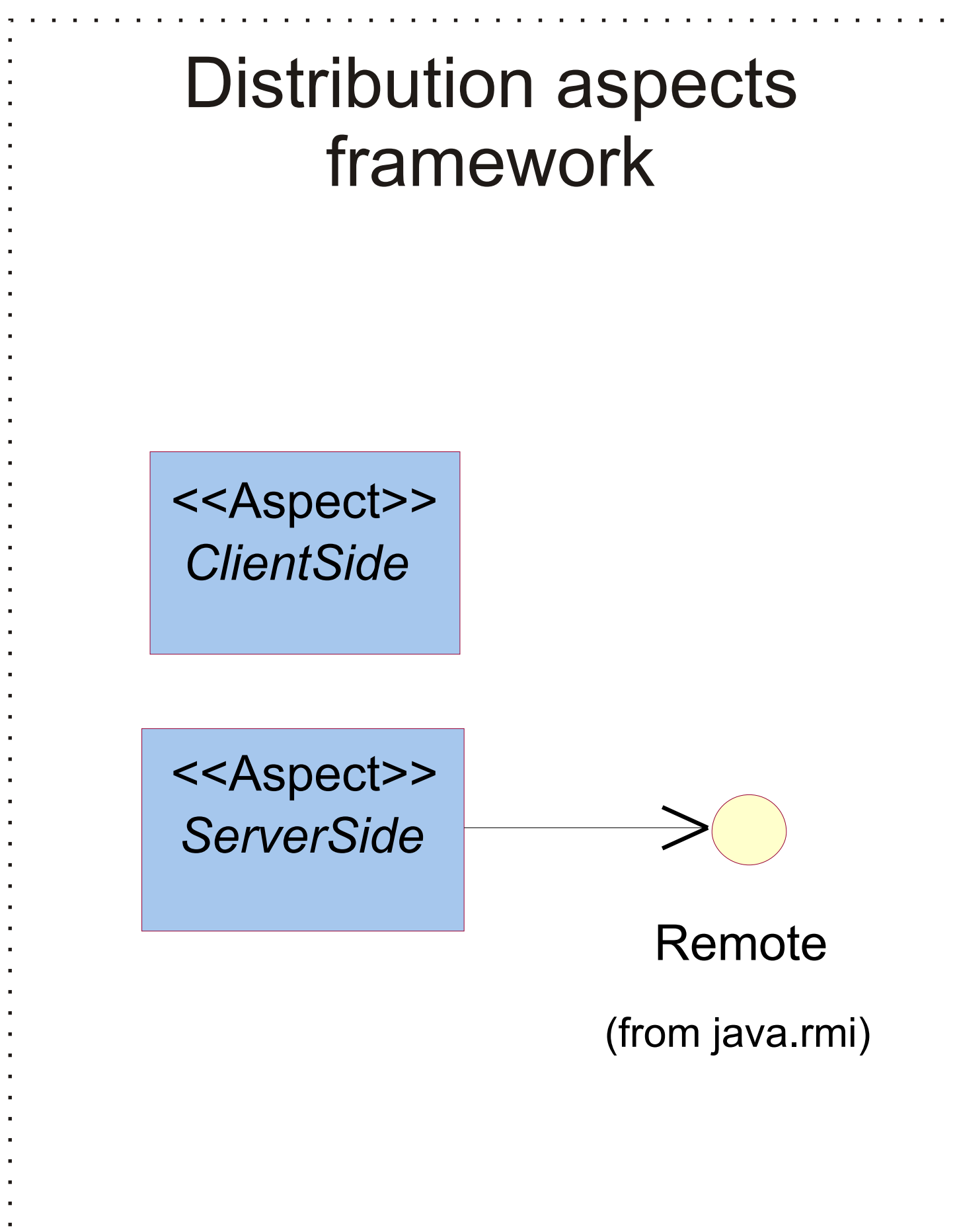
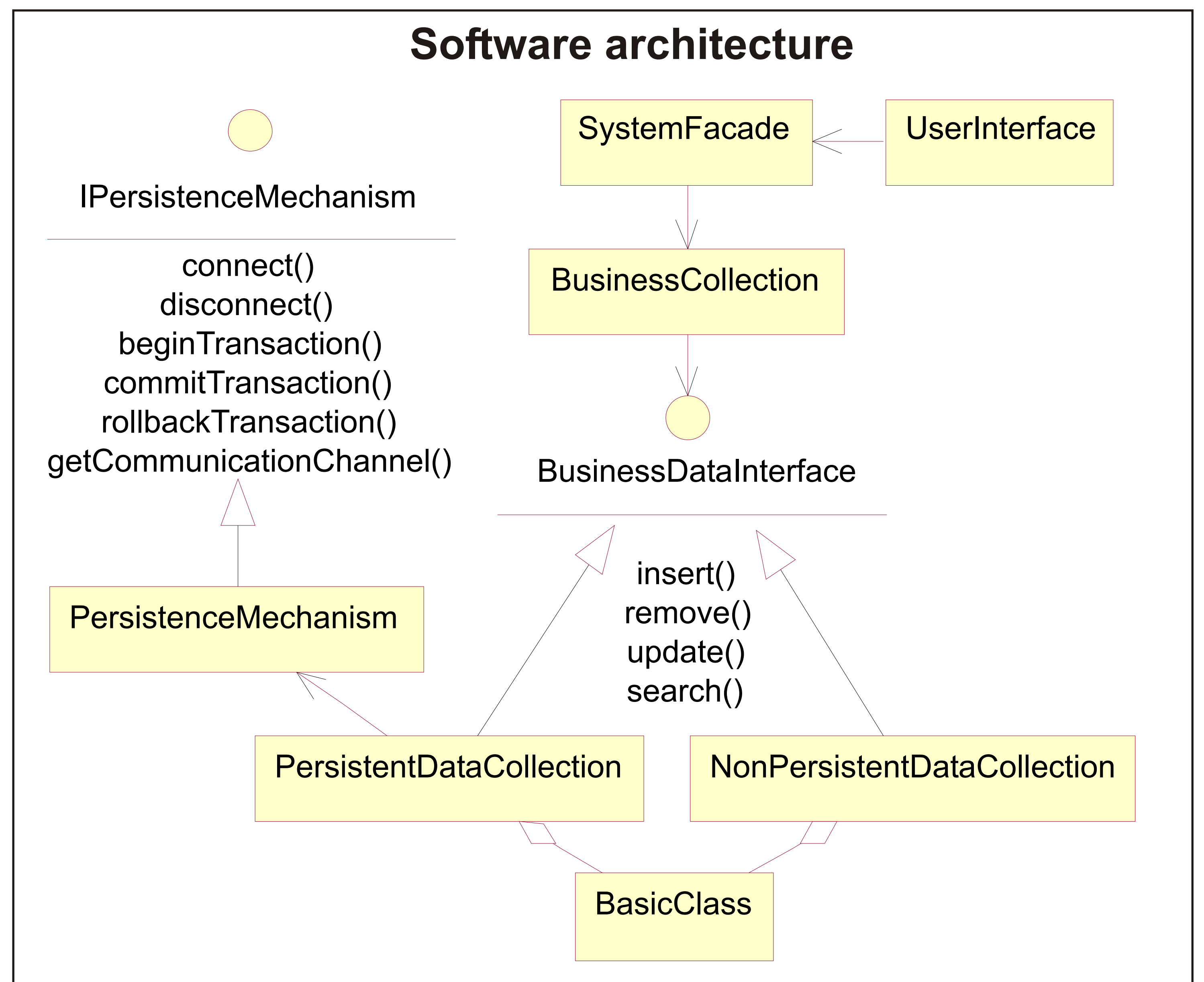
- Implementation activities
- Modifications in analysis, design, and tests activities
- Patterns for structuring the system architecture
- Aspects frameworks to implement crosscutting concerns:
 - Persistence, distribution, and concurrency control
- Integration with Use Case Driven Development

Benefits:

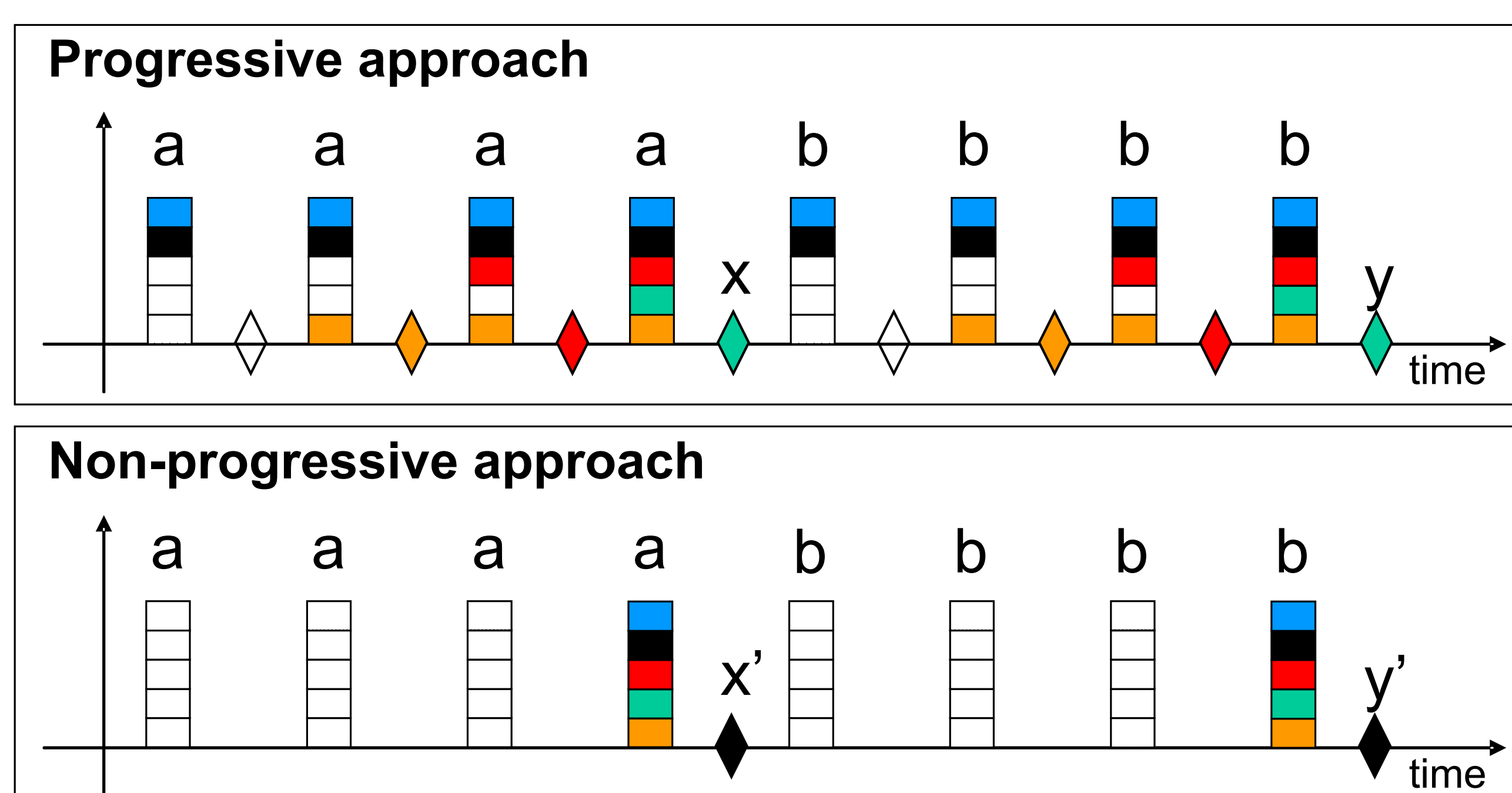
- Guarantees the effort given to requirements and design
- Guidelines to aspect-oriented development
- Guidelines to aspect-oriented refactoring
- Two implementation approaches
 - Experimentation for analysis
- Tool support
 - Aspect and classes generation
 - Increased productivity

Drawbacks:

- Interferences between aspects
- Tailored to a specific software architecture
 - Allows implementing several kinds of systems
 - Used in several real systems
 - More precise guidelines

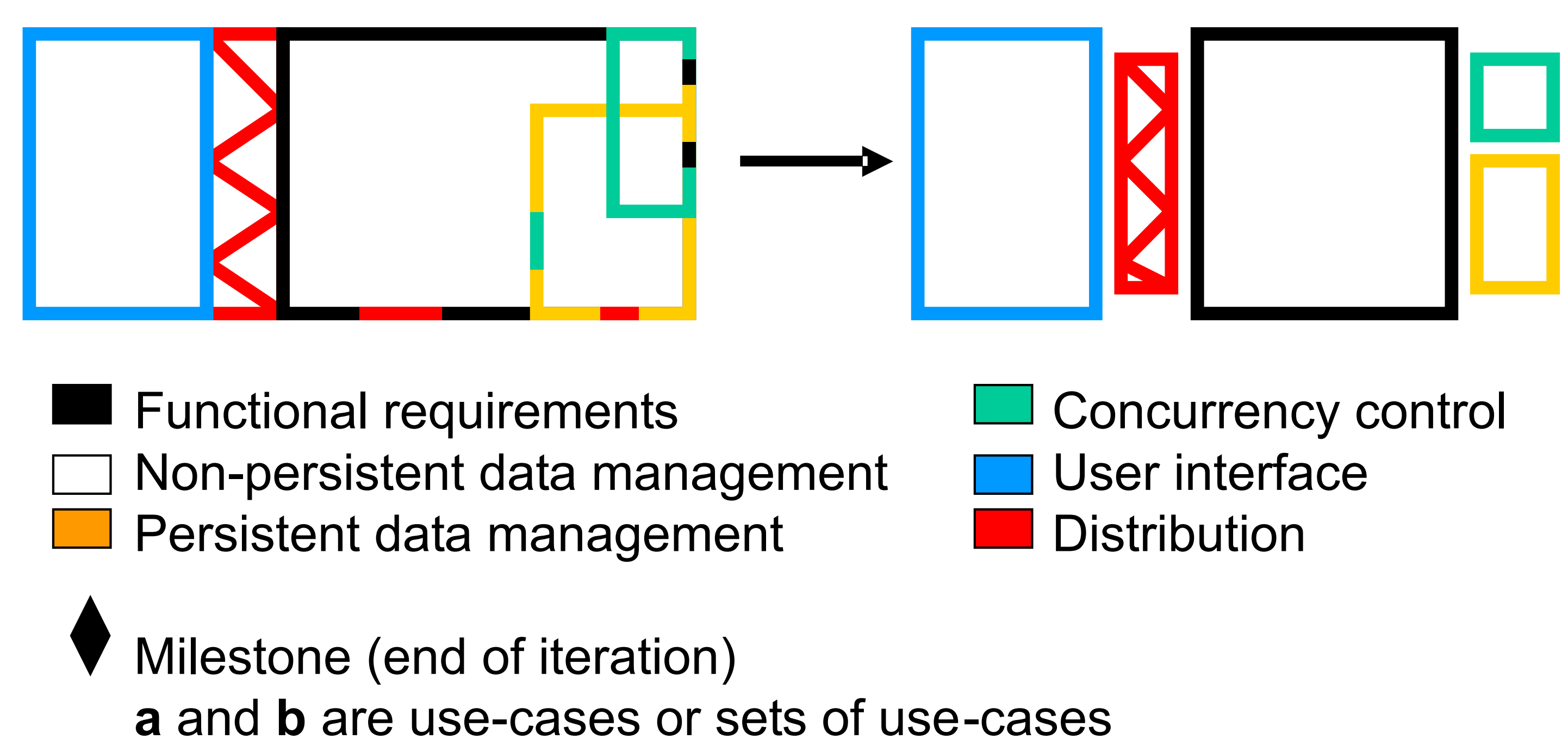


Aspect-oriented development



The implementation method is integrated to Use-case Driven Development in two different approaches

Aspect-oriented refactoring



The implementation method can be used to refactor an object-oriented application to an aspect-oriented one