

Assignment 11: Mini-Project 4: Bank Service

Use Case

A bank has automated the business process of giving loans to private clients.

After receiving a message with an application for a loan, containing the client's data, the bank applies rules to validate it. The rules can refer to either the quality of the available data (e.g. missing values, values over or below limits) or consistency with some bank standards (e.g. minimal income, personal status).

If the application fits the rules, it is supplemented with details about the bank product (the loan). A draft contract is created and sent to a bank agent (a person) for approval.

If the contract is approved, the agent notifies the client by sending a copy of the draft.

Then the client has 48 hours to accept the contract and get the loan.

In case the data validation fails the application is rejected and the client notified.

In case the agent disapproves the draft, an error message is printed, application rejected, and the client notified.

In case the client misses the 48-hour deadline, the application is deleted, and the case closed, without notification of the client.

Tasks

1. Create a model of the business process in BPMN.
2. Create a rule engine with the business rules, applied for validation of applications.
3. Create service task for adding details about the bank loan and creating a document out of it.
4. Integrate and deploy the whole process on a web server.
5. Test the operability by sending application messages from either a REST client or a message broker.
6. Upload the code and the model files in your Github repository, add some screenshots of the models, and a brief readme file.

Notes

You may reapply (parts of) the previous mini-project's solution, if it is appropriate.

You can consider sharing operations between Camunda and Apache Camel (optional)

Grade

This project is graded with 15 study points, which include the peer-grading of another project.