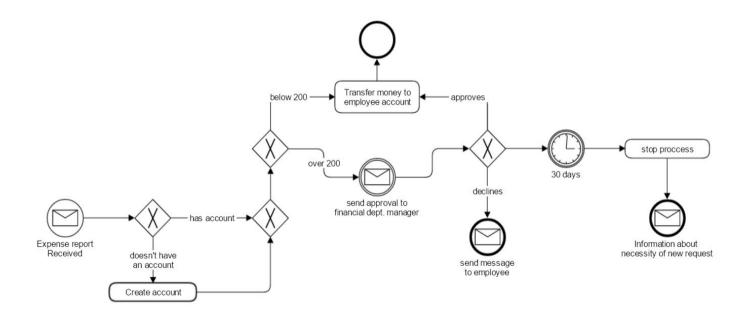
Exercise 1: Text to BPMN

Model a BPMN diagram according to the following description. (6 points)

In this exercise, you will model a process for reimbursement of expenses of an employee in a company. An employee determines expenses and requests for reimbursement by sending an expense report. For instance, the expenses could be to buy a book, equipment, or software.

The Process:

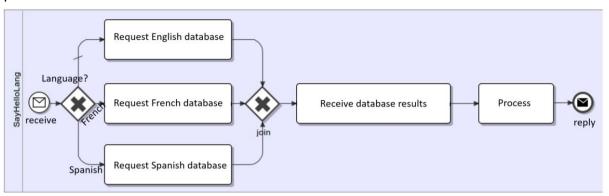
- 1. Once an expense report is received by financial department, an account must be created for the employee if one does not exist.
- 2. Expenses below 200 euro does not need the approval of the financial department manager, and are directly transferred to the account of the employee.
- 3. Expenses higher than 200 euro must be first approved by the financial department manager, and in case of approval, the expenses are transferred to the account of the employee.
- 4. If a request higher than 200 euro is rejected because it is not approved by the financial department manager, the employee must be informed about the rejection by Email.
- 5. If a request is open more than 30 days, the process should be stopped, and the employee should be informed that a new request is necessary.



Exercise 2: BPMN to BPEL

Please transform the following BPMN diagram to BPEL. Use placeholders for information required by BPEL, which is not provided in the BPMN diagram. (4 points)

1



```
cprocess name="SayHelloLang">
       <partnerLinks>
              <partnerLink name="database"</pre>
                            partnerLinkType="databaseLT"
                            partnerRole="sayHelloLangService"
                            myRole="sayHelloLangRequester" />
                           name="client"
              <partnerLink</pre>
                            partnerLinkType="langLT"
                            myRole="sayHelloLangResponseService" />
       </partnerLinks>
       <variables>
              <variable name="SayHelloLanguageRequest"</pre>
              messageType="LanguageMessageRequest" />
              <variable name="SayHelloLangResponse"</pre>
              messageType="LanguageMessageResponse" />
              <variable name="FrenchRequest"</pre>
              messageType="FrenchMessageRequest" />
              <variable name="SpanishRequest"</pre>
              messageType="SpanishMessageRequest" />
              <variable name="EnglishRequest"</pre>
              messageType="EnglishMessageRequest" />
       </variables>
       <sequence>
              <receive partnerLink="client"</pre>
                     portType="SelectLanguagePT"
                     operation="SelectLanguage"
                     variable="SayHelloLanguageRequest"
                     createInstance="yes" />
```

```
<if><condition>SayHelloLanguageRequest = "French"</condition>
                     <invoke partnerLink="database"
                    portType="SelectionLanguagePT"
                    operation="DatabaseLanguageRequest"
                    inputVarible="FrenchRequest"/>
              <elseif><condition>SayHelloLanguageRequest = "Spanish"</condition>
                    <invoke partnerLink="database"</pre>
                    portType="SelectionLanguagePT"
                    operation="DatabaseLanguageRequest"
                    inputVarible="SpanishRequest"/>
              </elsif>
              <else>
                     <invoke partnerLink="database"
                    portType="SelectionLanguagePT"
                    operation="DatabaseLanguageRequest"
                    inputVarible="EnglishRequest"/>
              </else>
              </if>
              <receive partnerLink="database"</pre>
                    portType="SelectionLanguagePT"
                    operation="DatabaseLanguageResponse"
                    variable="SayHelloLangResponse" />
             [Process]
              <reply partnerLink="client"</pre>
                    portType="SelectLanguagePT"
                    operation="SelectLanguage"
                    variable="SayHelloLangResponse" />
       </sequence>
</process>
```