cc-practice-bpmn

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1. READ README

- This file is a practice file for BPMN process models
- Time: approx. 30-60 min.
- When you're done with a section move the cursor on the section heading and type `S-<right>` (or SHIFT+ <right-arrow>).

2. TODO Identify yourself

- replace the placeholder `[yourName]` in the header of this file by your name and save the file (`C-x C-s`).

3. TODO Battle problem

Objective: learn to create, debug and save a process model.

1. Open the Signavio Process Manager at https://academic.signavio.com/
2. Create a simple BPMN based on the pseudocode 1 for the battle problem. The model should look like figure 1.

   Pseudocode:

   ```
   if health is less than 100
     Drink health potion
   else
     Resume battle
   end if
   ```

   BPMN Model for the pseudocode 1:

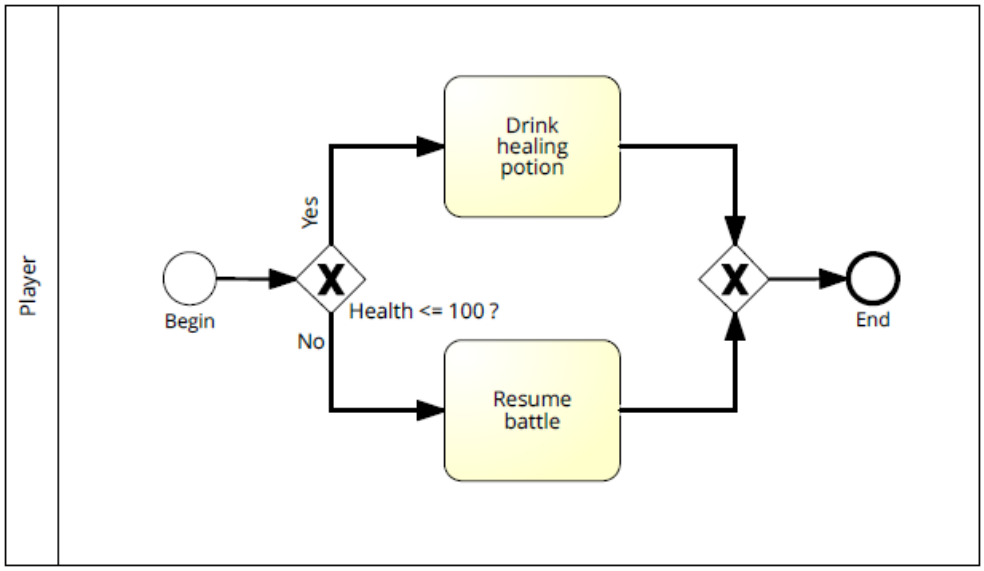

Figure 1: Health potion algorithm (battle problem) as BPMN diagram

3. In the next models, change "Insufficient funds" to "Do not withdraw gold" (tasks need to be articulated as active).
4. Save the BPMN model.
5. Print the model as a PDF file.
6. Take a screenshot of the model as a PNG file (using the "screenshot" program from your Raspberry menu).
7. Save the screenshot of the model in the same location as the PDF file.
8. Check that the files are where you think they are using one of these ways:
   - Open a Dired buffer in Emacs (`C-x d`)
   - Open a Shell inside Emacs (`M-x shell`) and check with `ls -l`
   - Open a terminal outside of Emacs and check with `ls -l`

4. TODO Gold withdrawal problem 1

1. Create a *model* based on 1:

```
if action == deposit
   Deposit gold into account
else
   Withdraw gold from account
end if
```

2. Save the BPMN model in Signavio.
3. Print the BPMN model as a PDF file (using the printer icon).
4. Open the PDF file and make a screenshot (PNG file) of the model.
5. Save the PNG file to the same location as the PDF file.
6. Add the PDF and the PNG files as **inline images** to this notebook using the code below:

   - PNG file as inline image: add a caption, and add the path to the PNG file: include the path in **TWO** square brackets (`[[...]]`) to turn it into a link. To view, toggle inline-image display with `C-c C-x C-v` (same as `M-x org-toggle-inline-images`).

[path to PNG file, e.g. `./file.png` enclosed by `[[ ]]`]

- PDF file as inline image link: add a caption, and add the path to the PDF file: include the path in **TWO** square brackets (`[[...]]`) to turn it into a link. To view in another buffer, enter `C-c C-o` (same as `M-x org-open-at-point`)

  [path to PNG file, e.g. `./file.pdf` enclosed by `[[ ]]`]

5. Gold withdrawal solution 1

1. BPMN Model as PNG image (screenshot from PDF file).

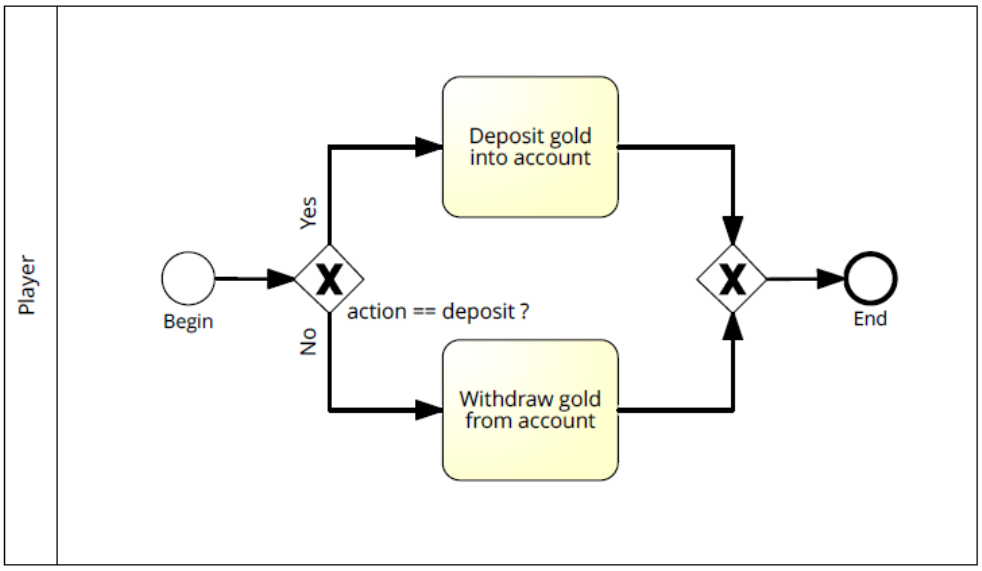

Figure 2: Gold deposit algorithm as BPMN diagram - version 1

2. BPMN inserted as PDF image

   ./img/DepositAlgorithm.pdf

6. Gold withdrawal problem 2

Create a model based on 1:

```
if action == deposit
   Deposit gold into account
else
     if balance < amount requested
        Insufficient funds
     else
        Withdraw gold from account
     end if
end if
```

1. Save the BPMN model in Signavio.

2. Print the BPMN model as a PDF file (using the printer icon).
3. Open the PDF file and make a screenshot (PNG file) of the model.
4. Save the PNG file to the same location as the PDF file.
5. Add the PDF and the PNG files as **inline images** to this notebook

7. Gold withdrawal solution 2

BPMN model as PNG only.

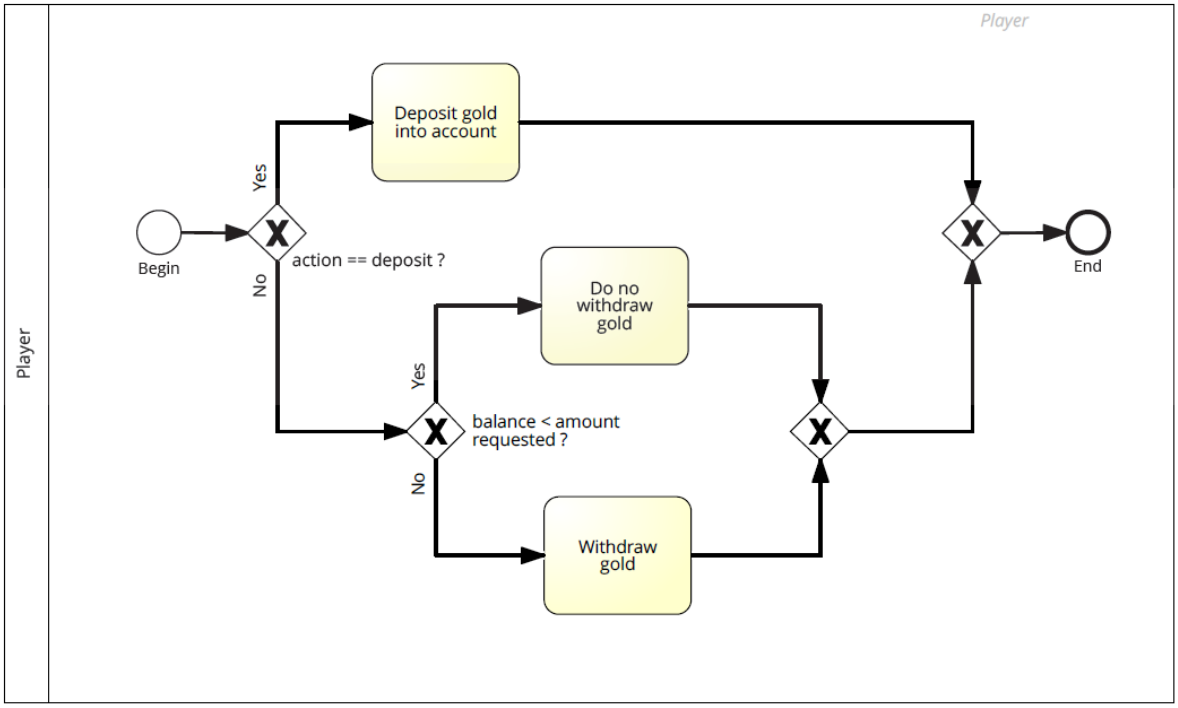

Figure 3: Gold deposit algorithm as BPMN diagram - version 2

8. Gold withdrawal problem 3

What changes if you use 1 instead? Make the changes.

```
if action == deposit
   Deposit gold into account
else
     if balance >= amount requested
        Withdraw gold from account
     else
        Insufficient funds
     end if
end if
```

1. Save the BPMN model in Signavio.
2. Print the BPMN model as a PDF file (using the printer icon).
3. Open the PDF file and make a screenshot (PNG file) of the model.

4. Save the PNG file to the same location as the PDF file.
5. Add the PDF and the PNG files as **inline images** to this notebook

9. Gold withdrawal solution 3

BPMN model as PNG only.

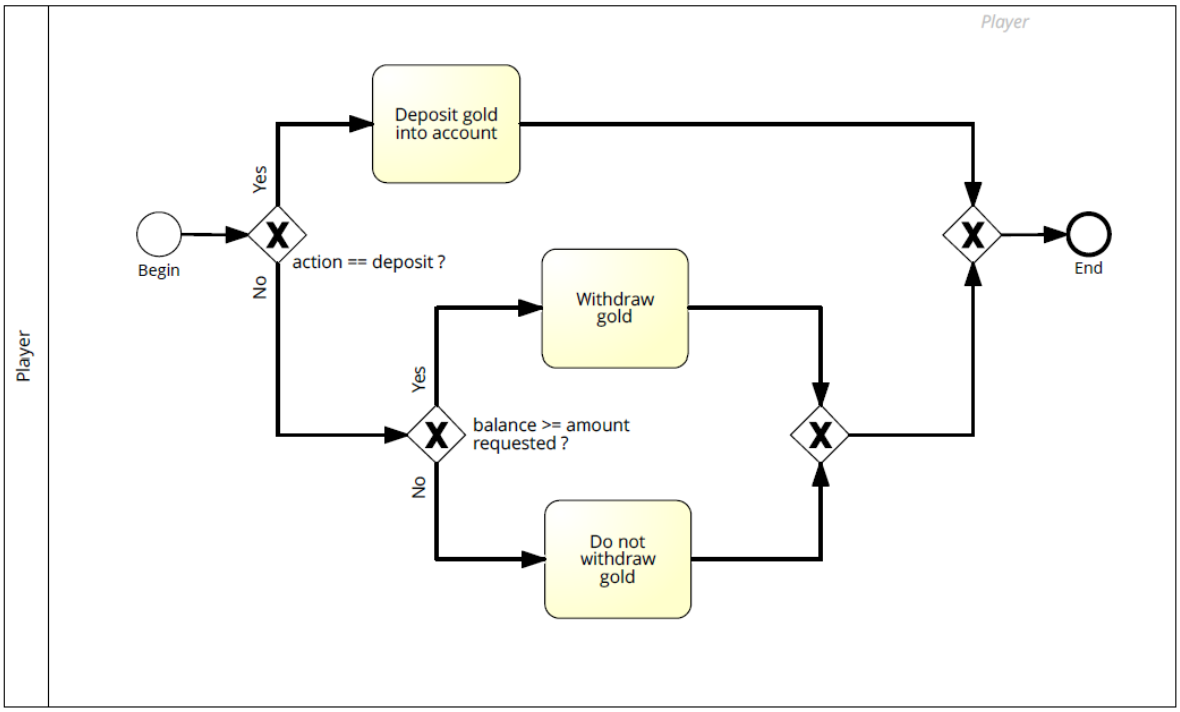

Figure 4: Gold deposit algorithm as BPMN diagram - version 3

Author: [yourName] (pledged)
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