COMP2511 UML Diagram Cheatsheet

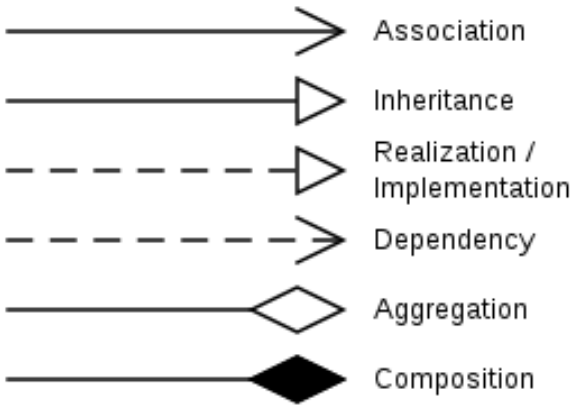
Basics

- Make sure your UML diagrams are all on one page. Some sites slice the UML diagram up into separate pages when you export it as a pdf, which makes it very difficult to mark!
    - Please note even though the spec states pdf format, as long as it is legible and placed in your repo any format (e.g. png) is fine since they are manually marked.

Abstract Classes and Interfaces

- Abstract classes should be *italicised*. Abstract methods should also be italicised.
    - All implementations of abstract methods should be explicitly listed out. These do not need to be italicised.
- Interfaces should have <<Interface>> preceding the name.
    - All implementations of interface methods should be explicitly listed out.

Relationships



Association - a class uses another in some way. Uncommon in this course.

Inheritance - a class inherits another. The arrow points to the parent class.

Implementation - a class implements an interface. The arrow points to the interface.

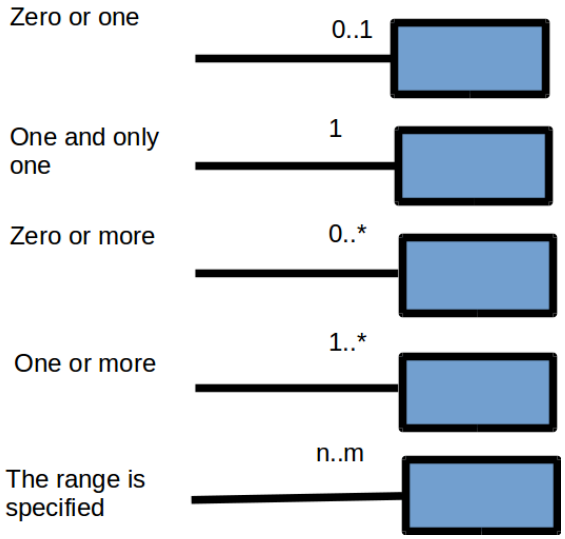
Dependency - a class depends on another. Uncommon in this course.

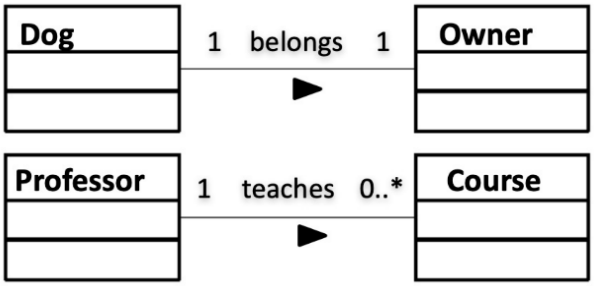
Aggregation (“has-a” relationship) - a class “A” contains another class “B”. “B” **can** exist independently of “A”. The diamond is on the side of “A” (the container)

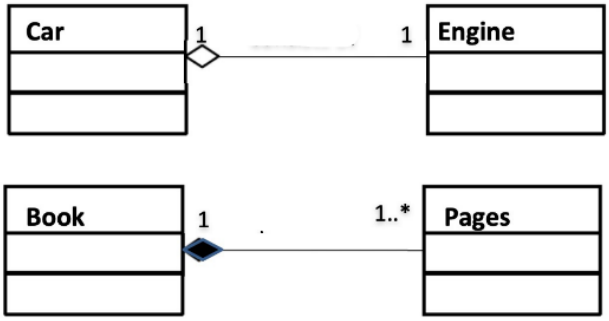
Composition (“has-a” relationship) - a class “A” contains another class “B”. “B” **cannot** exist independently of “A”. The diamond is on the side of “A” (the container)

Cardinality

All has-a relationships **must have cardinality**. Some common examples are shown below, as well as some examples from the lecture slides.







Access Modifiers