

6.898 – Homework No. 2

By next class (Tuesday, September 28), all students should have done the following:

1. Read Architecture of the World Wide Web:

<http://www.w3.org/TR/webarch/>

We expect Course 6 and technical oriented students to be able to answer questions relating to URIs (section 2), and Web Interactions (section 3).

2. Please attempt to render the following text into a circles and arrows diagram as discussed in class:

Joe Lambda, a 25-year-old man, has a FOAF file. Joe has an AIM account "jlambda", and a Jabber account "joe.lambda@example.com", which is also his e-mail address. Joe is a graduate student at Foobar University, a university in the Cambridge, Massachusetts (42.373611°N, 71.110556°W), the homepage of which is located at "<http://foobar.example.org/>".

Joe Lambda has two friends, Bill Foo and G. Baz. Normally, Joe lives in Somerville, Massachusetts (42.3875°N, 71.1°W), a city that borders Cambridge, with Bill. G. Baz is their neighbor. Joe, Bill, and G. have a number of different interests, but are all interested in Linked Data. Joe is also interested in Astronomy, and Cricket, Bill also enjoys American Literature and Baseball, and G. is interested in the TV show Arrested Development and Hockey.

(NOTE: As not all students may be able to turn in a digital copy of this diagram, you may instead turn in a paper copy to the TA by the beginning of next class, 4:00PM, September 28, 2010.)

3. List a) the resources, b) the predicates, and c) all the triples in the circles and arrows diagram at:

<http://dig.csail.mit.edu/2010/Courses/6.898/resources/hw2-circlesarrows.jpg>

4. Using dbpedia's relfinder (<http://relfinder.dbpedia.org/relfinder.html>):

Find and describe (list all the predicates and triples) the relationships between:

- Albert Einstein & University of Zurich
- John Travolta & Lawrence Bender
- Massachusetts Institute of Technology & University of Oxford

5. Identify three linked datasets you can use and provide a scenario that utilizes data from all of them.

In addition to the above tasks, we request that students provide another paragraph describing an idea for the Idea Bank. These ideas should be of a potential application for linked data.

Short Paper: Homework groups are responsible for providing a short one-page paper that investigates the impact of linked data on some aspect of e-commerce. You may consider the impact on brands, resellers, end consumers, or new business models.

Backgrounder: Homework Group 2 is responsible for providing a backgrounder on Thomas Tague and Open Calais before next class.

Please remember to turn in all homework to the appropriate Stellar homework dropbox by 4:00PM Tuesday, September 28, except for the backgrounder, which should be submitted no later than 11:59PM Monday, September 27. Stellar drop boxes will be made for each of the individual components of this assignment.