

# Account

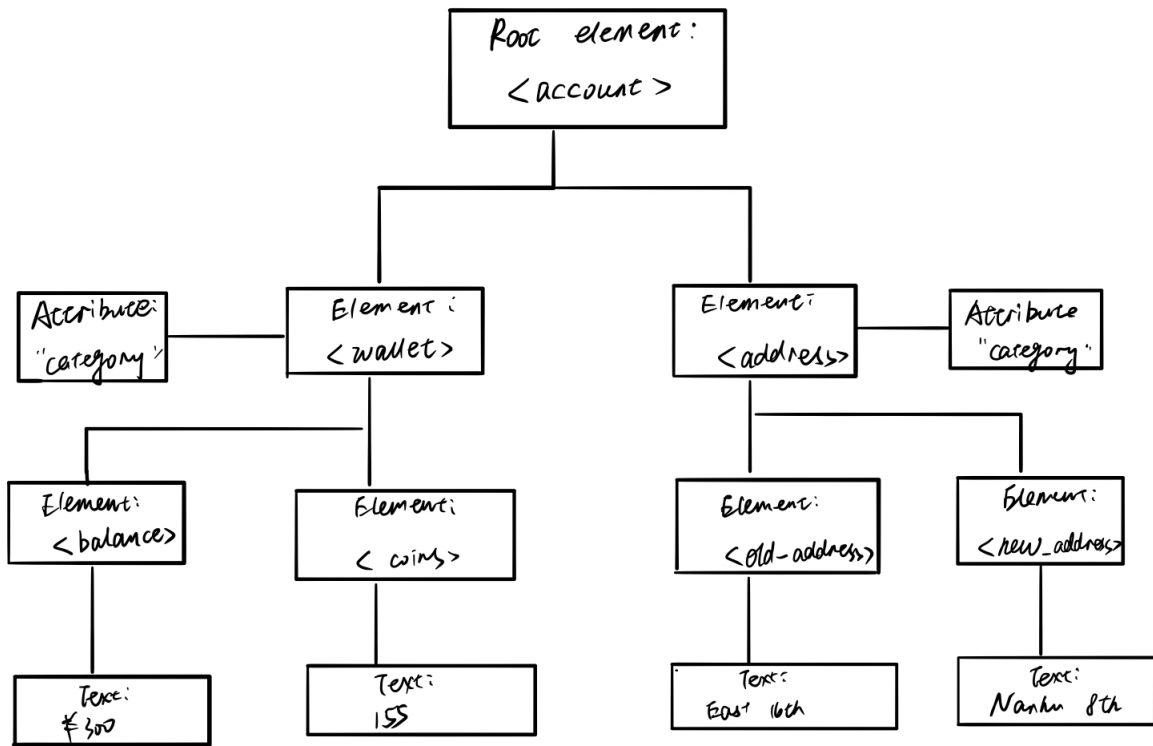
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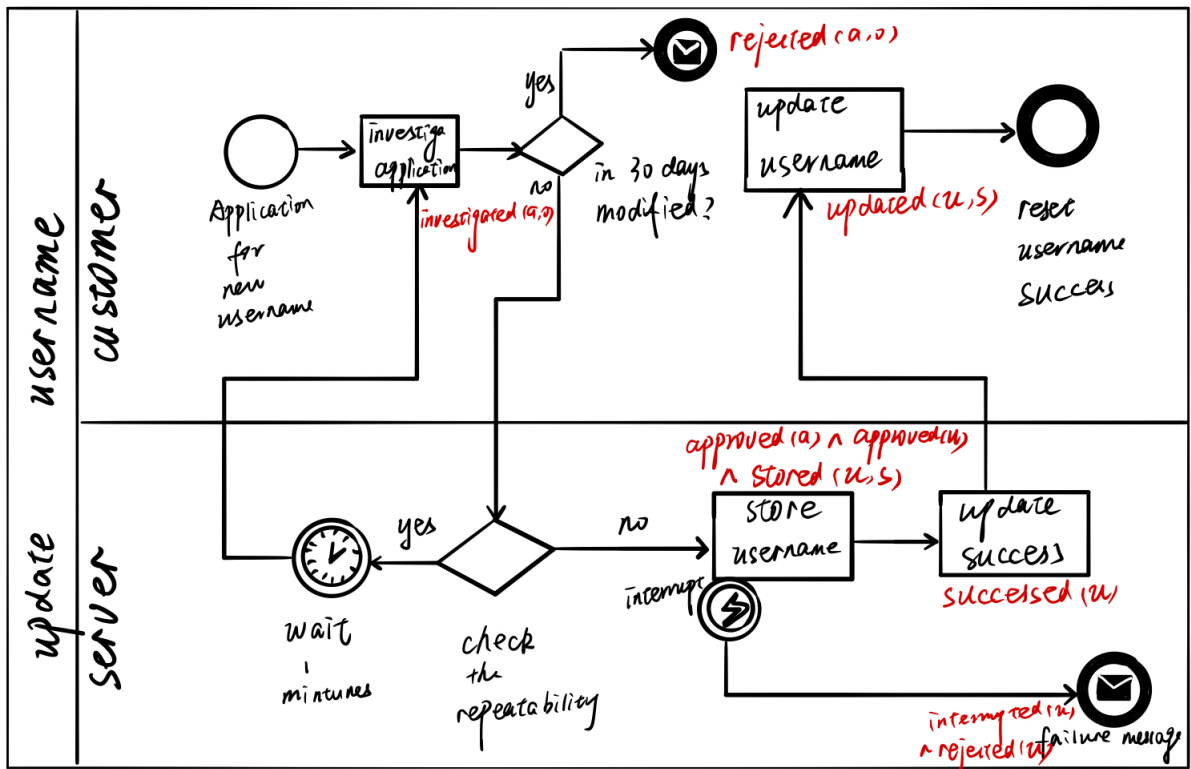
1. XML for partial page(wallet,address):

```
1  <?xml version="1.0" encoding="UTF-8" standalone="yes"?>
2  <account>
3      <account category="wallet">
4          <balance>¥300</balance>
5          <coins>153</coins>
6      </account>
7
8      <account category="adress">
9          <old_address>East 16th</old_address>
10         <new_address>Nanhu 8th</new_address>
11     </account>
12 </account>
13
```

2. XML tree for partial page(wallet,address):



3. BPMN for updating username with cumulative effects:



(a) Objects of interests: Application a, Username u, Outcome o, Status s.

(b) States:

- Application rejected or approved - rejected(a), approved(a)
- Username check approved or rejected, update succeeded- approved(u), rejected(u), succeeded(u)

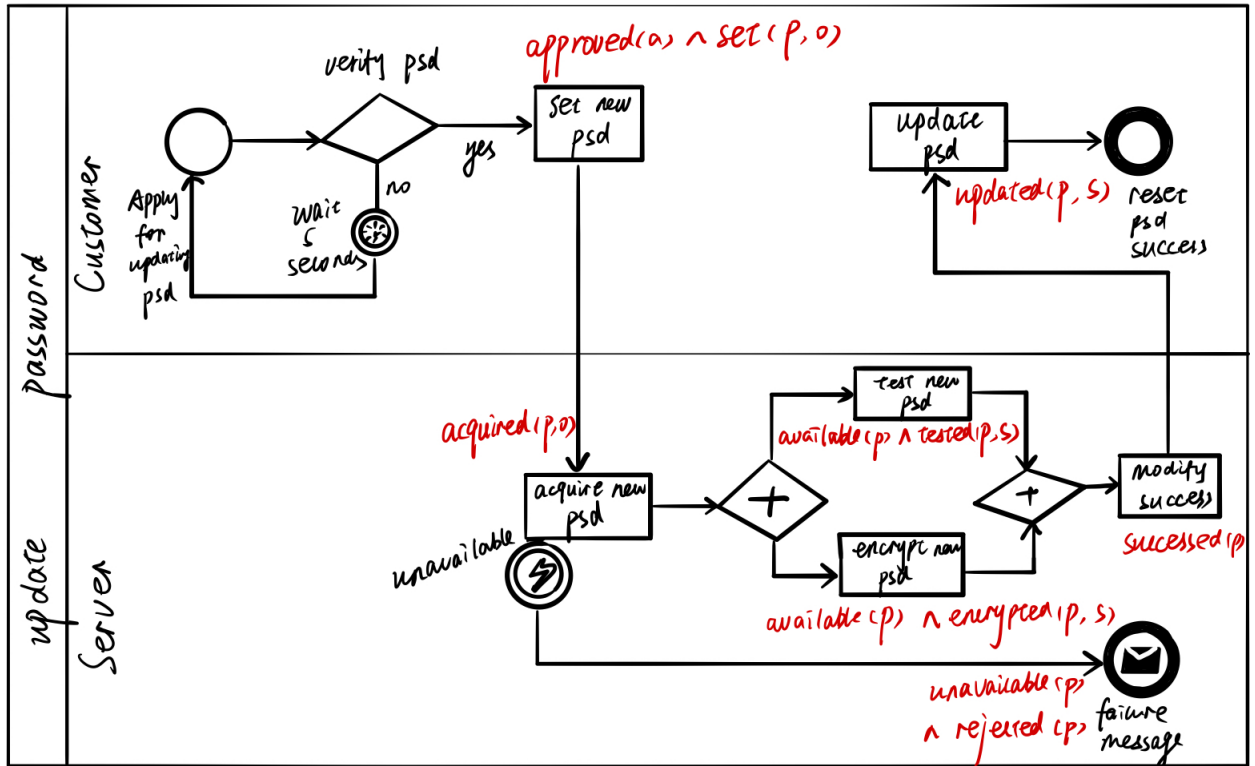
(c) Relationships between objects:

- Application investigated with an outcome - investigated(a,o)
- Username stored with an status - stored(u,s)
- Username updated with an status - updated(u,s)
- Username received with an status - received(u,s)

(d) Cumulative effects of tasks:

1. Reject Application:  $\text{investigated}(a,o) \wedge \text{rejected}(a)$
2. Store Username:  $\text{investigated}(a,o) \wedge \text{approved}(a) \wedge \text{approved}(u) \wedge \text{stored}(u,s)$
3. Reject Update Username:  $\text{investigated}(a,o) \wedge \text{approved}(a) \wedge \text{approved}(u) \wedge \text{interrupted}(u) \wedge \text{rejected}(u)$
4. Update Success:  $\text{investigated}(a,o) \wedge \text{approved}(a) \wedge \text{approved}(u) \wedge \text{stored}(u,s) \wedge \text{succeeded}(u)$
5. Update Username:  $\text{investigated}(a,o) \wedge \text{approved}(a) \wedge \text{approved}(u) \wedge \text{stored}(u,s) \wedge \text{succeeded}(u) \wedge \text{updated}(u,s)$

#### 4. BPMN for updating password with cumulative effects



(a) Objects of interests: Application a, Password p, Outcome o, Status s.

(b) States:

- Application rejected or approved -  $\text{rejected}(a)$ ,  $\text{approved}(a)$
- Password availabled or unavailabled, updated rejected and succeeded -  $\text{availabled}(p)$ ,  $\text{unavailabled}(p)$ ,  $\text{rejected}(p)$ ,  $\text{succeeded}(p)$

(c) Relationships between objects:

- Password set with an outcome -  $\text{set}(p,o)$
- Password acquired with an outcome -  $\text{acquired}(p,o)$
- Password tested with an status -  $\text{tested}(p,s)$
- Password encrypted with an status -  $\text{encrypted}(p,s)$
- Password updated with an status -  $\text{updated}(p,s)$
- 

(d) Cumulative effects of tasks:

1. Set Password:  $\text{approved}(a) \wedge \text{set}(p,o)$
2. Acquire Password:  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o)$
3. Reject Update Password:  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o) \wedge \text{unavailabled}(p) \wedge \text{rejected}(p)$
4. Test Password:  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o) \wedge \text{availabled}(p) \wedge \text{tested}(p,s)$
5. Encrypted Password:  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o) \wedge \text{availabled}(p) \wedge \text{encrypted}(p,s)$
6. Modify Password Success:  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o) \wedge (\text{availabled}(p) \wedge \text{tested}(p,s) \wedge (\text{availabled}(p) \wedge \text{encrypted}(p,s))) \wedge \text{succeeded}(p)$
7. Update Password :  $\text{approved}(a) \wedge \text{set}(p,o) \wedge \text{acquired}(p,o) \wedge (\text{availabled}(p) \wedge \text{tested}(p,s) \wedge (\text{availabled}(p) \wedge \text{encrypted}(p,s))) \wedge \text{succeeded}(p) \wedge \text{updated}(p,s)$