

VIII. Use Cases

The Unified Modeling Language Actors and Use Cases How to Find Them

Acknowledgment: these slides are based on Prof. John Mylopoulos slides which are used to teach a similar course in the University of Toronto – St. George campus. Used with Permission.

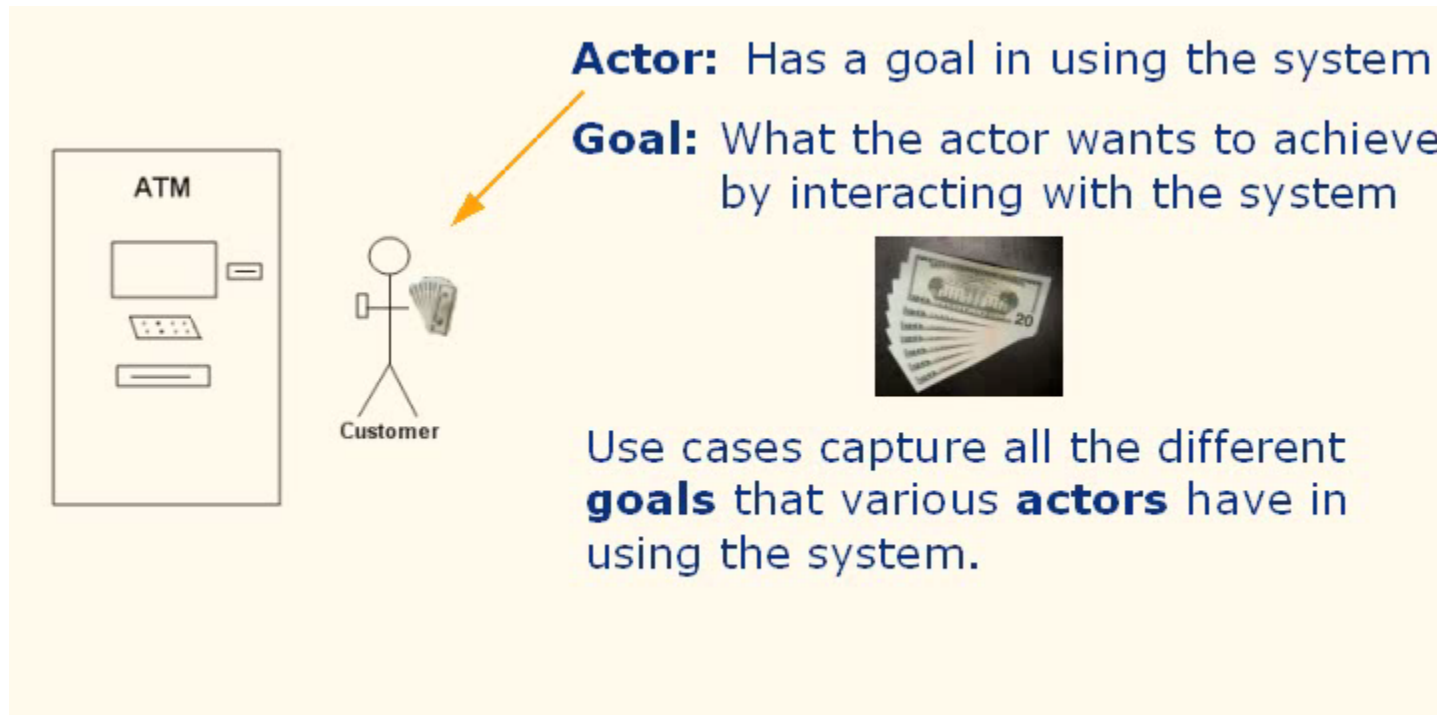
Recall: What's a Use Case?

- Use cases capture the functional requirements of a system
- Use cases describe the interactions between various actors and the system

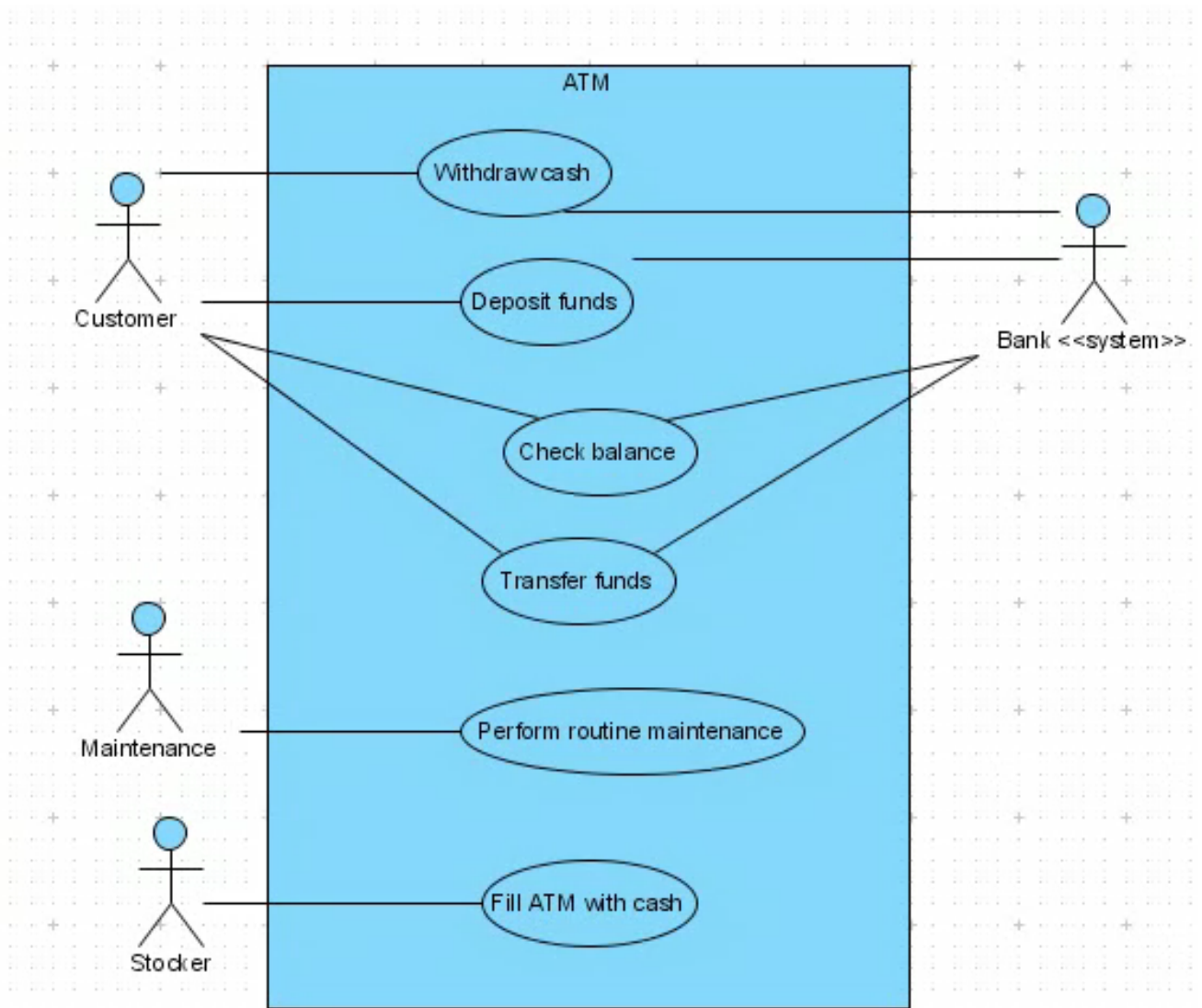
How to Find Use Cases?

- For each use case...
 - Describe the steps involved in an interaction between an actor and the system, beginning with the primary actor
 - Start with the main success scenario.
 - Look for alternative paths:
 - Exceptions: what could go wrong here?
 - Extensions: what other goal might come into play here?

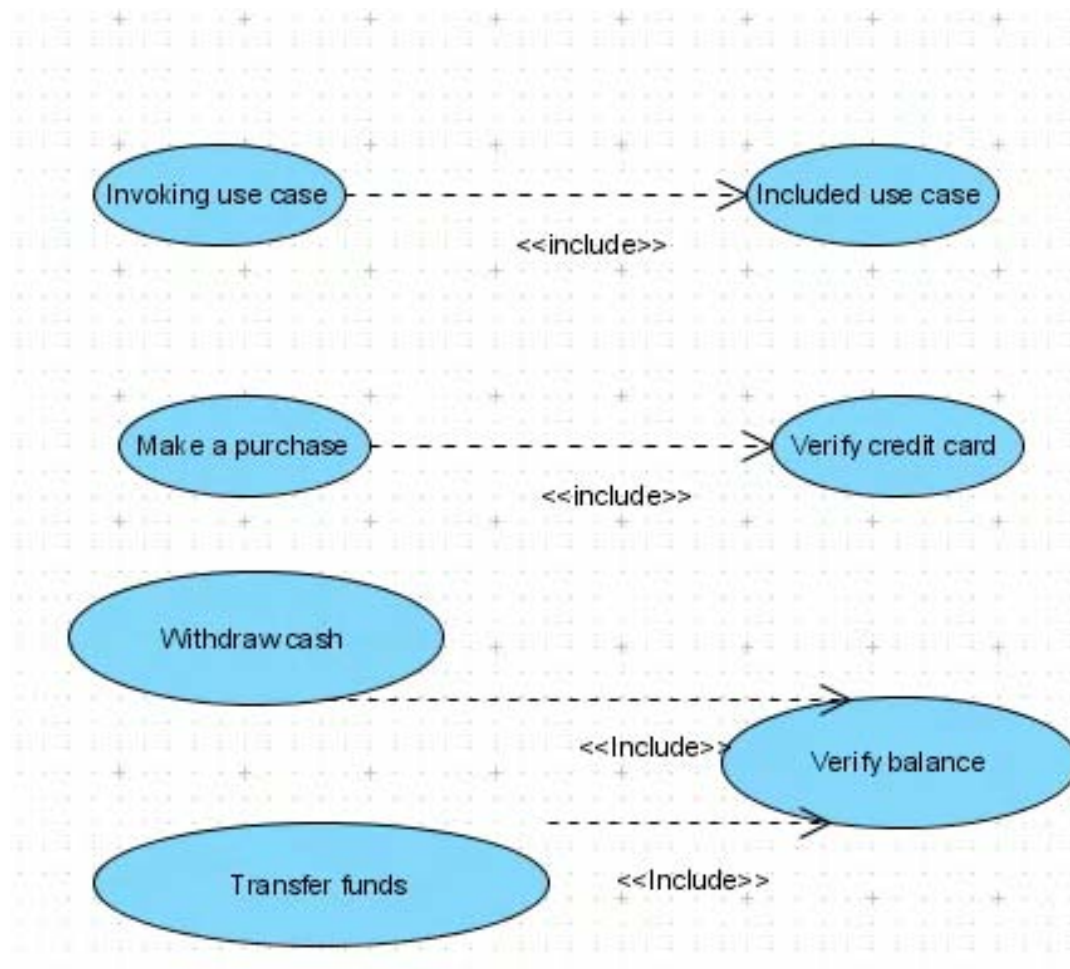
Use Case: ATM Example



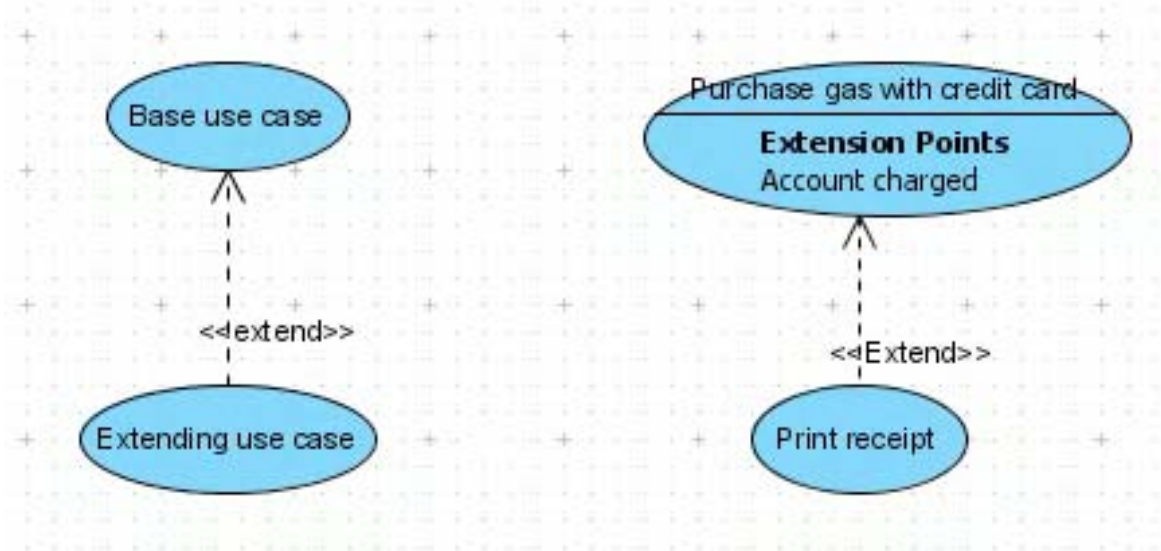
Use Case for an ATM



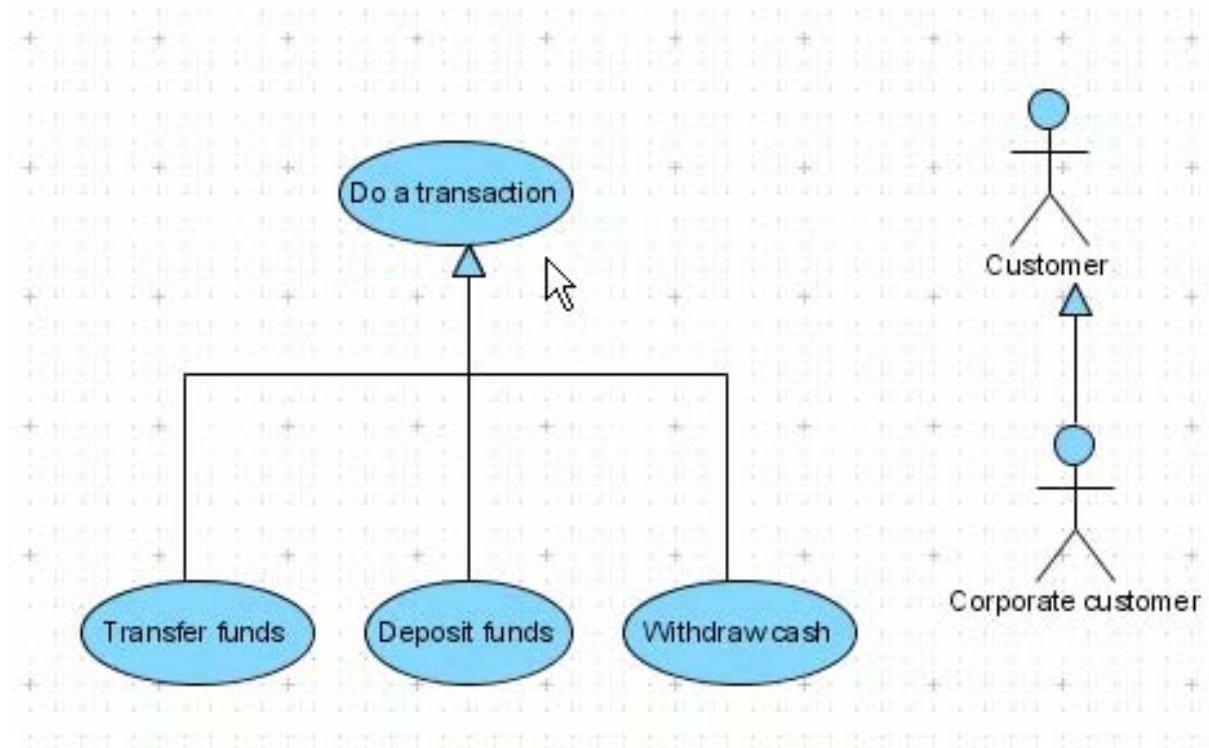
Use Case: include relationship



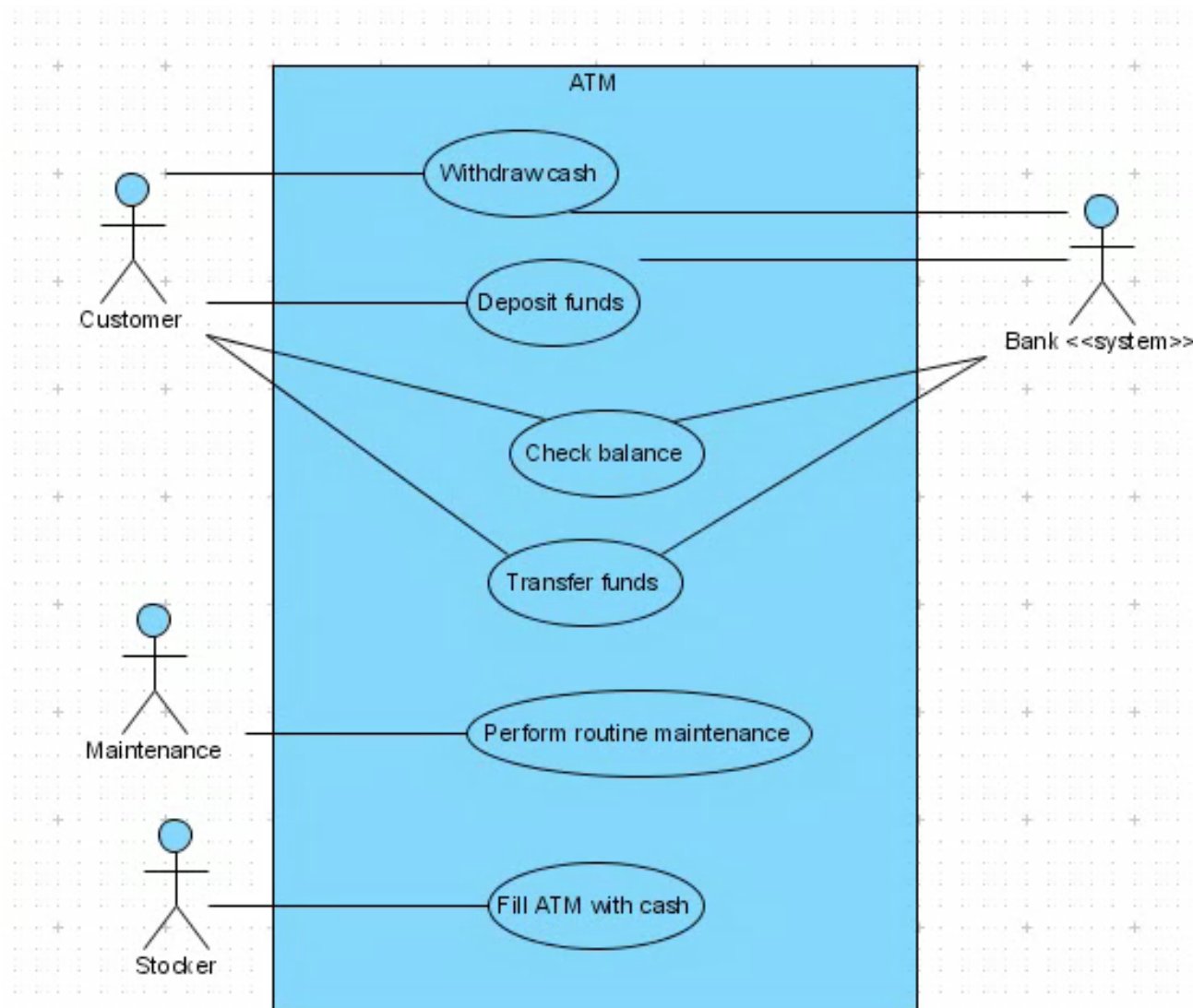
Use Case: extend relationship



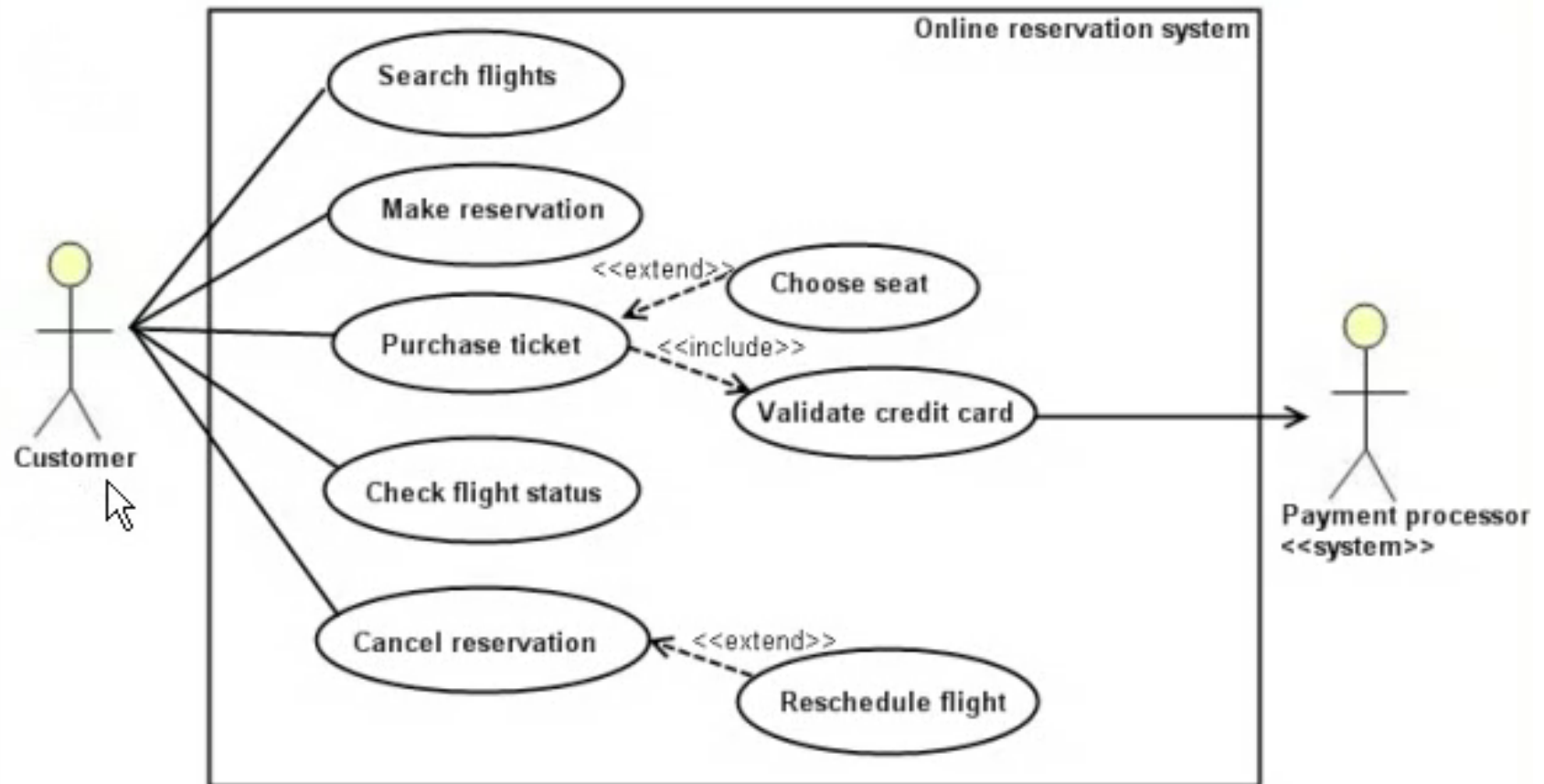
Use Case: Generalization relationship



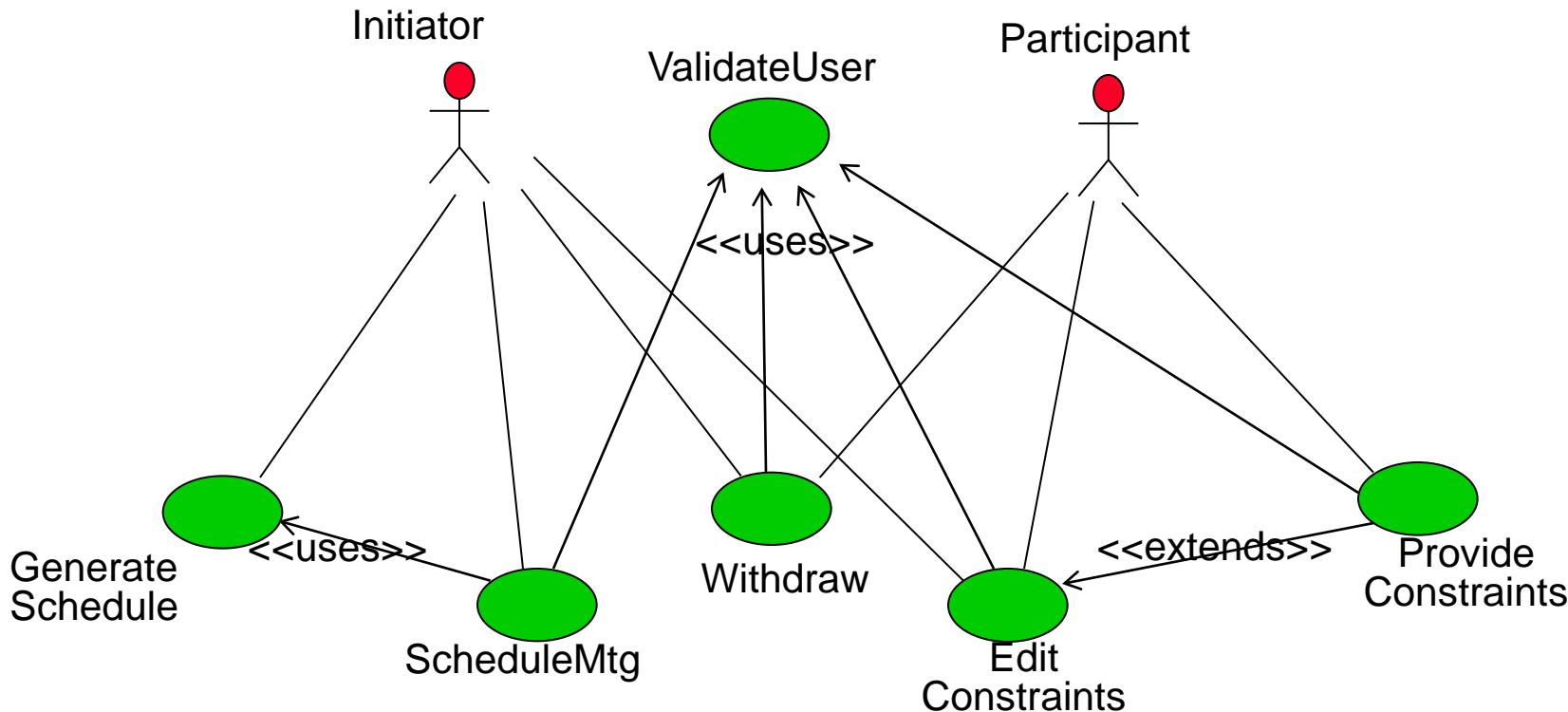
Use Case: primary vs. secondary actor



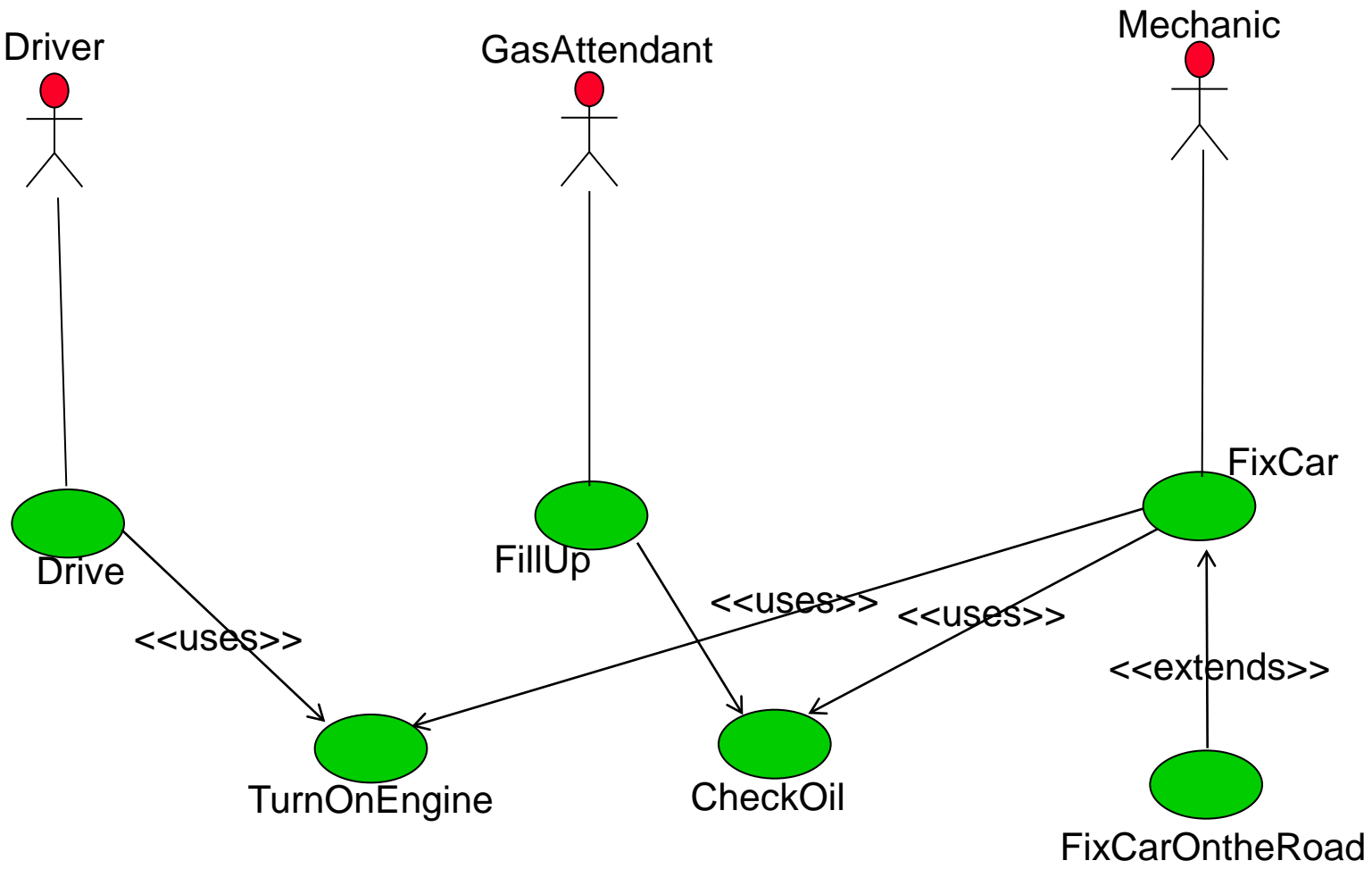
Use Case for Online Reservation System



Use Cases for a Meeting Scheduling System



Use Cases for a Car



Additional Readings

- [Booch99] Booch, G. et al. *The Unified Modeling Language User Guide*, Chapters 2, 16, 17. Addison-Wesley, 1999.
- [Jacobson92] Jacobson, I. et al. *Object-Oriented Software Engineering: A Use-Case Driven Approach*, Addison-Wesley, 1992.
- [Schneider98] Schneider, G. et al. *Applying Use Cases*, Addison-Wesley, 1998.

