TECNICAL UNIVERSITY OF MADRID

COMPUTER SCIENCE SCHOOL

INDIVIDUAL PRACTICAL WORK

DEVELOPMENT OF A CULTURAL EVENT ONTOLOGY REUSING GENERAL ONTOLOGIES

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Course in Ontologies and the Semantic Web in the Master in Artificial
Intelligence

Course 2009-2010

OUTLINE

1   Competences to be acquired (or strengthened)

The students should acquire the following competencies:

1) Methodological ontology development.

2) General ontology reuse.

2   Task to carry out

Each student must develop a cultural event ontology that answers, at least, the following competency questions (CQs):

- When is the cultural event `concert1` celebrating?

- Is celebrated the cultural event `concert1` before the cultural event `concert2`?

- Have the cultural events `concert1` and `concert2` the same duration?

- Are the cultural events `concert1` and `concert2` celebrated at the same time?

- Is the musical work `concert1` part of the cycle of concerts `concertCycle1`?

- Does the musical piece `musicalPiece11` belong to the musical work `musicalWork1`?

- Is the musical piece `musicalPiece11` interpreted in the cycle of concerts `concertCycle1`?

- What music pieces are interpreted in the cycle of concerts `concertCycle1`?

3   The required products

The students must deliver a report and the resulting ontology in OWL. The report must be delivered in paper and e-mail to the addresses: *mfernandez.eps@ceu.es* and *masterr09@delicias.dia.fi.upm.es*. It is preferable Word format, although PDF will be also accepted. Concerning the resulting ontology, it must be sent by e-mail to the aforementioned addresses.

The report must have, at least, the following parts:

- Title page. It will contain, at least, the name and the e-mail address of the student.

- Outline.

- Introduction.

- Justification of the types of general ontology to be reused (activity 1).

- The list of the found ontologies with their URL, language and implemented theories (activity 3).

- The comparative study of general ontologies (activity 4).

- CQs transformed according to the vocabulary used in the reused general ontologies (task 5.1).

- Tables of general ontologies versus features (task 5.2).

- Justified selection of general ontologies (task 5.3).

- Description of the process of customization of general ontologies (task 6).

- Description of the process of building of the host ontology integrating the customized general ontologies (activity 7).

- Filled questionnaire (see Table 1). It is **IMPORTANT** to note that you must take notes of the duration of each task that you carry out.

4 Deadline

The products must be delivered by the 29th of January of 2010.

Table 1. Questionnaire about the proposed methodological guidelines to reuse general ontologies.

Question	-	Score			+
	1	2	3	4	5
THE PROVIDED GUIDELINES TO DETERMINE THE TYPE OF GENERAL ONTOLOGY TO BE REUSED (activity 1)					
1. Are there precise?					
2. Are there understandable?					
3. Are there complete?					
4. Are all their explanations necessary?					
THE PROVIDED TIME MODELING DESCRIPTION (activity 2)					
5. Is it precise?					
6. Is it understandable?					
7. Is it complete?					
8. Are all its explanations necessary?					
THE PROVIDED MEREOLOGY MODELING DESCRIPTION (activity 2)					
9. Is it precise?					
10. Is it understandable?					
11. Is it complete?					
12. Are all its explanations necessary?					
THE PROVIDED GUIDELINES TO CARRY OUT THE COMPARATIVE STUDY (activity 4)					
13. Are there precise?					
14. Are there understandable?					
15. Are there complete?					
16. Are all their explanations necessary?					
THE PROVIDED GUIDELINES TO ANALYSE THE HOST COMPETENCY QUESTIONS (task 5.1)					
17. Are there precise?					
18. Are there understandable?					
19. Are there complete?					
20. Are all their explanations necessary?					
THE PROVIDED GUIDELINES TO IDENTIFY THE FEATURES OF THE GENERAL ONTOLOGIES (task 5.2)					
21. Are there precise?					
22. Are there understandable?					
23. Are there complete?					
24. Are all their explanations necessary?					
THE PROVIDED GUIDELINES TO DETERMINE THE COMMON ONTOLOGY THAT BEST FITS THE FEATURES (task 5.3)					
25. Are there precise?					
26. Are there understandable?					
27. Are there complete?					
28. Are all their explanations necessary?					
THE PROVIDED GUIDELINES TO CUSTOMIZE THE SELECTED COMMON ONTOLOGY (activity 6)					
29. Are there precise?					
30. Are there understandable?					
31. Are there complete?					
32. Are all their explanations necessary?					
THE PROVIDED GUIDELINES TO INTEGRATE THE GENERAL ONTOLOGY (activity 7)					
33. Are there precise?					
34. Are there understandable?					
35. Are there complete?					
36. Are all their explanations necessary?					
CONCERNING THE EFFICIENCY OF THE METHODOLOGY	**Time in minutes**				
37. How many minutes have you devoted to the activity 1 *identify the type of general ontology to be reused*?					
38. How many minutes have you devoted to the activity 3 *search for general ontologies*					
39. How many minutes have you devoted to the activity 4 *carry out a comparative study*?					
40. How many minutes have you devoted to the task 5.1 *analyze the host CQs*?					
41. How many minutes have you devoted to the task 5.2 i*dentify the features of the general ontologies*?					
42. How many minutes have you devoted to the task 5.3 *determine the general ontology that best fits*?					
43. How many minutes have you devoted to the task 6.1 *prune the general ontology*?					
44. How many minutes have you devoted to the task 6.2 *enrich the general ontology*?					
45. How many minutes have you devoted to the task 6.3 *translate the general ontology*?					
46. How many minutes have you devoted to the task 6.4 *evaluate the obtained general ontology*?					
47. How many minutes have you devoted to the activity 7 *integrate the general ontology*?					
48. How many minutes have you devoted to test the host ontology?					

COMMENTS AND SUGGESTIONS:

We are especially interested in the comments and suggestions for those features to which you have assigned lower values (1, 2 or 3).