

Module 4: Use Case Diagram

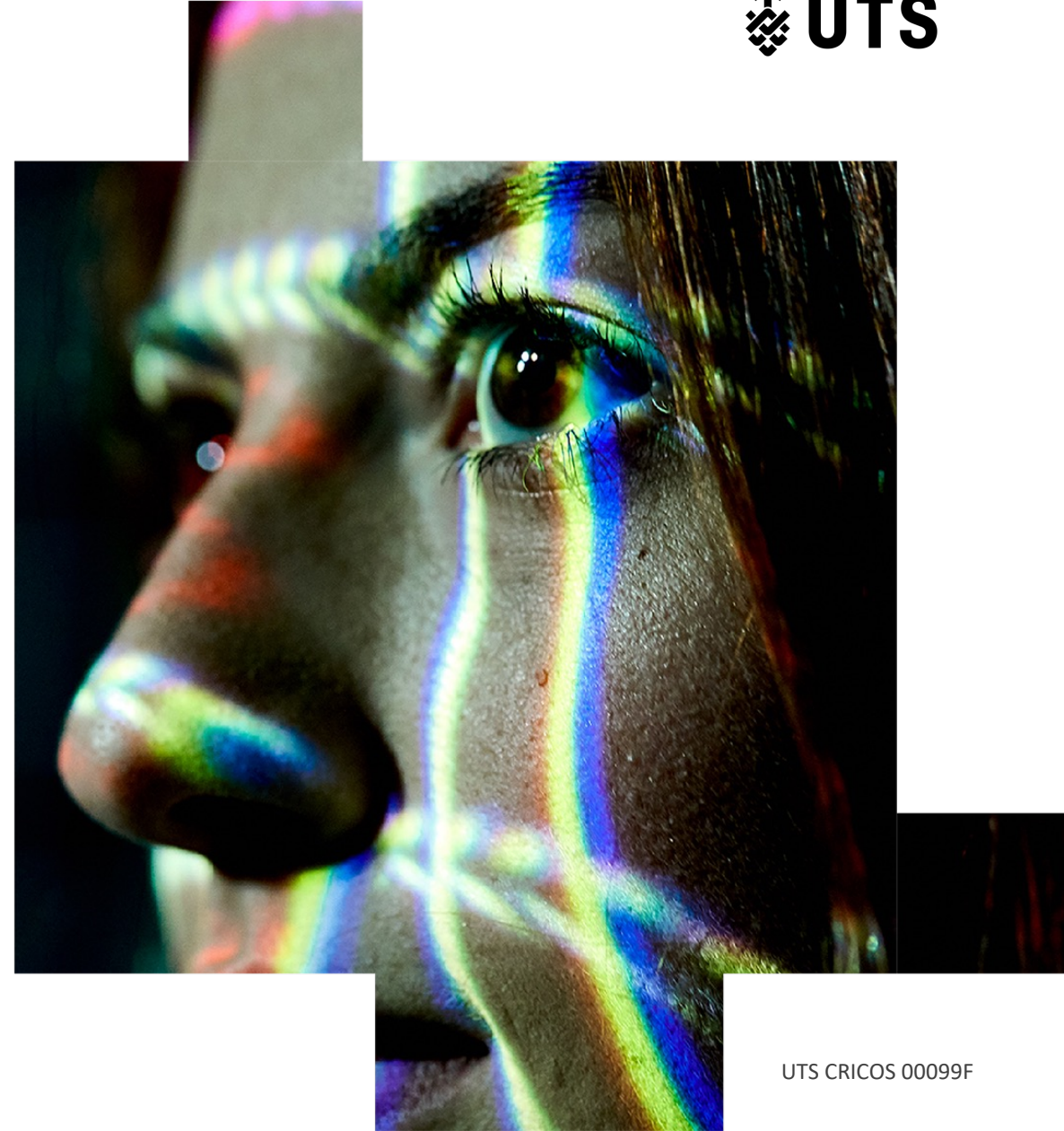
SSTC 2022
Module 4 – Lecture 1

Dr. Salvatore Flavio Pileggi


SalvatoreFlavio.Pileggi@uts.edu.au

<https://www.uts.edu.au/staff/salvatoreflavio.pileggi>

School of Computer Science, Faculty of Engineering and IT
University of Technology Sydney (Australia)



- UC Diagram
- UC Engineering (from User Stories)



Use Case Diagram

Use Case diagrams

Why?

- A use case diagram aims to describe the **details of users** (or “actors”) **and their interactions with the system**
- For a given system, Use Case diagrams can contribute to model:
 - **Scenarios**
 - **Goals**
 - **Scope**
- Use Case diagrams are normally not detailed; they rather express **high-level overview and abstractions**

Use Case diagrams

Building blocks, symbols and notations

In UML, a Use Case diagram may include different **building blocks**

System boundary (rectangle)

It defines the system(s) of interest. All use cases outside the box would be considered outside the scope of that system.

Actors

Users (person, organization or external system)

Relationships

Between actors and Use Cases

Relationships

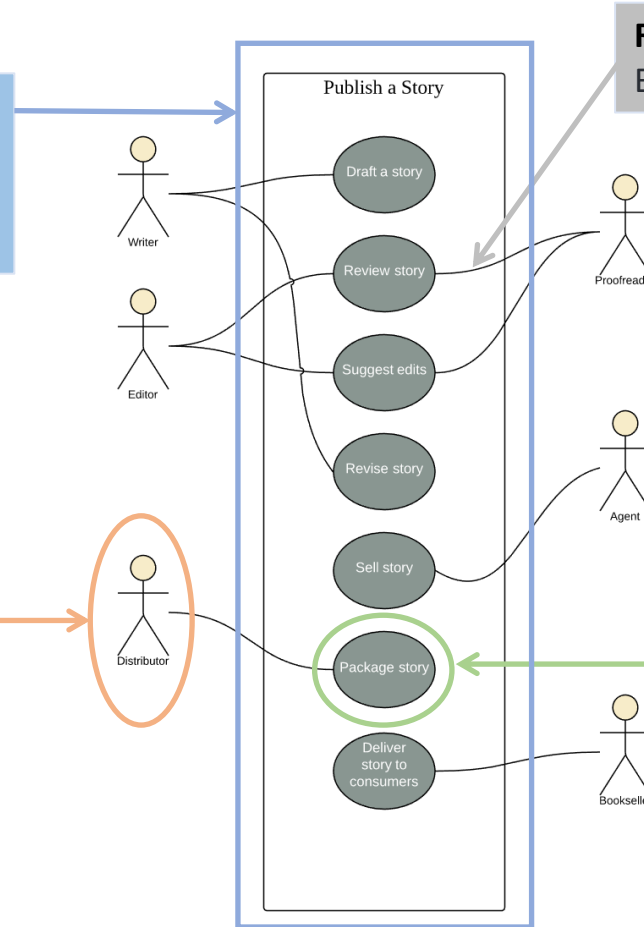
Between Use Cases

Relationships

Between Actors

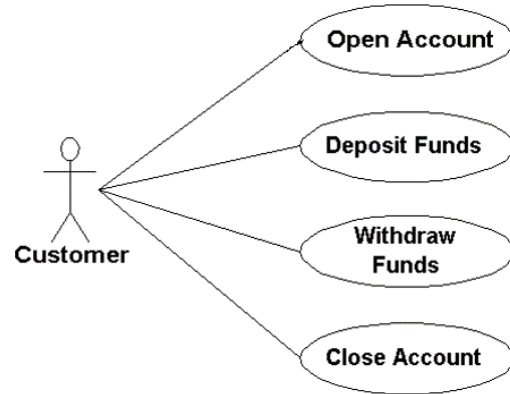
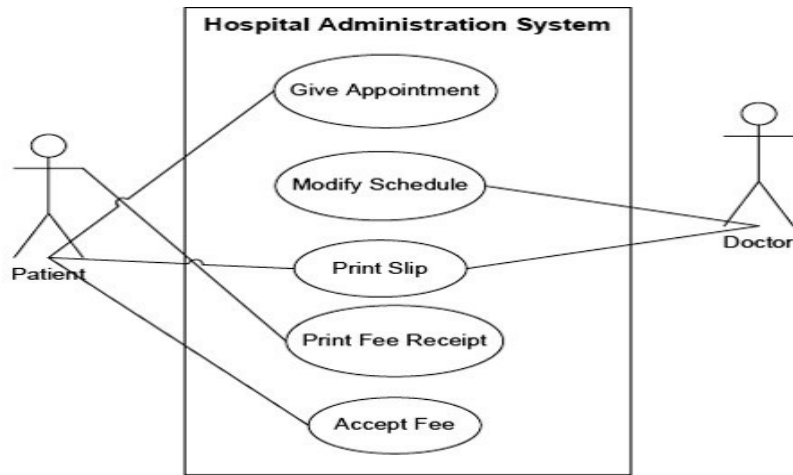
Use Cases (ovals)

Different uses that a user might have. It is a generalized description of a set of interactions between the system and one or more actors. The system **functionalities** are captured in use cases.



Use Case diagrams

Simple examples

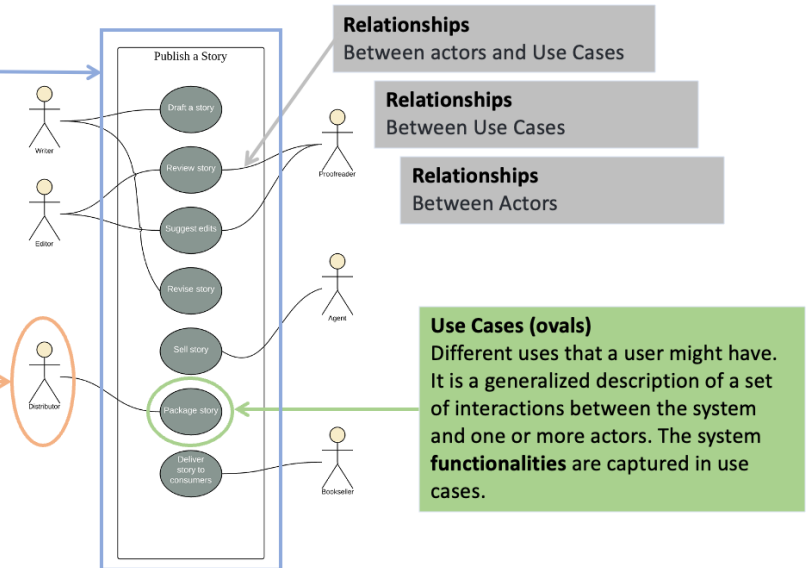


System boundary (rectangle)

It defines the system(s) of interest. All use cases outside the box would be considered outside the scope of that system.

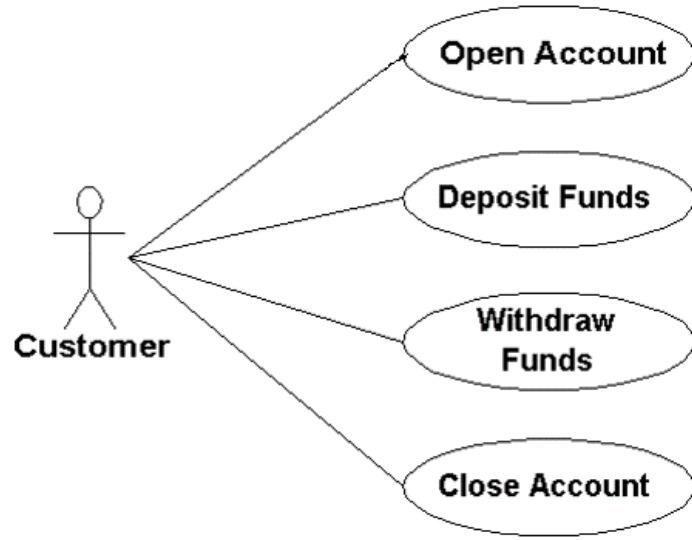
Actors

Users (person, organization or external system)

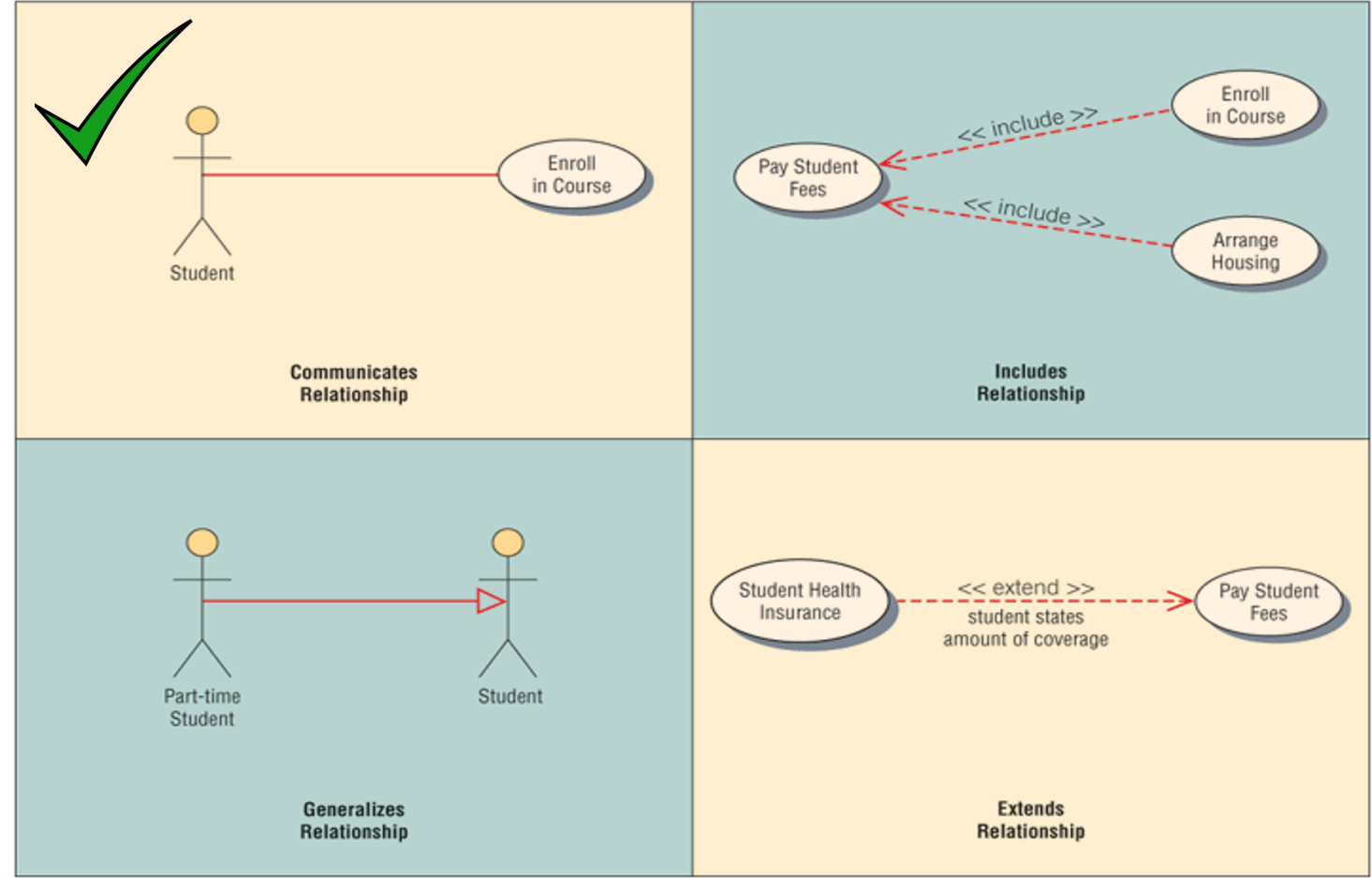


Use Case diagrams

Relationships

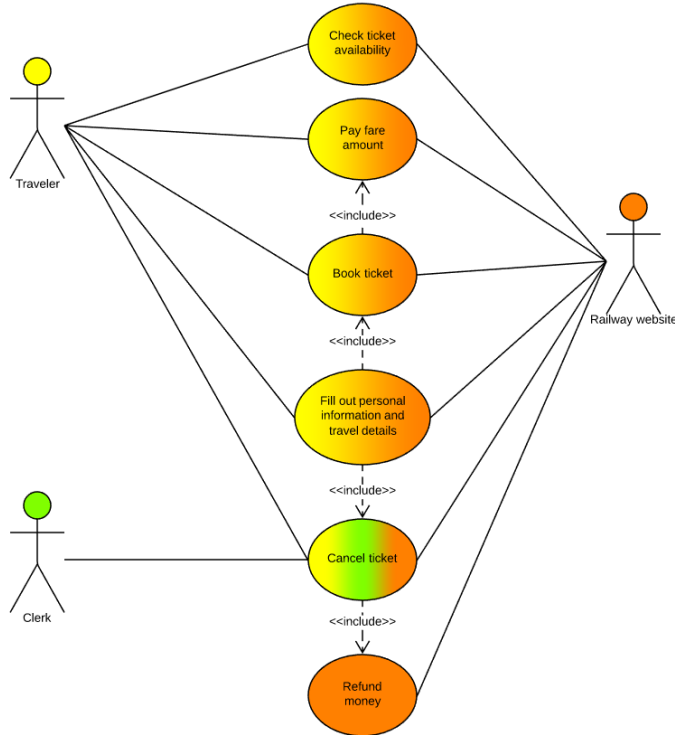


Intuitive association between an actor and a use case



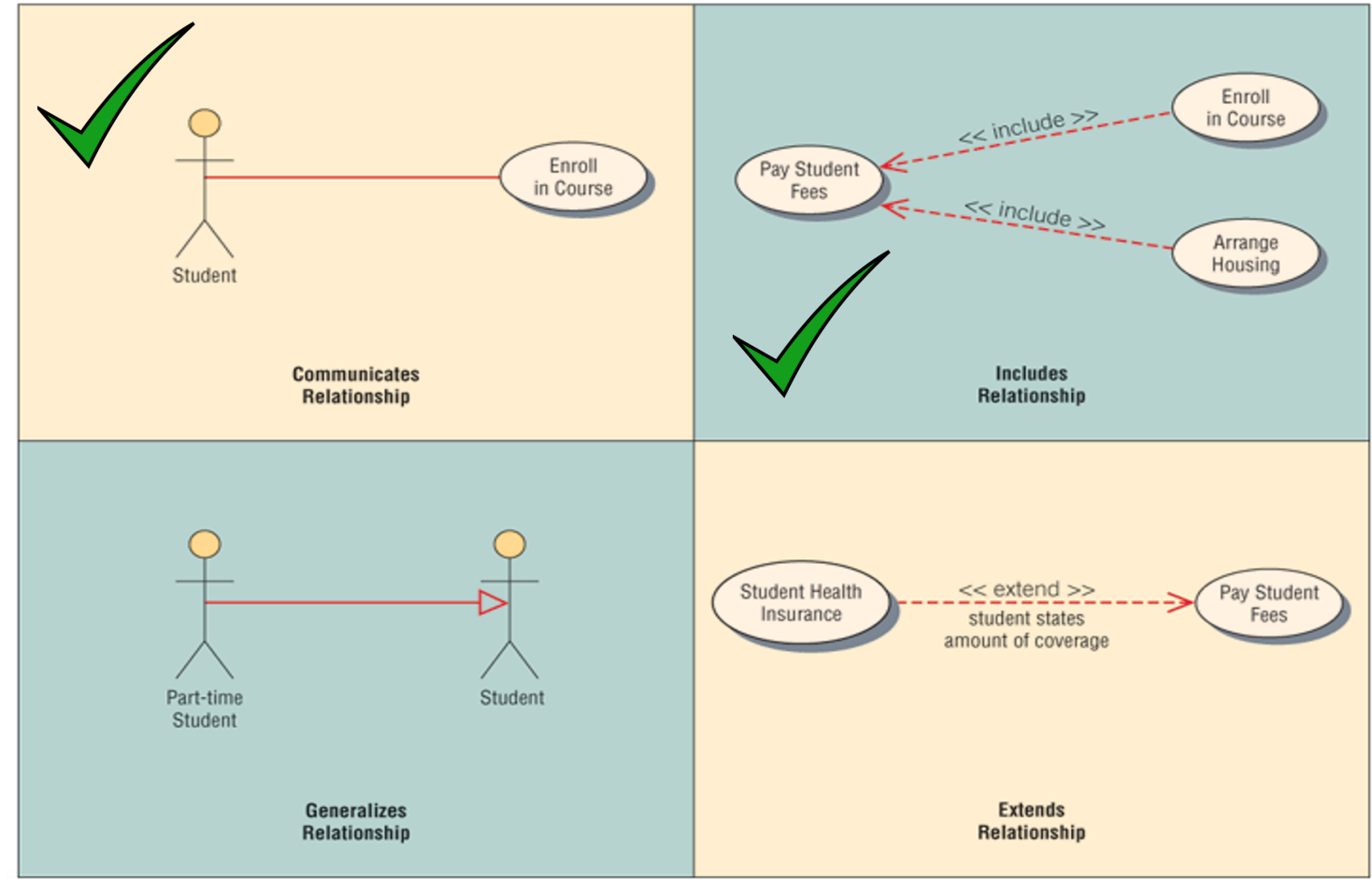
Use Case diagrams

Relationships



<https://www.lucidchart.com/pages/uml-use-case-diagram>

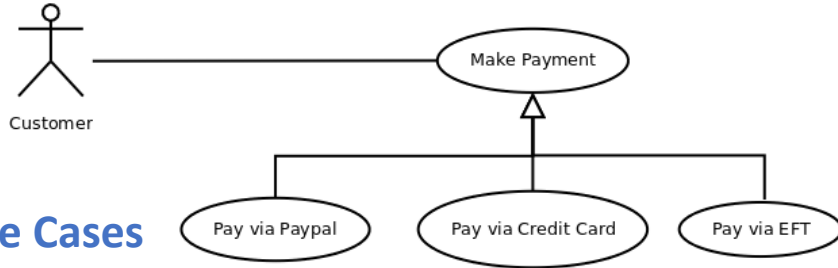
It's an association between two use cases.
The included use case describes a **lower-level** goal than the base use case



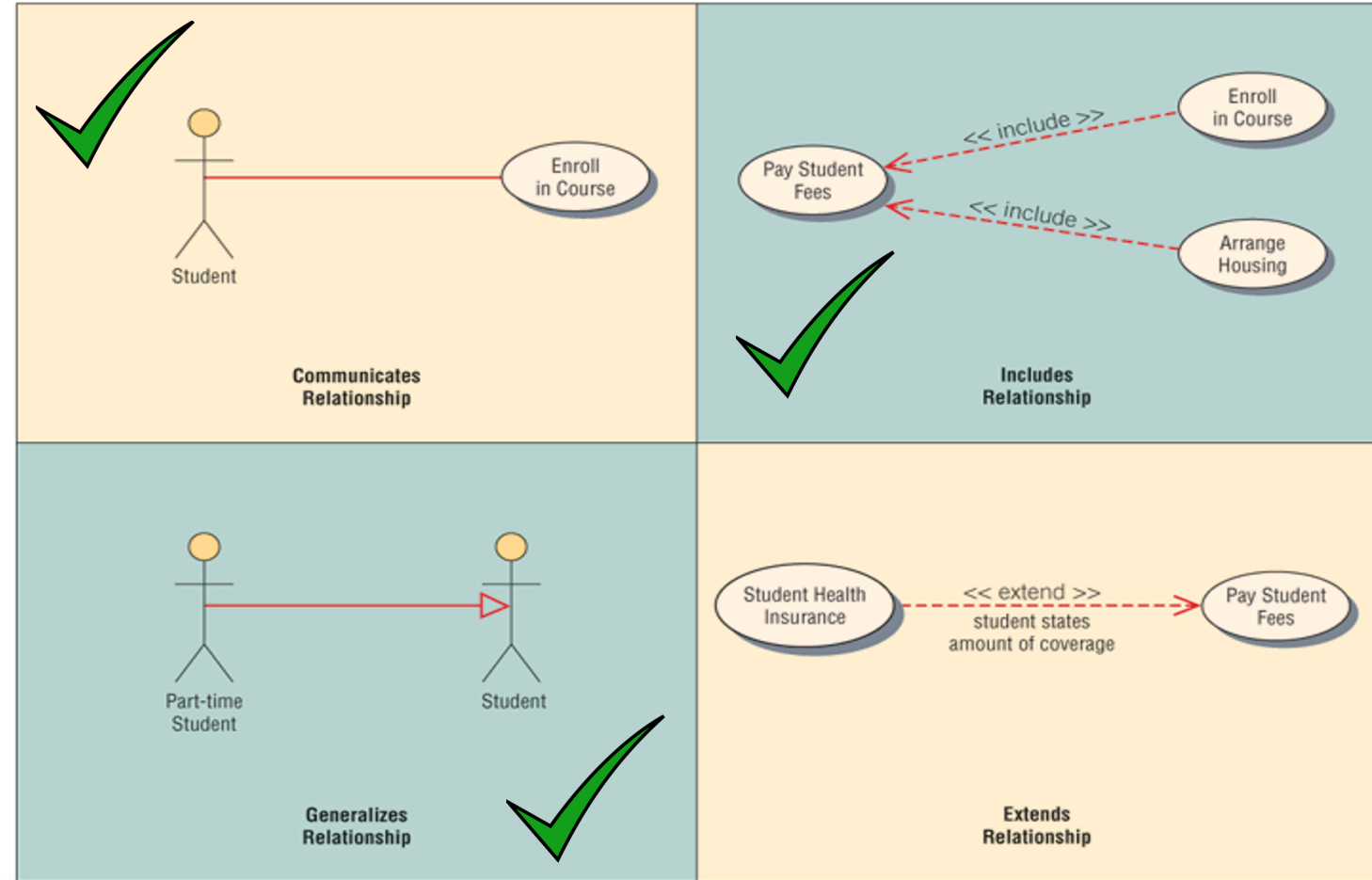
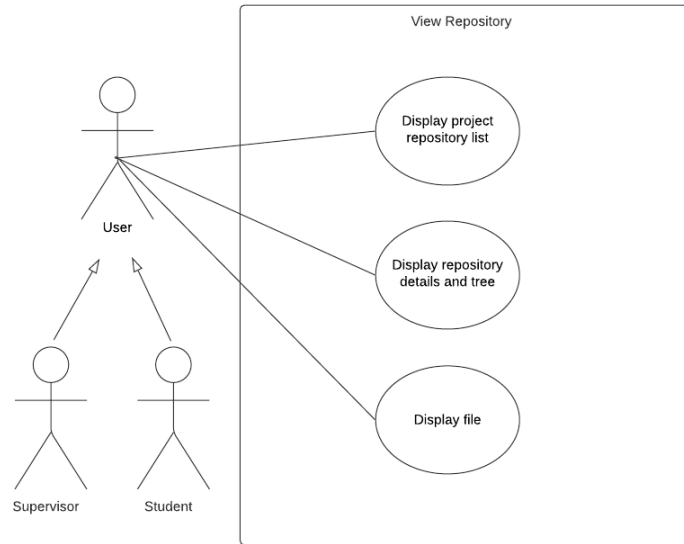
Use Case diagrams

Relationships

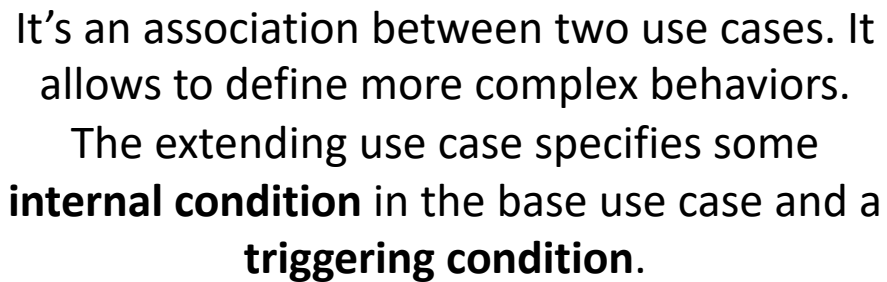
Use Cases



Actors

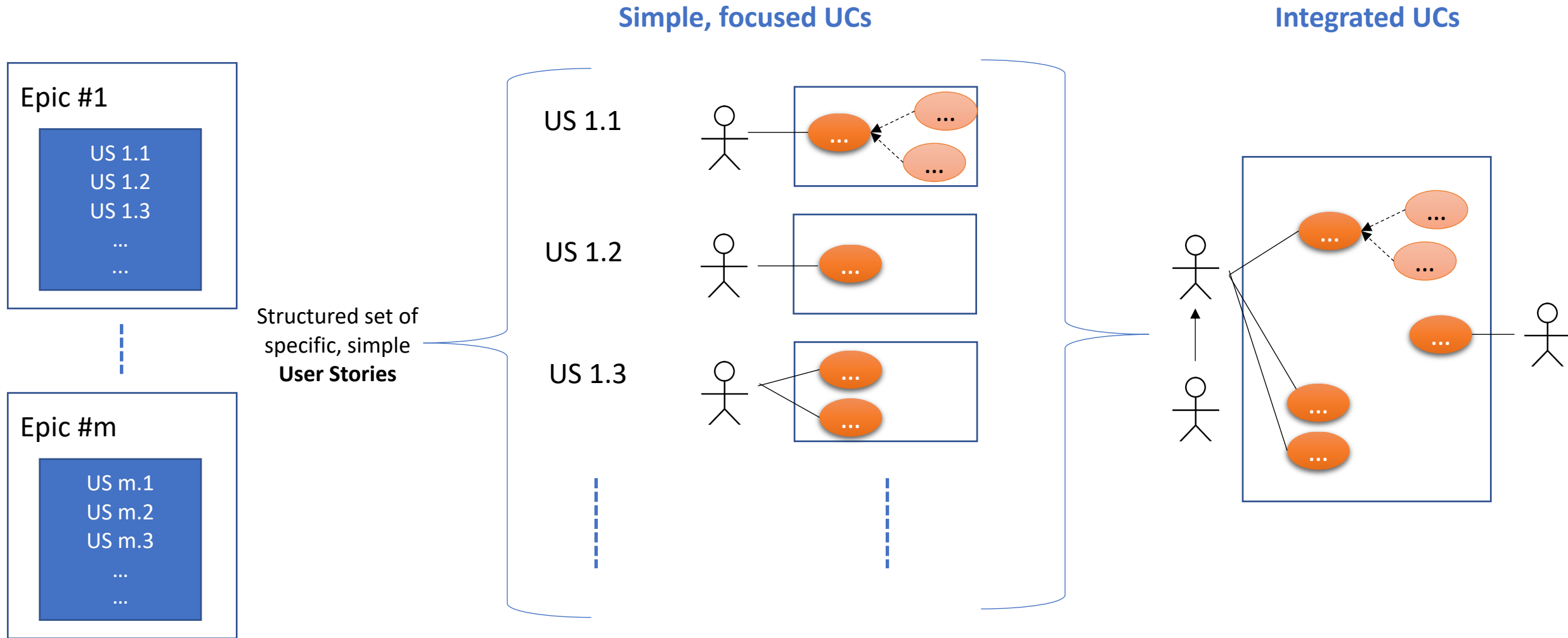


Relationships



UC Engineering

From User Stories



Thank You!