Lab 10 – Recap

The session today will not be based on exercises, but rather on a collective discussion around the different notions seen in the semantic web course and how they materialise in practice. There won't be solutions and all should come from you. The role of the teacher is only to

- encourage you to discuss the key points;

- identify when something might have been misunderstood in the course and re-explain it; and

- take notes of your discussions

The idea is that, through discussing collectively about the different aspects of a particular case study, you should have an opportunity to review the core notions seen during the course, and therefore to strengthen your understanding of those notions.

To start with, collectively (as an entire group) **discuss ideas of possible semantic web applications and decide which one you want to pursue**. Those idea should ideally be of application that would benefit from data represented in RDF on the Web, from reusing existing data and ontologies, and from the kind of inference RDF-Schema and OWL can enable. It would also be nice if the idea was original, i.e. not something that has already been done many times before.

Discuss in the whole group **what would be the overall architecture of you application**. Would it have a triplestore? Which one? What would the client side do? What sort of data it might need?

Try to find ontologies and dataset that could be reused for your application, discuss how suitable they are and how, practically, they can be reused. **What kind of ontological choices do you need to make?** Can you come up with a **few ideas of how some of the classes you will have to include will be defined through description logics?**

Collectively decide on **an instance of the main class of the application's ontology to be represented and write down how the RDF representation of this individual should probably look like**. Will there be an inference affecting this indivivudal? Do you need to rethink some aspects of the ontology?

Think of the interaction between the front-end of you application and the RDF data. **Can you write down some of the queries you would need to implement?** How would you choose to implement the application? In what language, using which library?