Mini Project 2: Message-Oriented Middleware

Assignment 1: Travel Reservation

Create and validate an integration software, which enables the following communication between two or more applications over MOM:

- a travel agency offering booking of hotel rooms/car rents/flight tickets (choose one) uses a message broker for advertising campaigns;
- customers of this travel agency's services register their topics of interest in offers coming from the same ads channel;
- right now, the travel-booking application, created by you, runs the "*Dreams come true this autumn*" campaign, offering cheap services during this season's months;
- customers, who are interested in the current offer confirm a booking, while those who are not interested, say '*pass*'.

Assignment 2: Banking Operations

Create MOM-integrated application used by a customer, who need an urgent bank loan.

The customer application
- makes a loan requests to multiple banks;
- collects non-binding bank quotes from (simulated) bank applications;
- compares the quotes and selects one, based on its own financial status and criteria

See https://www.gocompare.com/loans/ for inspiration.

Assignment 3: Mail Services

Create a messaging application, which sends notification letters to a group of people at a specified time, under the following conditions:

The names and mail addresses of the group members are stored in either xml or json file.

The content of the letter is stored in a text file.
The letter should start with the salutation "*Dear XX NN,*", where
- XX is either 'Mr' or 'Ms', depending on the gender of the receiver;
- NN is the name of the receiver.

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

Choose one task or replace it with your own. The solution gives 15 credits, in which Peergrade review and presentation in class are included.