6.898 – Homework No. 5

By next class (Tuesday, October 19), each student in the CS track should have turned in the following:

Modify one of the code examples presented in class on Tuesday, October 12 to do the following:

Given the name of a musical artist, it should find all Peel Sessions with that artist, and return the name (label) of each session and the names of all works performed in each session. The program should *also* display a short comment/abstract describing the artist, the names of any current members (if the artist is a band), the artist's birth and death dates (If present. For the purposes of this problem, the date of formation/disbandment of a band are also acceptable.), and finally, list the names of all (official) records released by the artist sorted by earliest release date.

You will probably want to use DBTune's Peel Sessions database (<u>http://dbtune.org/bbc/peel/</u>), together with DBPedia and DBTune's MusicBrainz database (<u>http://dbtune.org/musicbrainz/</u>) to piece together a solution. (One tip: official albums may be identified in the MusicBrainz dataset by looking for Records with the album_attributes "{0,1,100}"). The code examples should be linked from the course website shortly.

Each student in the business track should have turned in the following:

In the coming weeks you will be challenged to create ideas for a Linked Data business or product and to build those in a small team. There are an endless number of ideas for great businesses but for this class it is important that your concept is made possible specifically because of Linked Data or its properties. You have learned about these in class through our technical lectures and through the experiences of the guest speakers and we now ask that you take what you have learned and distill some of the key attributes of Linked Data that might create disruptive opportunities in the real world. To that end, please write a two page paper that describes unique capabilities and characteristics of linked data that would support a set of business or product ideas that would be new, useful and sustainable. Illustrate some of these characteristics with examples from the technical lectures and/or guest speakers.

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 discusses about whether open source software and open data has been an advantage or disadvantage for the adoption of linked data. How might the "open" landscape and the resulting social dynamics affect the linked data ecosystem going forward?

Backgrounder: Homework Group 5 is responsible for providing a backgrounder on Jim Hendler and Rensselaer Polytechnic Institute's involvement with Data.gov before next class.

Please remember to turn in all homework to the appropriate Stellar homework dropbox by 4:00PM Tuesday, October 19, except for the backgrounder, which should be submitted no later than 11:59PM Monday, October 18. Stellar drop boxes will be made for each of the individual components of this assignment.