

# C0452

# Programming Concepts

Lecture 7

UML Diagrams – Class Diagrams and Use Case

# Introduction to UML

Unified Modelling Language (UML) consists of 14 diagrams, which can represent a view of a system:

- ❖ Use Case Diagram
- ❖ Class Diagram
- ❖ Activity Diagram
- ❖ Sequence Diagram

# Use Case Diagrams

# Use Case Diagram

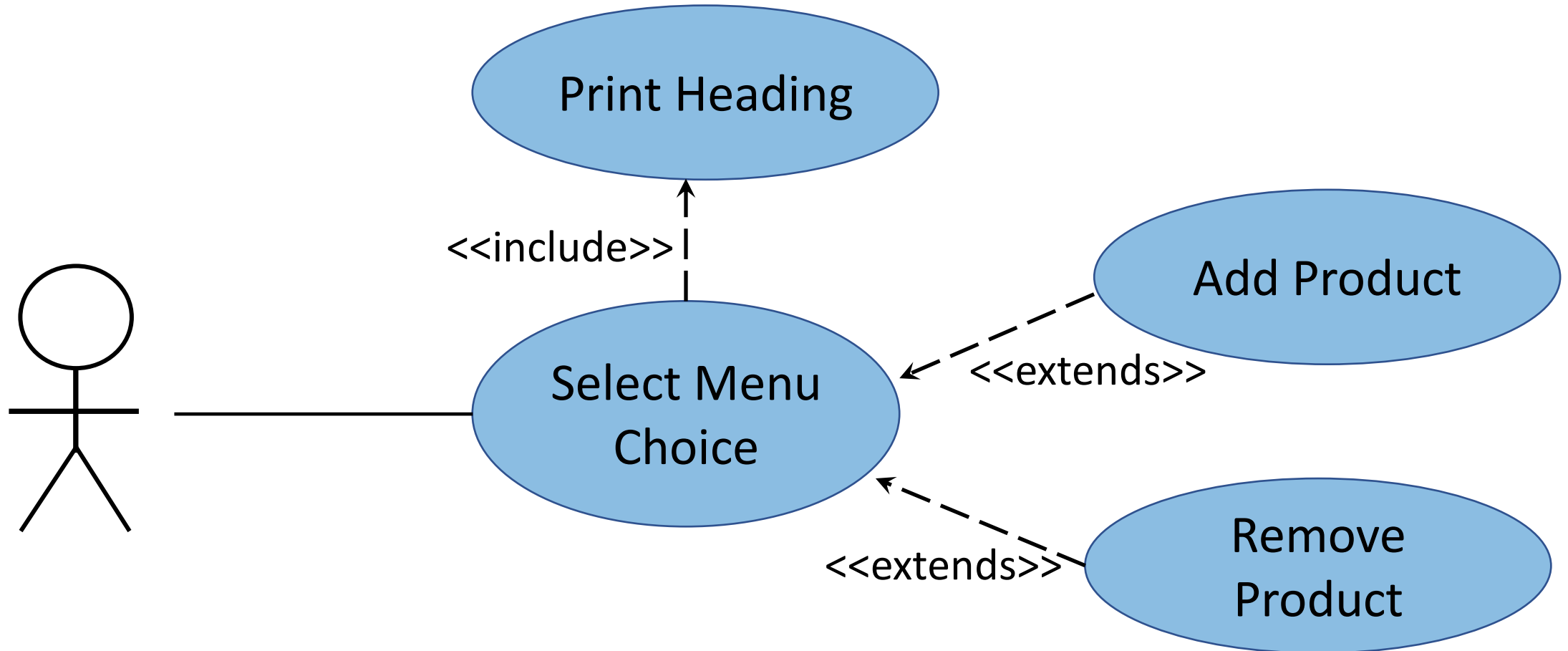
Use Case Diagrams can be used to represent users of a system (actors), and what behaviours they have (methods) in relation to the system (the 'use cases').

Use Cases (ovals) start with a verb (as methods should do).

**<<Include>>** is a mandatory Use Case (will always happen)

**<<Extend>>** is an optional Use Case (may not happen)

# Use Case Diagram



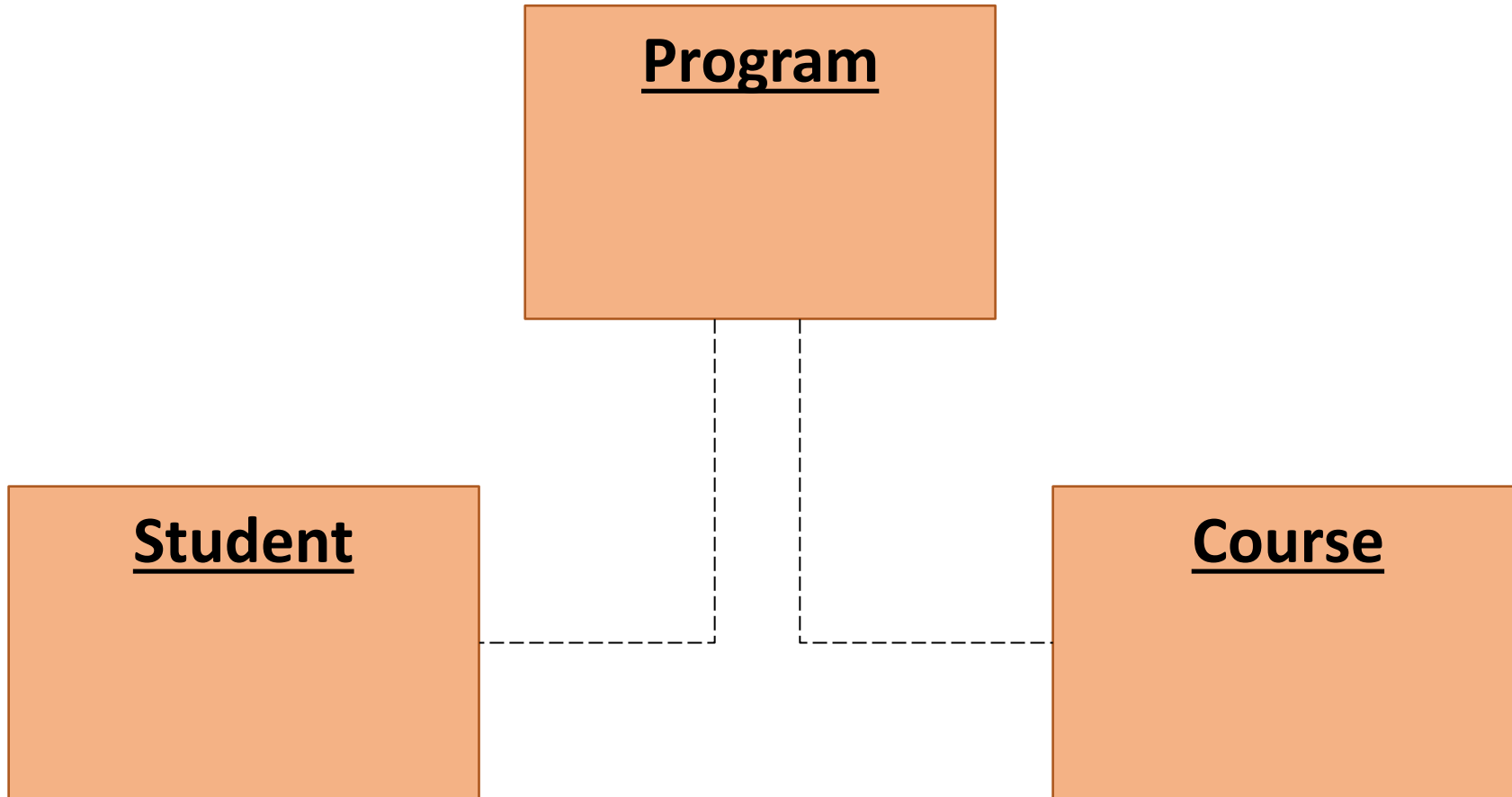
# Class Diagrams

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The BlueJ interface provides a basic version of a Class Diagram because it shows the classes of an application and any associations between them.

A more detailed Class Diagram would show the **variables** and **methods** written in each class.

# Class View in BlueJ





# UML Class Diagram

