

6.898 – Homework No. 1


The following homework is designed to get you set up and ready for the remainder of the course by introducing you to the concepts and tools you will be using throughout the course to explore and understand Linked Data. We encourage and request that you form teams to work on the homeworks together, so that all students can better understand both the technical features of linked data as well as the marketplace in which Linked Data applications compete. We expect that these teams will be formed by the end of Lab on Thursday, September 16.

By next class (Tuesday, September 21), all students should have done the following:

1. Read “The Semantic Web” by Tim Berners-Lee, James Hendler, and Ora Lassila, from the May 2001 issue of *Scientific American*. This article is available online through the MIT libraries and nature.com at:
<http://www.nature.com/scientificamerican/journal/v284/n5/pdf/scientificamerican0501-34.pdf>
2. Install Firefox and Tabulator, a Firefox extension that may be used to browse linked data. The latest version of Tabulator is available at:
<http://dig.csail.mit.edu/2007/tab/release/unofficial/tabulator-latest.xpi>
3. Make and upload a Friend of a Friend (FOAF) file. We will be expanding and extending these files over the next few weeks as you become more familiar with the basic principles of linked data and the semantic web.

The best place to start your first FOAF file is <http://foaf.me/>, which allows for building your FOAF file without any technical expertise and will give you an account to modify it.

Course 6 students may wish to explore further and try out the older FOAF-a-Matic (<http://www.ldodds.com/foaf/foaf-a-matic>), which generates a FOAF file, but does not provide hosting or an easy way to modify it. You may wish to read further documentation about FOAF at <http://www.foaf-project.org/docs>.

4. Open your FOAF file in Tabulator and send a screenshot of the social pane (marked by the button that looks something like this: ) to the TA (pipian@mit.edu) so we can make sure you have done the above two things. Please also forward the URL of your FOAF file (or WebID, on foaf.me) along with the image.

In addition to the above tasks, each week, we require students to provide one paragraph describing an idea for the Idea Bank (on Stellar). These ideas should be of a potential application for linked data.

Furthermore, each week, homework groups are responsible for providing a short one-page paper that investigates some aspect of the viability of linked data applications in the marketplace, the details of which will be provided each week. For this first assignment, we expect groups to provide a current market overview for some portion of the linked data ecosystem. Please describe the need and the value that linked data provides and some aspects of the current players in the market. You may consider data providers, tools/platform services, or applications from the commercial, open source, or public sectors.

Finally, each week, we will select a homework team to provide a “backgrounder” on the next week's guest lecturer and share it with the class (the homework team tasked to do so will rotate each week during the term). Place the lecturer in context against the broader linked data and semantic web technology and business landscape (what they do, public information about their linked data initiatives, comparing them to competitors and substitutes). Propose three questions to ask them. Unlike other homework, which is due at 4:00PM the Tuesday of the following week, these backgrounders should be submitted to Stellar no later than 11:59PM on the Monday before the lecture to allow other students the chance to read the backgrounder.

Future homework will be posted on the course Stellar website, so please contact the TA, Ian Jacobi (pipian@pipian.com) if you are currently not registered for the course or cannot access Stellar.