

Politecnico di Milano

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Workgroup and Workflow Management Systems-Written Test of Jan. 29th, 2008

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 considered¹.

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 what kind of data you expect to be described by the *organizational* model of a WfMS. Is the temporal dimension relevant for these kind of data?

space reserved to your answer

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

(2) It is a very National peculiarity (if compared at a European level) that Italy's industry is still heavily based on small and medium enterprises (SMEs), which are typically not able to invest in innovation and research. To promote investments in innovation-related activities, the Region Lombardy co-finances innovative projects by SMEs that pass the following selection process.

A company that wants to participate in the selection for a co-financing must register to the web-based selection system and provide some global data about the company's business. In a next step, the company fills the online forms for the project description and uploads the necessary attachments to the system. This closes the project submission phase.

Once the project has been received, the system automatically selects two experts from the pool of registered evaluation experts, one technology expert and one financial expert, and assigns them to the project for evaluation. The technology expert evaluates the viability of the adopted technologies and the innovativeness of the proposed project; the financial expert, in parallel, evaluates the planned effort and the financial feasibility of the project. Both experts use the web-based selection system, where they also may provide comments for their decisions. Once both evaluations have been received by the system, the system automatically performs a first coherence check, based on the quantitative feedback given: if the two evaluations are too divergent, both experts are asked to reconsider their feedback and to explicitly comment their decisions - comments are now mandatory. Only if the system gets all feedbacks with appropriate comments, the application for co-financing and the experts' feedback is forwarded to the responsible of the selection process. If he/she, despite the comments provided by the experts, is not satisfied with the provided evaluations, he/she may restart the evaluation process by telling the system to re-assign the application to two new experts (in which case the evaluation phase is started again). The responsible may ask for only one reevaluation. After that, he/she takes the final decision about the application. He/she thus compiles a final decision letter, marks the application as "accepted" or "rejected", and sends out the decision letter via the selection system. The system archives the process results and the application.

Provide a reasonable schema of the outlined process(es), according to one of the following modeling formalisms: WIDE model, Workflow Management Coalition model.

(3) With respect to the process described in Exercise 2, provide a reasonable example of an exception monitoring the response time by the two experts.

space reserved to your answer - exercise 3

space reserved to your answer - exercise 2

(4) Describe the concept of *workflowability* for a business process and the relevance of that concept within the design methodology. Should you discover that a process does not feature the *workflowability*, which other tools can be adopted to manage that process?

space reserved to your answer

This part for use by the teacher, only.

| Ex. 1 | Ex. 2 | Ex. 3 | Ex. 4 | Total |
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