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Introduction to Web of Data Week 7 Tutorial

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The logo for Capsicum Business Architects, featuring the word "CAPSICUM" in a bold, sans-serif font with a small circle above the 'I', and "Business Architects" in a smaller, lighter font below it.

Business Architects

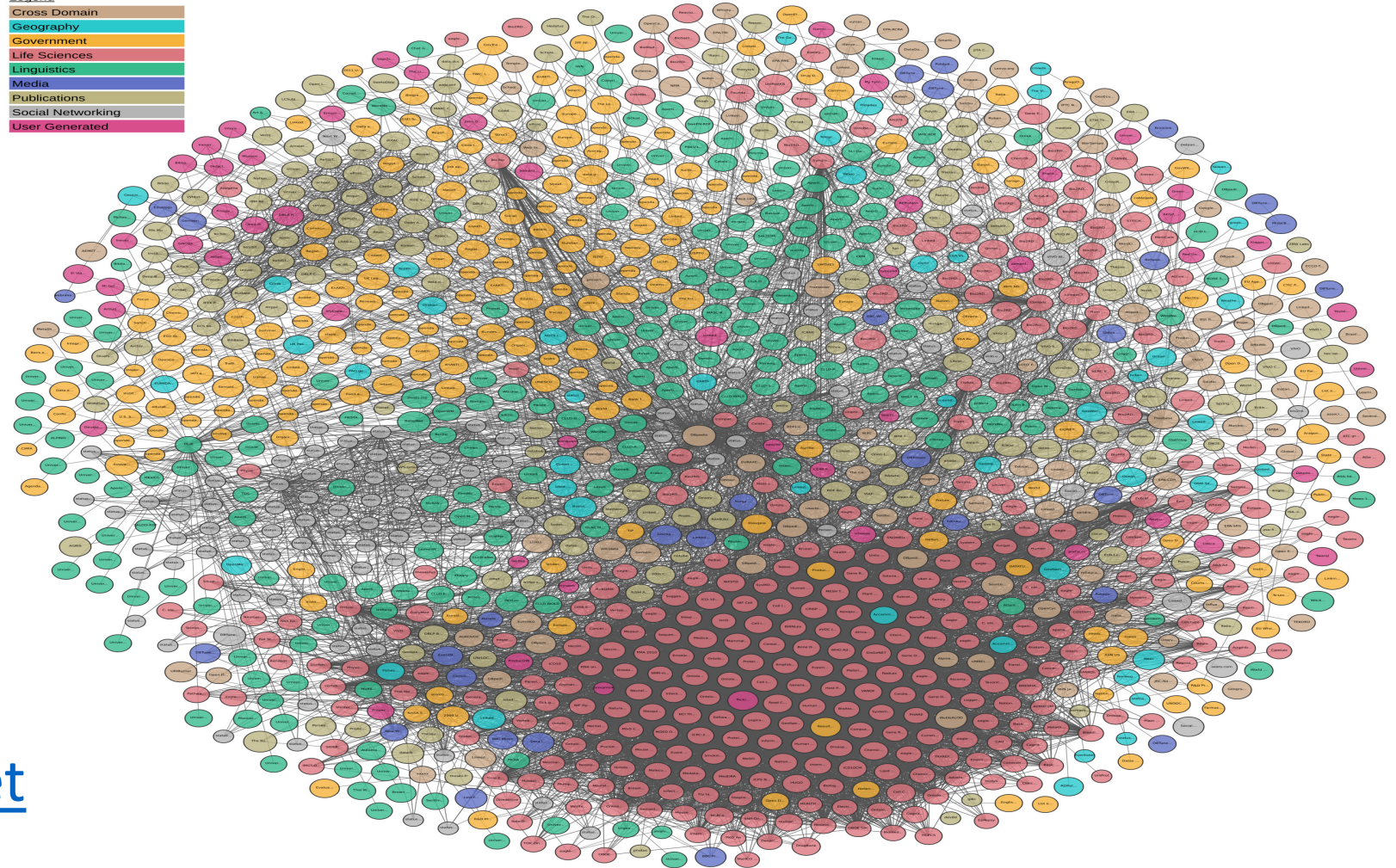
Let's listen to the father of World Wide Web

https://www.youtube.com/watch?v=OM6XIIcm_go

Linked Open Data Cloud

Legend

Cross Domain
Geography
Government
Life Sciences
Linguistics
Media
Publications
Social Networking
User Generated



- <https://lod-cloud.net>



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Complete Exercise 1

They are about understanding a domain and represent it through an ontology.

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You should have these 2 classes

The screenshot shows the Protégé ontology editor interface. The main window displays the class hierarchy for the 'analytic-ontology' project. The class hierarchy is as follows:

- owl:Thing
 - Model
 - Variable

The 'Model' and 'Variable' classes are highlighted in the hierarchy. The main workspace shows a graph with three nodes: 'owl:Thing', 'Model', and 'Variable'. 'owl:Thing' is the superclass of 'Model' and 'Variable'. 'Model' and 'Variable' are subclasses of 'owl:Thing'. There are also two dashed orange arcs connecting 'Model' and 'Variable', representing domain and range constraints. The 'Arc Types' panel on the right shows the following checked options:

- dependentVar (Domain>Range)
- has individual
- has subclass
- independentVar (Domain>Range)

At the bottom of the window, there is a status bar with the text: "To use the reasoner click Reasoner > Start reasoner Show Inferences".



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Complete Exercise 2

How we can populate data through an ontology.

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Visualization of the Solution

PowerPoint File Edit View Insert Format Arrange Tools Slide Show Window Help 100% Mon 11:51 am

analytic-ontology (http://adage.cse.unsw.edu.au/teaching/analytic-ontology) : [/Users/madhushi/Dropbox/comp9322/Tutorials/Week7 Creating Models Using Protege/Simple model solution to exercise.o...

analytic-ontology (http://adage.cse.unsw.edu.au/teaching/analytic-ontology) Search...

Active Ontology x Entities x Classes x Object Properties x Data Properties x Individuals by class x OWLViz x OntoGraf x SPARQL Query x

Class hierarchy: Model Asserted

owl:Thing
Model
Variable

Search: contains Search Clear

Arc Types

type filter text

- dependentVar
- dependentVar (Domain>Range)
- has individual
- has subclass
- independentVar
- independentVar (Domain>Range)

Node Types

type filter text

- class
- individual

To use the reasoner click Reasoner > Start reasoner Show Inferences

Reading Material

- "[Information Management: A Proposal](https://www.w3.org/History/1989/proposal.html)", Tim Berners-Lee, CERN March 1989, May 1990 - <https://www.w3.org/History/1989/proposal.html>
- How it all started- <https://www.w3.org/2004/Talks/w3c10-HowItAllStarted/>
- [A Little History of the World Wide Web](https://www.w3.org/History.html), Dan Connolly, 2000 - <https://www.w3.org/History.html>
- W3 Standards - <https://www.w3.org/standards/>
- “Web Data” activity at W3C - <https://www.w3.org/2013/data/>
- Creating a simple ontology in Protégé - <http://protegewiki.stanford.edu/wiki/Protege4Pizzas10Minutes>