

Management Information Systems (Spring 2012-2013): Detection of Data Anomalies and Data/Process Consistency

Due on Week starting on 6.04.2013

*LA. Iman Helal, TA. Marwa Hussien
, TA. Nesma Mostafa, TA. Ahmed Emad, TA. Fatma Abdel-Dayem
Sunday: 09:30-11:00 am, 12:34-02:30 pm
Thursday: 08:00-09:30 am*

Dr. Ahmed Hany Awad

This assignment cover the topics discussed in lecture 3.

BPMN Support for Data Modeling

Problem 1

Mark the following statements as true or false

1. A data object can be attached to a catching message intermediate event in BPMN.
2. A data object lifecycle represents possibilities to assign values to the data object.
3. A process model covers a data object life cycle when it allows only those states and transitions stated in the life cycle.
4. Data stores are used in a BPMN model to show where data are loaded from and where they are eventually saved.
5. Data input/output are used to represent process-level input/output only.

Data Anomalies, execution semantics and consistency

Problem 2

With respect to the process model shown in Figure 1, answer the following questions:

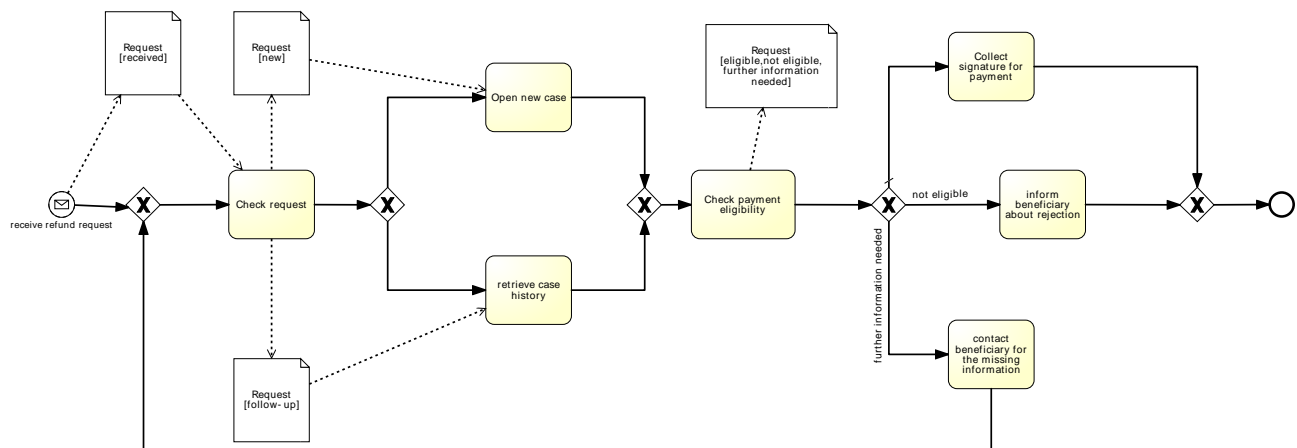


Figure 1: A travel-request-refund handling process

1. What type of data anomaly(ies) would this process suffer from?
2. Suggest a resolution for the found anomalies.
3. At the time task “Check Payment Illegibility” is ready to execute, what are the values (states) of the request object?
4. At the time task “Collect Required Signatures for Payment” is ready to execute, what are the values (states) of the request data object?

Problem 3

Given the Request object lifecycle shown in Figure 2 and after the above found data anomalies have been resolved, decide whether the process in Figure 1 is conformant and covering the lifecycle?

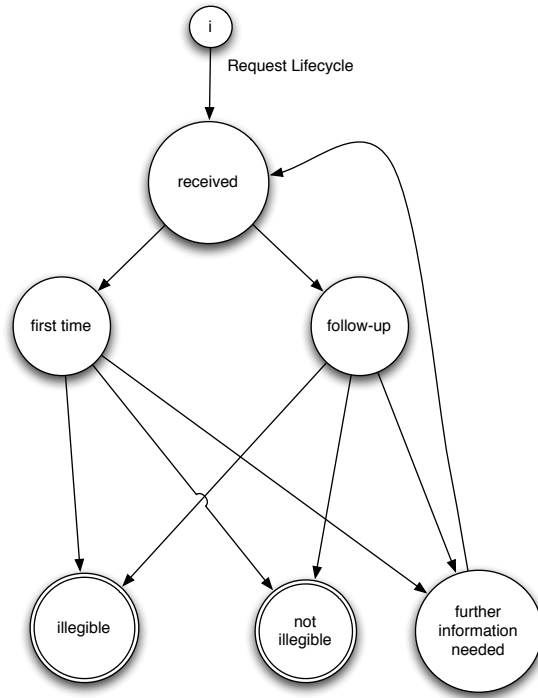


Figure 2: Refund request lifecycle