Workgroup and Workflow Management Systems-Written Test of June 21st, 2011

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 which are the main advantages achievable by the adoption of a standard process definition language.

space reserved to your answer

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

(2) In order to increase the participation of citizens to public elections, the Freeland Republic Municipality (FRM) wants to set up an electronic voting system.

During the election day, the stewards of FRM open the polling station, reset all the counters of the system, and declare the station *formally opened*.

Whenever a citizen goes to the polling station, he/she gets identified by the stewards, his/her Id data are recorded, and the citizen accesses the voting system. Every polling station has *three* voting systems, where three different citizens can vote in parallel. Every citizen of FRM can obviously vote only once.

At the end of the election day, the stewards of FRM close the polling station, and declare the station *formally closed*. The system automatically counts how many votes every candidate received, and prints out a suitable report. Finally, the process(es) end(s).

Provide a reasonable schema of the outlined process(es), according to the modeling formalisms of WIDE. Please, suitably model all the *pre-conditions* and *post-conditions* of every task.

(3) With respect to the process described in Exercise 2, provide an example of a reasonable exception that every 3 hours after the opening of the station counts how many citizens attended the voting procedure and immediately informs the Minister of the Interior of FRM about it.

space reserved to your answer - exercise 3

space reserved to your answer - exercise 2

space reserved to your answer - exercise 2

(4) Define the concept of business transaction and the related pros and cons.

space reserved to your answer

This part for use by the teacher, only.

Ex. 1	Ex. 2	Ex. 3	Ex. 4	**Total**
4	12	5	4	25