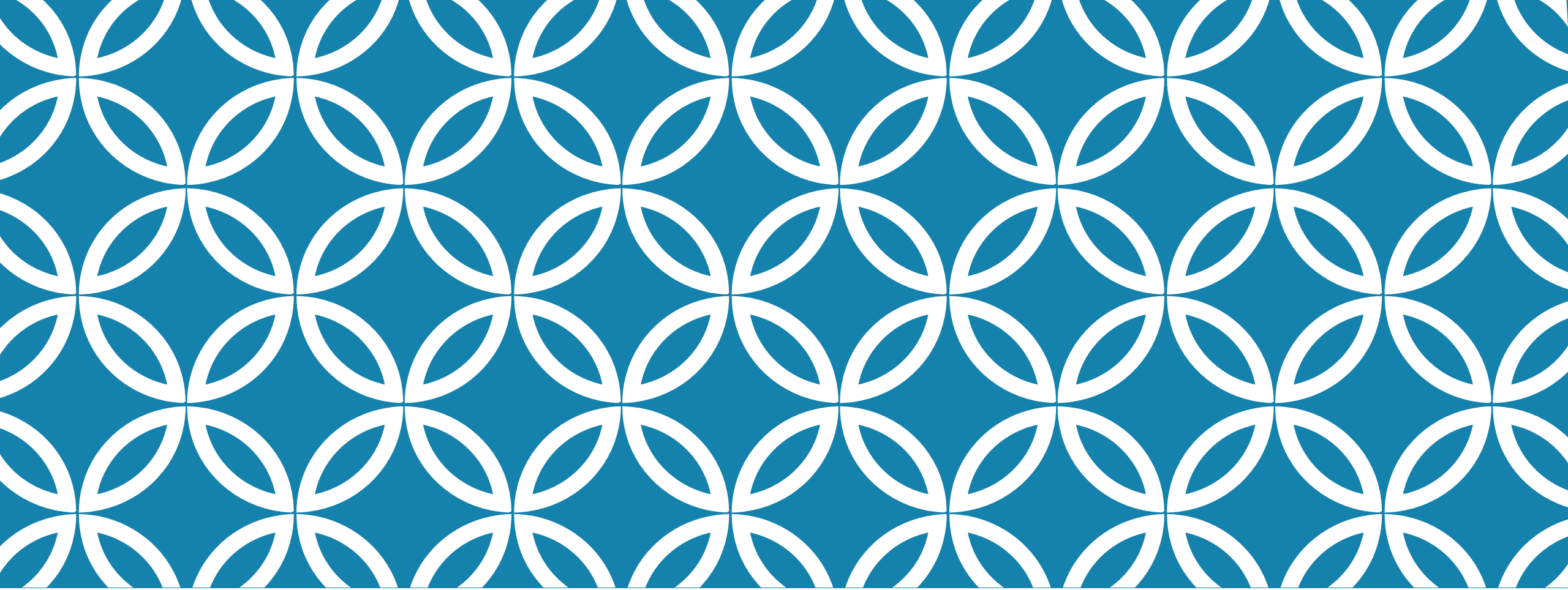


COMODIDE EVALUATION

Instructions and Ontology Introduction

INSTRUCTIONS



10-minute introduction (this)



2*20-minute individual modelling of tasks A and B

Using either Protégé + MODL or CoModIDE (see last line of each task description)



10-minute follow-up (hand in solutions, answer questionnaire)



Karl will tell you when the time is up

But if you're done sooner, feel free to progress to the next task
Just remember to mark the time when you did so on the task sheet



No guidance for either tool will be given – this is on purpose!

ONTOLOGY INTRODUCTION

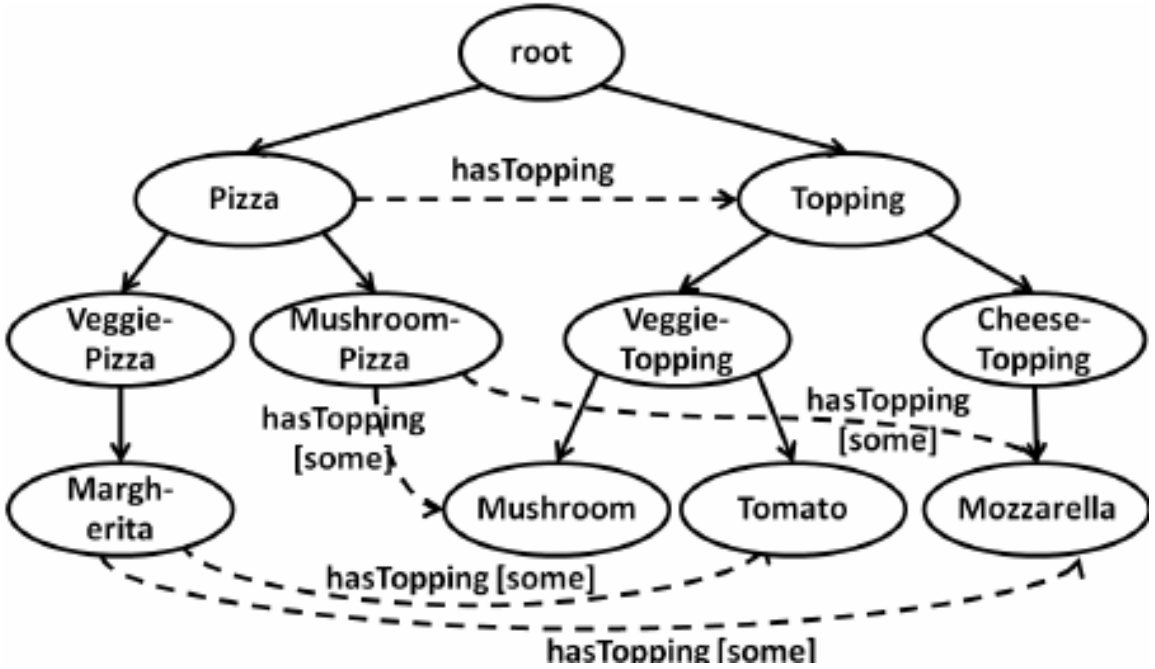
Ontologies are data models

Like UML, or ER diagrams, or OOP classes and fields

These all organize types of things, and the relations those types of things have to another and to data values

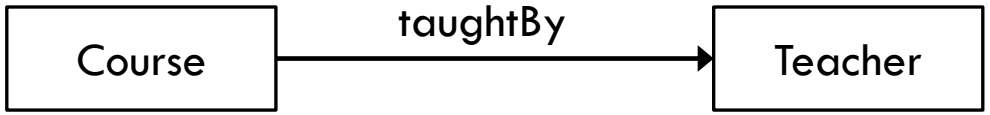
In ontology we call these types “Classes”, and the links that structure them “Properties”

Ontologies have formal logic representations but are often visualized graphically



PROPERTY TYPES

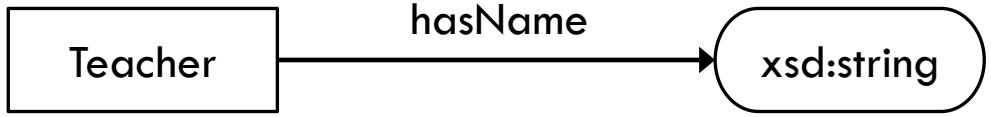
Object properties – link between two classes



$Course \subseteq taughtBy.Teacher$

$Teacher \subseteq taughtBy^{-}.Course$

Data properties – link between a class and a data value



$Teacher \subseteq hasName.xsd:string$

$Xsd:string \subseteq hasName^{-}.Teacher$

PROPERTY IMPLEMENTATIONS

Property domain = the class that the property can be applied to

Property range = the class or datatype that the property points to

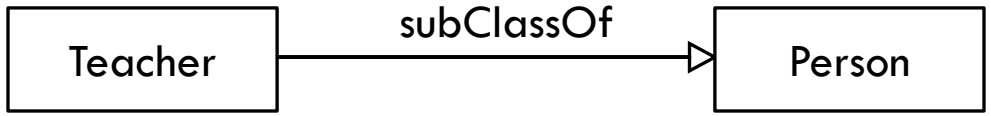
Data property ranges:

- xsd:int
- xsd:string
- xsd:float
- xsd:dateTime
- xsd:Boolean
- … etc.

XSD = XML Schema Definition – A W3C standard for datatypes on the web

SUBCLASS RELATION

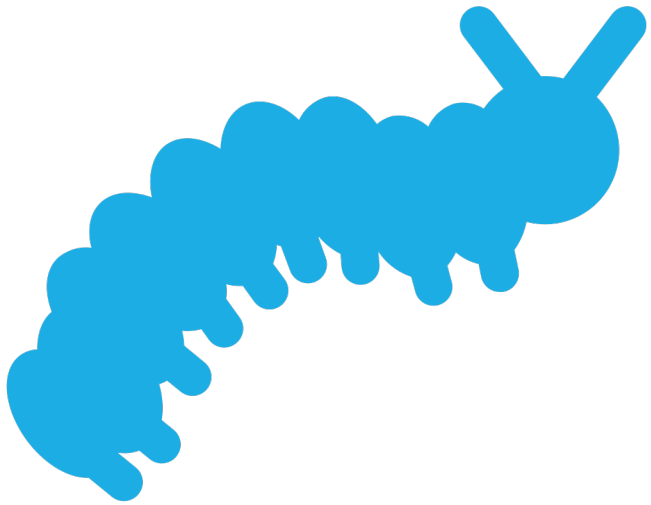
Subclass property – special case, links a superclass to a specialisation subclass



Teacher ⊆ Person

All properties that apply to some superclass apply equally to its subclasses

LAST-MINUTE COMODIDE ERRATA



1. Protégé must be shut down entirely between the two modelling tasks.
2. Drag-and-drop from the pattern library requires that you first click once on the pattern; then click and drag it onto the canvas.
3. The buttons on the right-hand side of the pattern library show documentation for each pattern.
4. The palette on the left hand side of the diagram is supposed to have tabs at the top: if it doesn't, drag it by the edge to make it slightly wider.
5. Selecting classes is a little fidgety: when the whole cell lights up green, that will draw a property connector. This happens when you mouseover the cell label. Click a little to the side of the cell label, (but still within the cell) to select it for move.