Politecnico di Milano

School of Industrial and Information Engineering
Polo Territoriale di Como, via Anzani 42, 22100 Como
Tel.: 031-332.7332 Fax: 031-332.7321
prof. Giuseppe Pozzi - Workgroup and Workflow Management Systems
e-mail: giuseppe.pozzi@polimi.it

Workgroup and Workflow Management Systems-Written Test of Jul. 8th, 2014

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) Provide a reasonable taxonomy of cooperative systems and some typical application domains.

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) When applying for tickets for the football matches of the FIFA world championship, every customer has to register all his/her personal data, including passport number and payment card, through the FIFA.com web site. Every customer may apply for one football match, only.

Sales take place through two phases. In the first phase, a random selection draw is performed two weeks before the scheduled match: selected customers are notified and must pay within two days after the draw. If payment succeeds, the customer will receive the PDF file of the ticket, and he/she will attend the match. If payment fails, the reservation of that customer is canceled.

Customers that have not been selected by the draw, receive a negative notification. The second phase starts three days after the first phase, and customers may purchase the ticket for the preferred match according to a "first-come-first-served" mechanism. The payment must be performed immediately: again, if payment fails, the reservation of that customer is canceled.

Provide a reasonable schema of the outlined process(es), according to the modeling formalism 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, write a Chimera Exception which does not permit two customers to share the same payment card. Would that occur, the customer is notified and the case ends.

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space reserved to your answer - exercise 3
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space reserved to your answer - exercise 2

(4) With respect to a BPMN activity graph, describe the concept of *coupling* for the resource model.

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