Software Engineering Essentials

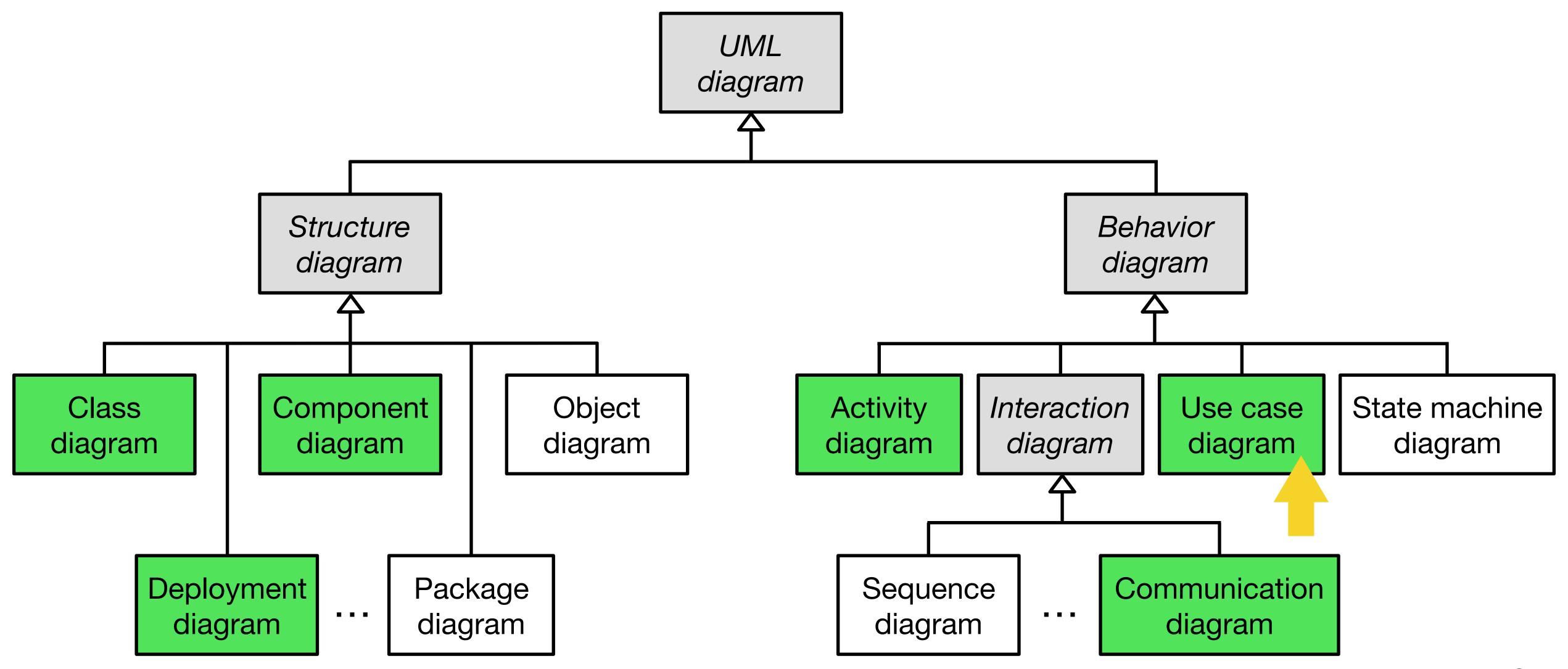
Use Case Diagram

Bernd Bruegge, Stephan Krusche, Andreas Seitz, Jan Knobloch Chair for Applied Software Engineering — Faculty of Informatics



UML diagrams covered in this course





Purpose of use case diagrams



Use case

- Focuses on a single behavior of the system from an external point of view
- · Describes a function provided by the system that yields a visible result for an actor
- Is typically initiated by an actor
- An actor is any external entity that interacts with the system

Use case diagram

Shows the main use cases, actors and their associations

Textual description of a use case



Similar to a scenario, use cases can be specified textually and consists of:

Name: Description of the use case

Actors: Users of the system from outside the system boundaries

Entry conditions: Conditions which have to be met at start of the use case

Event flow: The actual event flow of a single use case

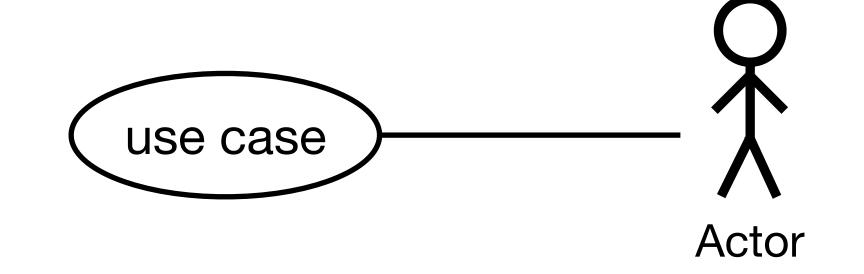
Exit conditions: The state of the system after the use case has finished

Use case diagram elements



System

System boundary



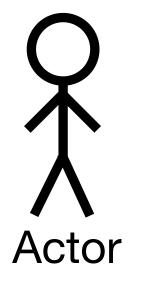
Association



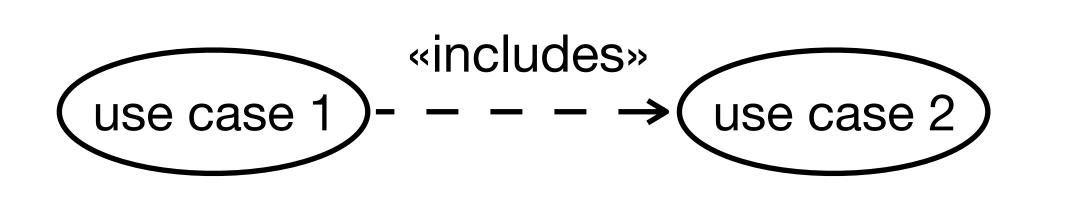
Use case



Extension



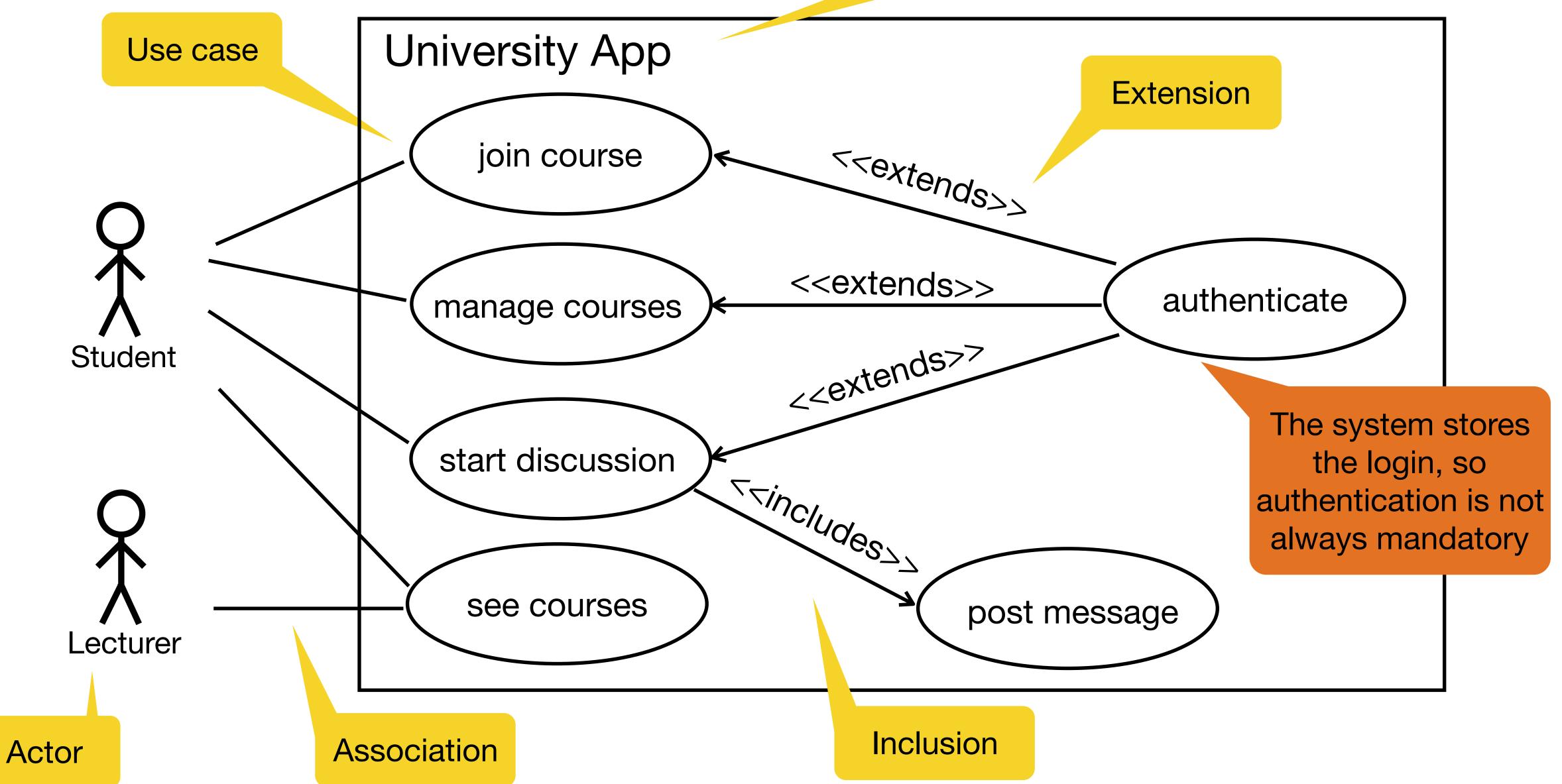
Actor



Inclusion (reuse)

Example of a use case diagram





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