

DPF EXCERCISE #9

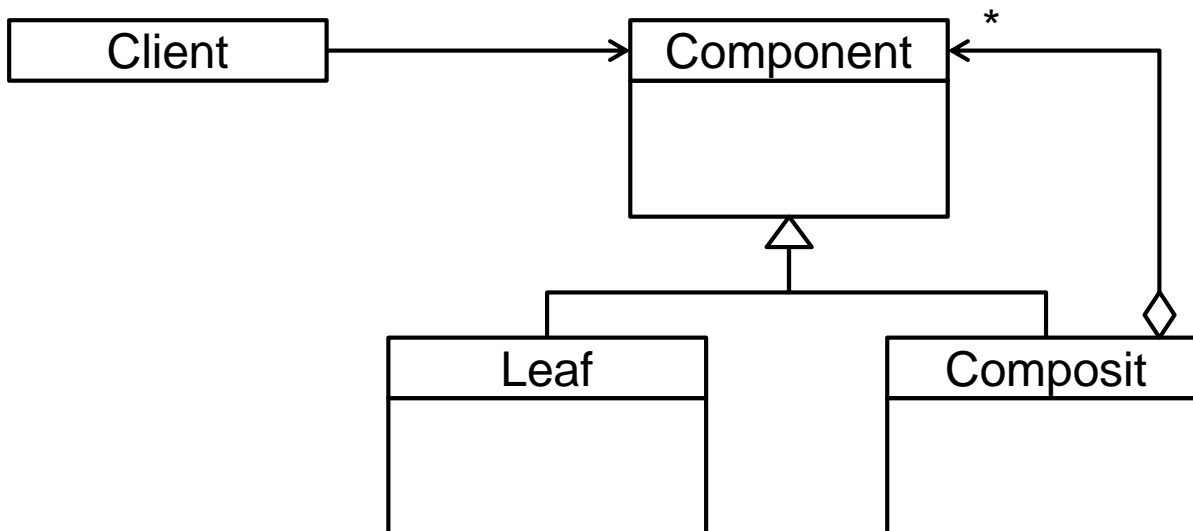
2 The Role-based Modelling Language

A UML-like Notation for Design Patterns

Task #1a – Composite in RBML

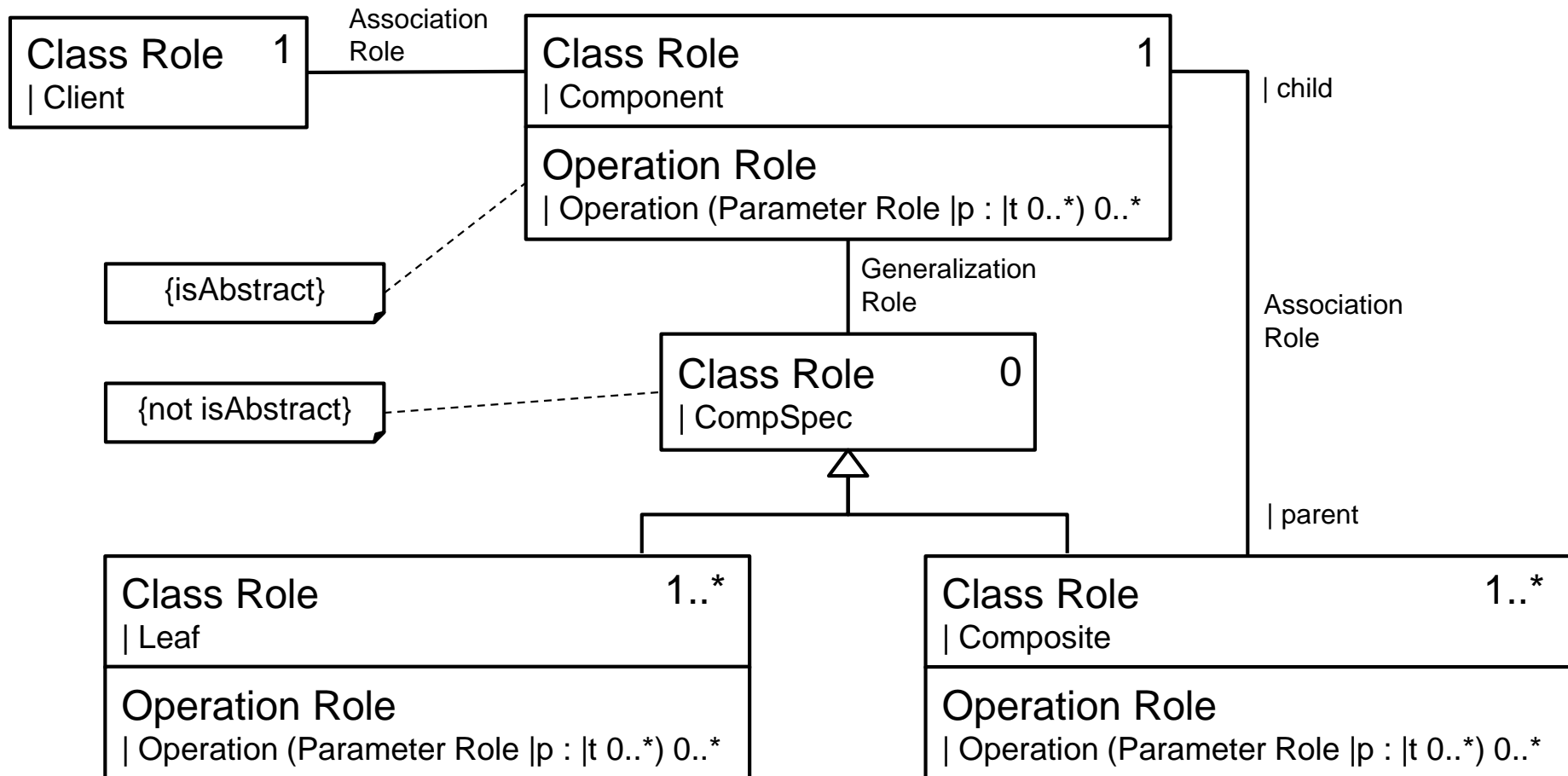
3

- Use RBML to represent the **Composite** design pattern.



Task #1a – Composite in RBML

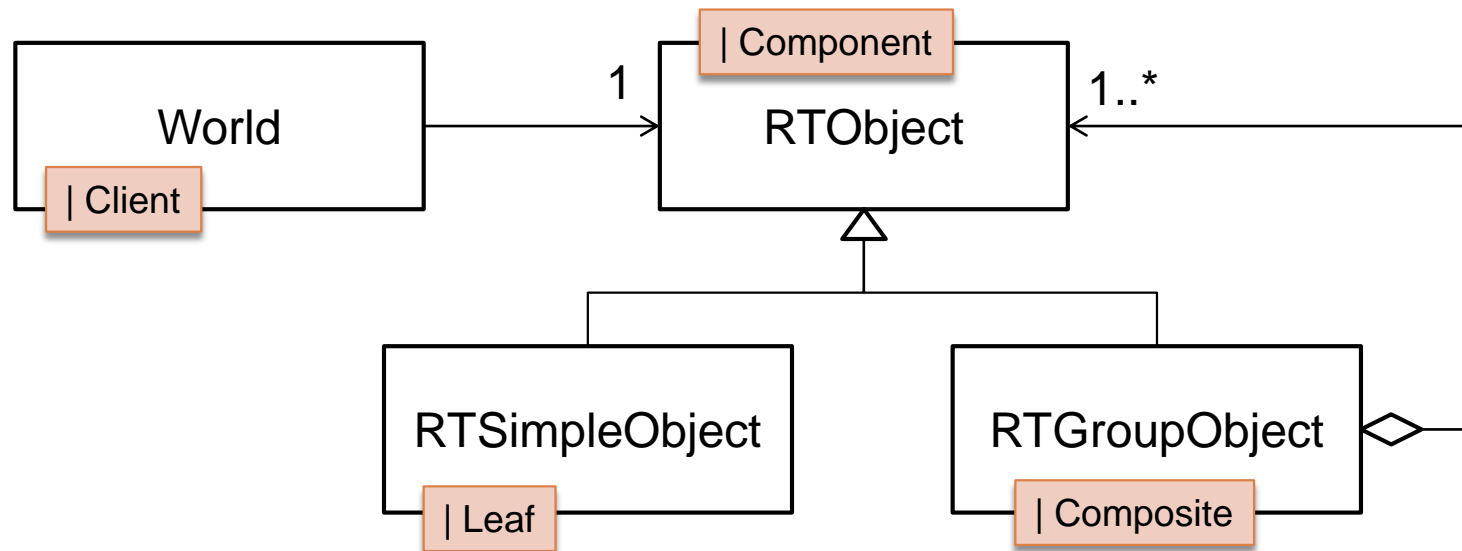
4



Task #1b – Raytracer Check

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- RBML allows to check (and detect) whether a pattern is correctly used (by pattern matching).



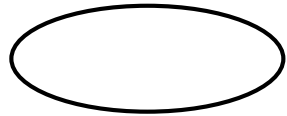
6

OWL Observant

Pattern Detection using Ontologies

Task #2 – OWL Observant

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Class Template



Data-Value Types



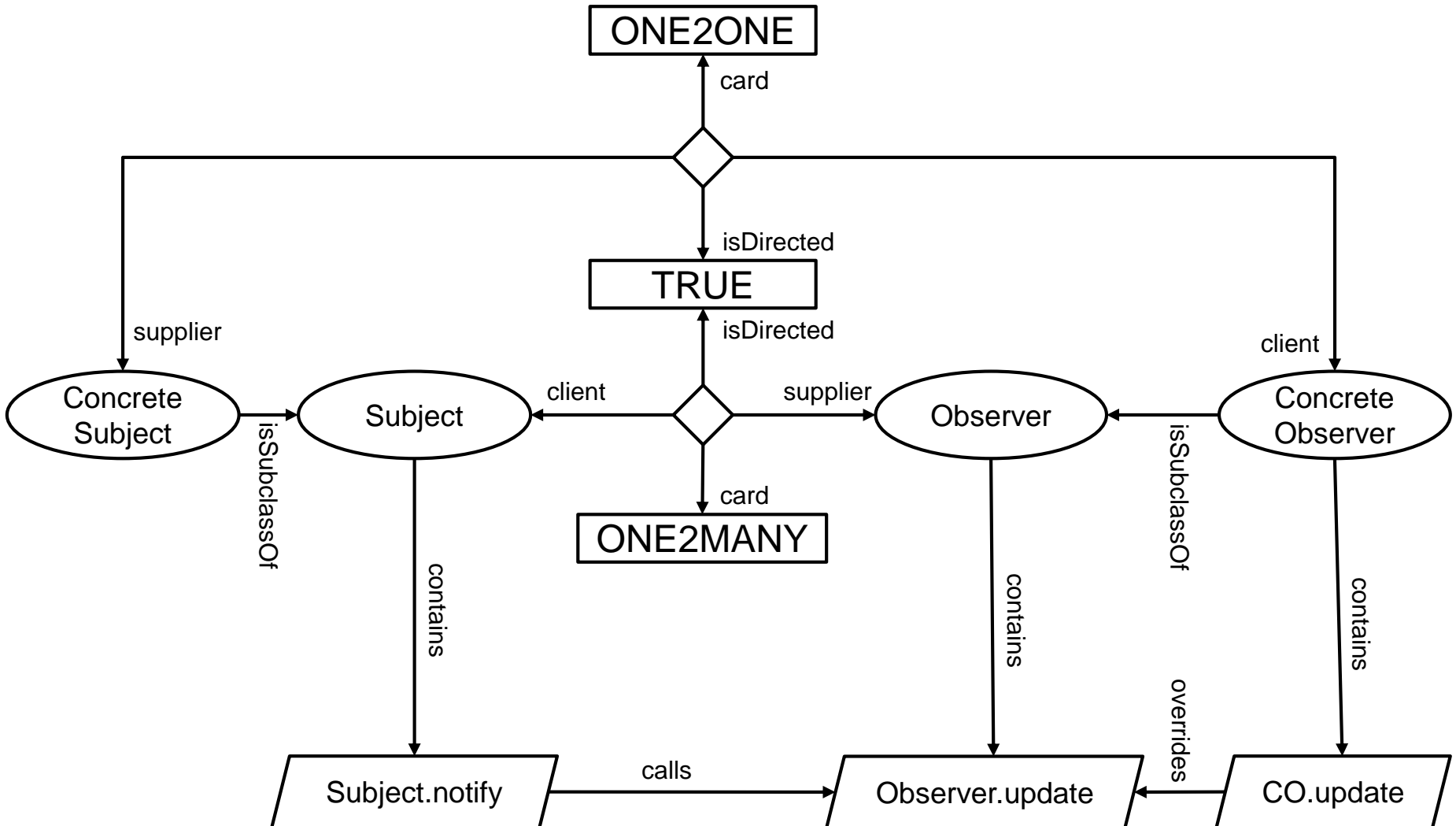
Method Template



Association Template

Task #2 – OWL Observant

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Discussion – Formal Design Patterns

Discussion – Formal Design Patterns

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- Ambiguity
- Relations between Patterns
- Automation & Tool Support
- Lack of variation in formally specified patterns
- ...

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End