System Integration Assignment

Mini Project 3: Message-Oriented Middleware

Objective

The main objective of this assignment is to provide the students with practical experience in creating and integrating small-scale enterprise application implementing message-oriented middleware.

Task

Create MOM-integrated bank application, which enables the following services:

- a customer makes a loan requests to multiple banks;

- some of the requested banks respond to the customer with loan quotes;

- customer compares the quotes and selects one, based on own financial criteria;

- customer applies for the selected bank product, sending her/his personal data;

- bank returns a confirmation letter to the customer (text file) and a copy of a contract (file);

- the confirmation letter starts with the salutation "*Dear XX NN,*", where

  - XX is either 'Mr', 'Ms', or 'Mx', depending on the specified or non-specified gender of the receiver;

  - NN is the name of the receiver.

- the gender of the receiver can be retrieved out of the name by use of a web service, hosted at http://www.thomas-bayer.com/restnames/

Solution

The solution is a group work. The recommended size of a group is 3-4 students.

It must implement at least two or more MOM technologies, introduced in class: Apache Camel, ActiveMQ, RabbitMQ, and Apache Kafka.

Additional implementation of other integration technologies is also possible.

The solution gives 15 credits, in which Peergrade review and presentation in class are included.