

Object Oriented Design

CSC207 Fall 2015



Computer Science
UNIVERSITY OF TORONTO

UML

Unified Modeling Language (UML) allows us to express the design of a program before writing any code.

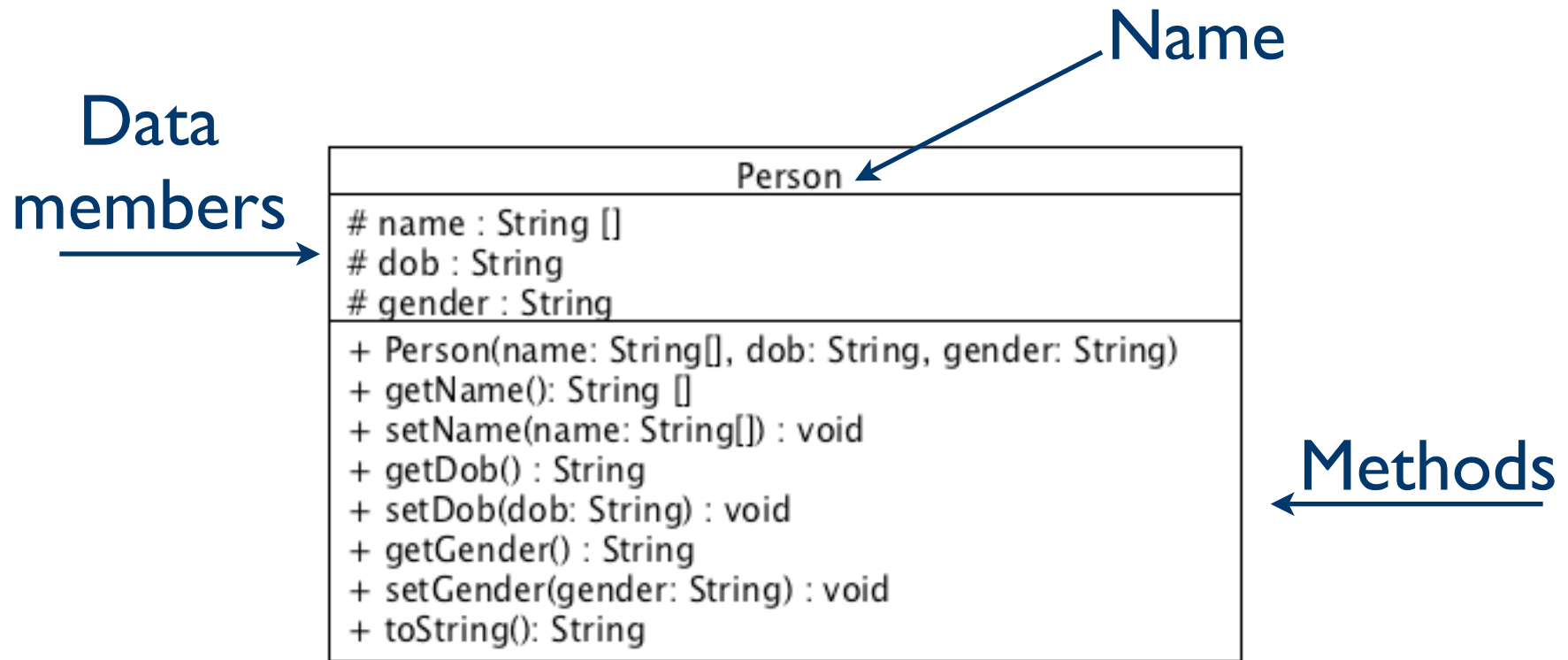
It is language-independent.

An extremely expressive language.

We'll use only a small part of the language, Class Diagrams, to represent basic OO design.

class diagram

Example: Class Person



Notation

Data members:

`name: type`

Methods:

`methodName(param1: type1, param2: type2, ...): returnType`

Visibility:

– private

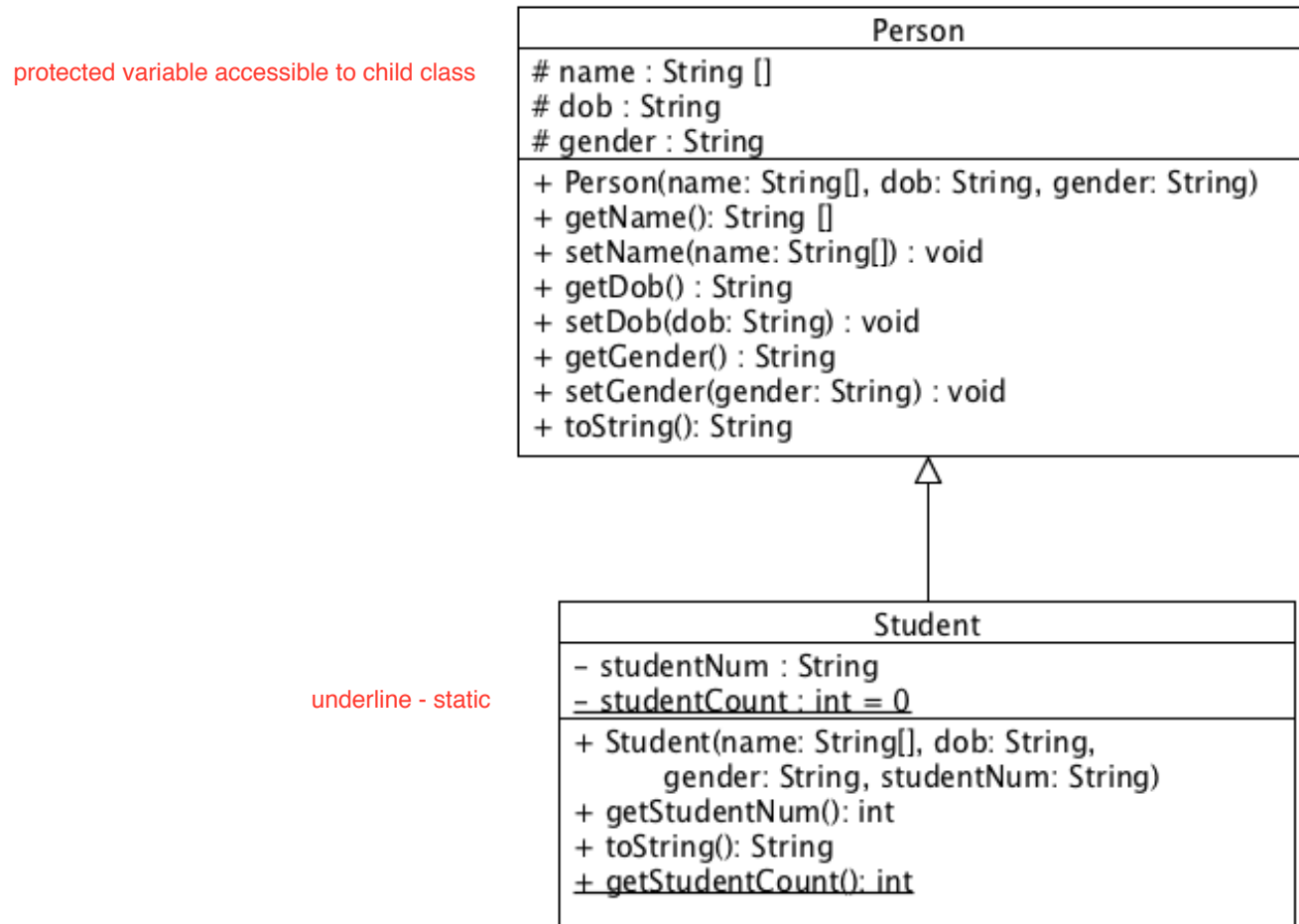
+ public

protected

~ package

Static: underline

Example: Inheritance



The arrow indicates that `Student` is a subclass of `Parent`.

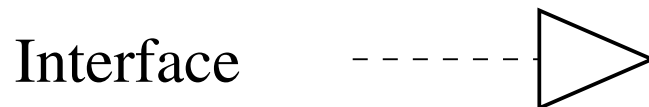
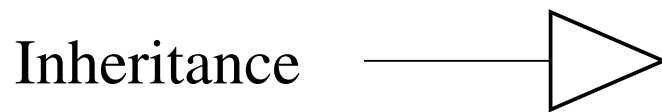
More Notation

Abstract method: *italic*

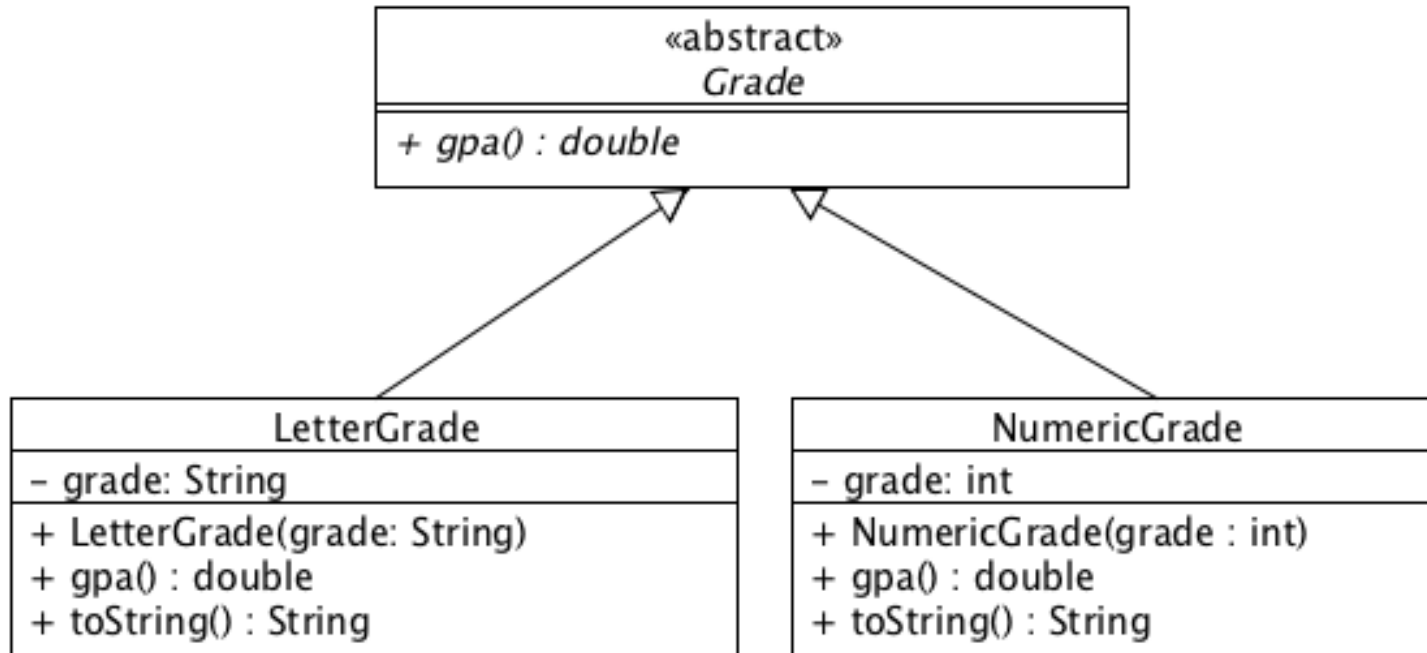
Abstract class: *italic* or <<abstract>>

Interface: <<interface>>

Relationship between classes:



Example: Abstract Class



Example: Abstract Class

