Workgroup and Workflow Management Systems - Written Test of Jan 31st, 2006

Family name _____ First name _____ Politecnico ID # _____

Master Course in _____

Please, fill in this sheet carefully. All answers must be provided on this sheet, which must be returned at the end of the test. No additional sheet will be considered[1].

Rules. The examination is passed if the student obtains at least 13 points out of a total of 25 points available for this test, and the grand total of obtained points, including those obtained with a presentation or a project, is greater than or equal to 18. Use of books, handbooks, lecture notes is not permitted: only the sheets provided by the teacher can be used. All the questions must be answered, at least partially: tests in which even one question has not been answered will not be evaluated. Duration of the test: 2 hours.

Exercises

(1) Describe the concept of *supertask* as defined by the methodology of *WIDE*. Is there any equivalent concept in the model from the *Workflow Management Coalition*?

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[1]**Remark**. Complete specifications whenever needed. Clarity and order will be taken into account for the evaluation.

(2) The online newspaper FastNews would like to automate the following publication process.

As soon as a new event is signaled to the editor of the newspaper, the editor connects to the internal Web site and provides instructions about the event. Once the instructions are completed, the editor assigns the job of writing about the event to one of the correspondents and, also, commissions a photographer to take some pictures. After this assignment, both the correspondent and the photographer cover the event and take notes and pictures, respectively. After the event, the correspondent connects to the online publication system and edits the article. The submitted article is forwarded to one of the reviewer of the editorial staff in charge of proofreading and correcting the article. Independent of the correspondent, the photographer connects to the system and uploads a set of pictures taken at the event. As soon as the article is corrected and the pictures are available, the editor checks the article and, if he/she identifies any point to be clarified, notifies the correspondent of the changes to make. Accordingly, the article is re-edited (modified), corrected, and checked, until the editor is satisfied. If the article is ready for publication, the editor rates the quality of the article (for internal purposes) and selects the pictures to be published among those uploaded by the photographer. The article is then ready for publication on the FastNews Web site. The system thus forwards the details to the Web designer, who publishes the article. In parallel to the publication of the article, the system adds the article to the correspondent's publication list and the selected pictures to the photographer's publication list (for payment). When the article is finally online and the payment data are gathered, the process ends.

Provide a reasonable schema of the outlined process (process model), according to one of the modelling formalisms: *WIDE* model, *Workflow Management Coalition* model, Petri nets.

(3) Complete the process model, defined in exercise (2), by adding a reasonable example of a *business transaction*.

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(4) Consider the interoperability issues in a *peer-to-peer* format. Provide a very schematic description. State clearly what the main advantages and the main drawbacks are if the *two* involved *WfMS*s share the same *PDL* language or not.

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This part for use by the teacher, only.

Ex. 1	Ex. 2	Ex. 3	Ex. 4	**Total**