Summer School on Ontological Engineering and the Semantic Web: Mini-Project Introduction

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Aims

The goal of the mini-project is to get you to generate ideas about the way semantic web technology can be used to solve concrete problems.

- We want you to be able to *explore, in greater depth, the material* presented in the formal sessions *in solving a concrete problem*.
- We want you to have the opportunity to *integrate* topics, tools and techniques from across the range of material introduced in the formal and hands-on sessions.
- We want you to gain experience in *working as a member of a group*.

Outcomes

Students will:

- have an opportunity to show original, independent and critical thinking;
- have an opportunity to apply the methods and techniques taught at the summer school on a concrete problem;
- learn how to integrate a range of diverse ideas, techniques and tools to solve a problem;
- learn how to cooperate with others in solving a concrete problem, using semantic web technology;
- gain experience in organizing a limited number of person hours in order to achieve the goals of the project;
- have the opportunity to gain experience in summarizing and presenting their results;
- gain experience in critically analyzing and evaluating their work.

Approach

- We also encourage you to engage with several of the summer school **topics** in an exploration of how your problem might be solved by combining ideas and techniques from more than one area.
- We encourage you to form groups which span backgrounds (not just with respect to topics, but also institutions and nationalities)
- One extremely important aspect of the project is the social interactions you will need to engage in both with tutors and other students.
- It is important that you work on the problem collaboratively. Collaboration with others will give you a flavour of some of the problems you will meet in a real life ontological engineering situation.

Scope

Since time is limited and you will not be able to produce any detailed results, we want you to concentrate on the **process** of completing your project:

- Think about the social interactions with other members of your group as well as how you deal intellectual challenges you encounter.
- At the same time, you should bear in mind that we do expect a product — i.e., a 10 minute presentation to the summer school as a whole.
- One way of tackling the project (not perhaps the most intellectually challenging) is to work backwards from this, allocating tasks as needed to complete the presentation.
- Your project can be functionality or technology centred;

can sketch out a design for a system which can deliver new functionality or focus on exploring some technical issue .

Tutoring

The first session of project time is designated as **tutor-led**. By this we mean that tutors will take an active role in ensuring that your project is on track. They will provide additional tutorial and practical advice as needed and may, for instance, provide mini-talks on some additional sub-topic.

In the **tutor-available** sessions, students are expected to take the lead in their work though tutors will be available for any extra input. Note that while we have allocated specific amounts of time for these different sorts of interactions, we expect students and tutors to be flexible and arrange sessions as needed.

Specifics 1

- You will need to form yourselves in groups of 4 or 5.
- Since we expect tutors to oversee 2 groups at most there should be no more than 14 groups.
- Group selection should be complete by Wednesday morning at the latest.
- If you are unable to form a suitable group on your own, Barry Norton will assist in group formation.

Specifics 2

- We want you to select a problem which your project is intended to solve or a technical issue it is intended to explore.
- Bear in mind that you should work with at least one of the tutors but you may, given the goal of covering as many topics as possible, be able to elicit the help of other tutors.
- Since tutors will only be able to oversee 1 or 2 projects you may need to consider an alternative project with an alternative tutor.
- You should have a topic by Thursday morning if not earlier.

Specifics 3

The main criteria for finding a topic are that:

(a) the project can be completed in the limited time set aside;

(b) that resources such as ontologies and texts are available; and

(c) that at least one of the tutors is willing to oversee/assist with the project.

This means that if students want to pursue a project in their own domain, this would be fine. However we prefer that students tackle projects for which some resource (e.g., ontology) is already available. Similarly the use of tools presented in the afternoon sessions is highly encouraged.

Specifics 4

We have allocated 5 ½ formal hours for the mini-project so you don't have time to develop a full implementation of your solution or to create enormous new ontologies or extensions to ontologies.

However we will be looking for sketches of solutions (as given in the presentations) which convince us that you have looked hard at the problem, constructed a framework for a solution and subjected this to critical analysis.

We want to see projects which seem likely to be the basis for viable and complete solutions given more time and effort.

Specifics 5

On the final day of the summer school we have set aside 3½ hrs for you to present your results. This means that you will have **10 minutes** per group to present the most important and interesting aspects of your work.

The project presentation should be concise and to the point, entertaining, show insight into the problem, show how you creatively applied ideas in its solution and indicate any problems and how you overcame them.

Your presentation should be e-mailed before dinner on Friday (20h00); even though you may also have a demo, you should be finished work, your slides will be shown from a standard machine (even if you have a demo on your own), and we would like to publish the slides on the school's website.

Summary

- Form a *mixed* team
- Choose an *interesting* but *feasible* topic
- Find a *tutor*
- Use the *tools* and *resources* from the school
- Prepare an *interesting* and *entertaining* presentation