UNIVERSITY OF TARTU

1632

Institute of Computer Science

MTAT.03.231 – Business Process Management

Regular Exam – 28 May 2013

Notes:

- *The exam is open-book, open-laptop, open-Internet. You can consult any course material during the exam and you can browse the Web.*
- *You are not allowed to share information with anyone during the exam, so e-mails and chats for example are prohibited.*

Task 1. Process Implementation (40 points)

Implement the following insurance claims handling process using Bizagi.

The insurance claims process starts when a customer submits an insurance claim. Each insurance claim goes through a two-stage evaluation process. First, a Claims Handler determines if the customer is duly insured and if the customer is liable for the loss described in the claim. Secondly, the claim is assessed in order to determine if the insurance company has to cover this liability and to what extent. If the amount of the claim is greater than 10000, the assessment of the claim is performed by a Senior Claims Handler. If the claimed amount is less than or equal to 10000, the assessment can be performed by any Claims Handler (senior or not senior). There are 2 senior claims handlers and 2 non-senior claims handlers. Note that all Senior Claims Handlers are also Claims Handlers themselves.

Next, the customer is advised of the decision regarding their claim. If the decision is positive, they are also informed of the amount to be reimbursed by the insurance company. Preferably, the same (senior) claims handler who assesses the claim should advise the customer of the outcome.

If the claim is accepted, a Finance Officer triggers the payment for the amount approved during the assessment. The payment can be triggered before, after or at the same time when the customer is advised of the decision. There is only one finance officer.

An insurance claim should contain at least the following fields:

- Name of claimant
- Policy number (this is a string with alphanumeric characters, not an integer)
- Description of the claim
- Amount claimed

When a claim has been assessed, a "claim decision" is produced. A claim decision contains at least the following data fields:

- Decision (positive or negative)

- Explanation
- Amount to be reimbursed (greater than zero if the decision is positive).

You may add other data fields into the Claim or the Claim Decision if you deem it necessary.

For this task, you must submit a memory stick with a virtual machine (".ova" file) containing your Bizagi solution. Please make sure you have saved the virtual machine before exporting it to "ova" format.

IMPORTANT: As a precaution: Please keep a copy of the VM in your hard drive until the exam is graded.

Task 2. Process Mining (10 points)

Consider the "repair example" log that was used in Practice Session of 30 April and also available here: http://www.processmining.org/_media/tutorial/repairexample.zip

a. Draw a BPMN diagram (using any modelling tool) corresponding to these logs. You can use any process mining technique to reverse-engineer the BPMN model.

b. Which task in this repair process has the longest waiting time and how much is the waiting time?

For this task, you should submit a PDF file containing your complete BPMN model. In the BPMN model, put an annotation (comment) in the task that you have found to have the highest waiting time.

You can export the PDF from Bizagi, Signavio or any other tool of your choice.

Submit the PDF file using the "Submit" button in the course web site.