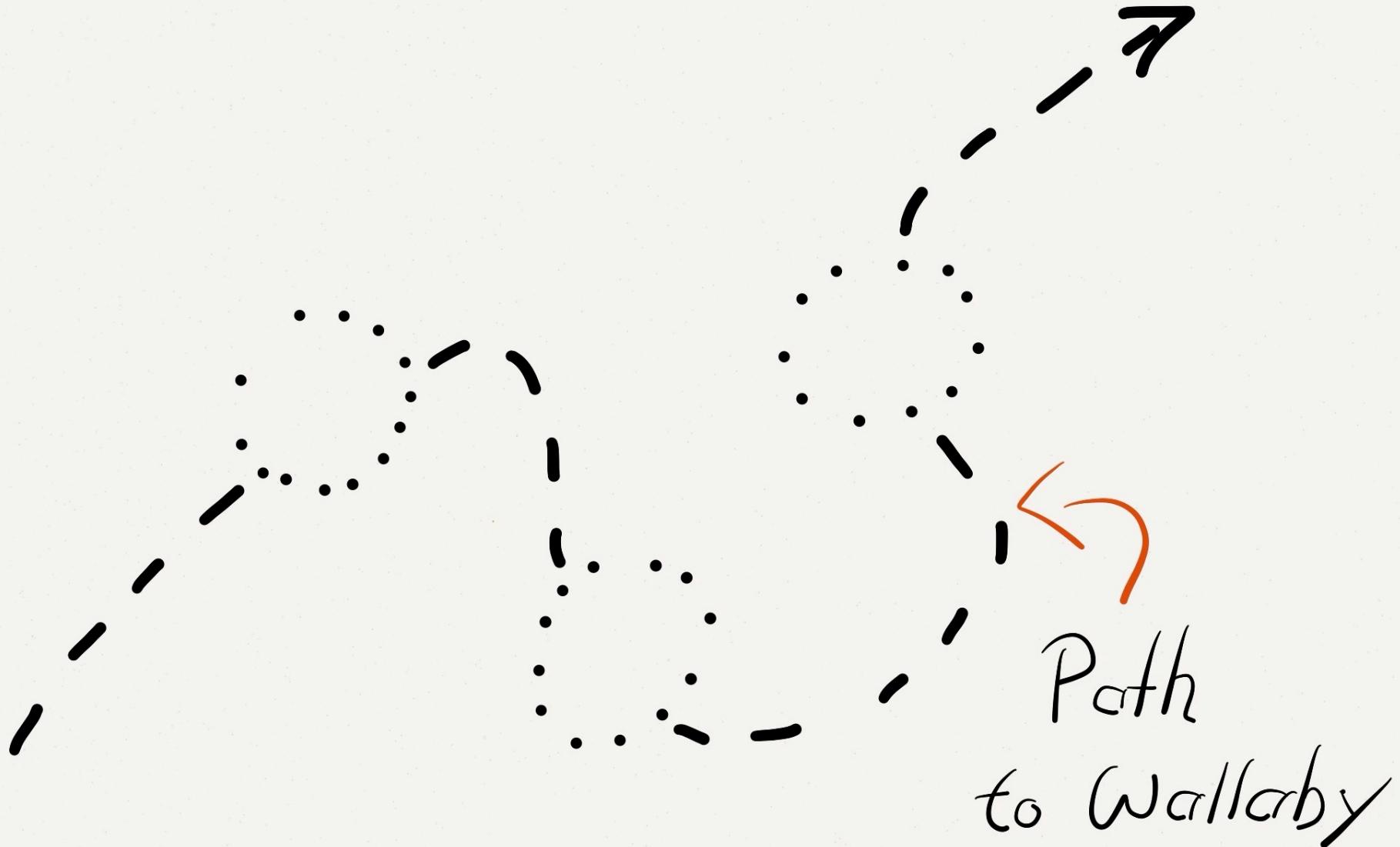
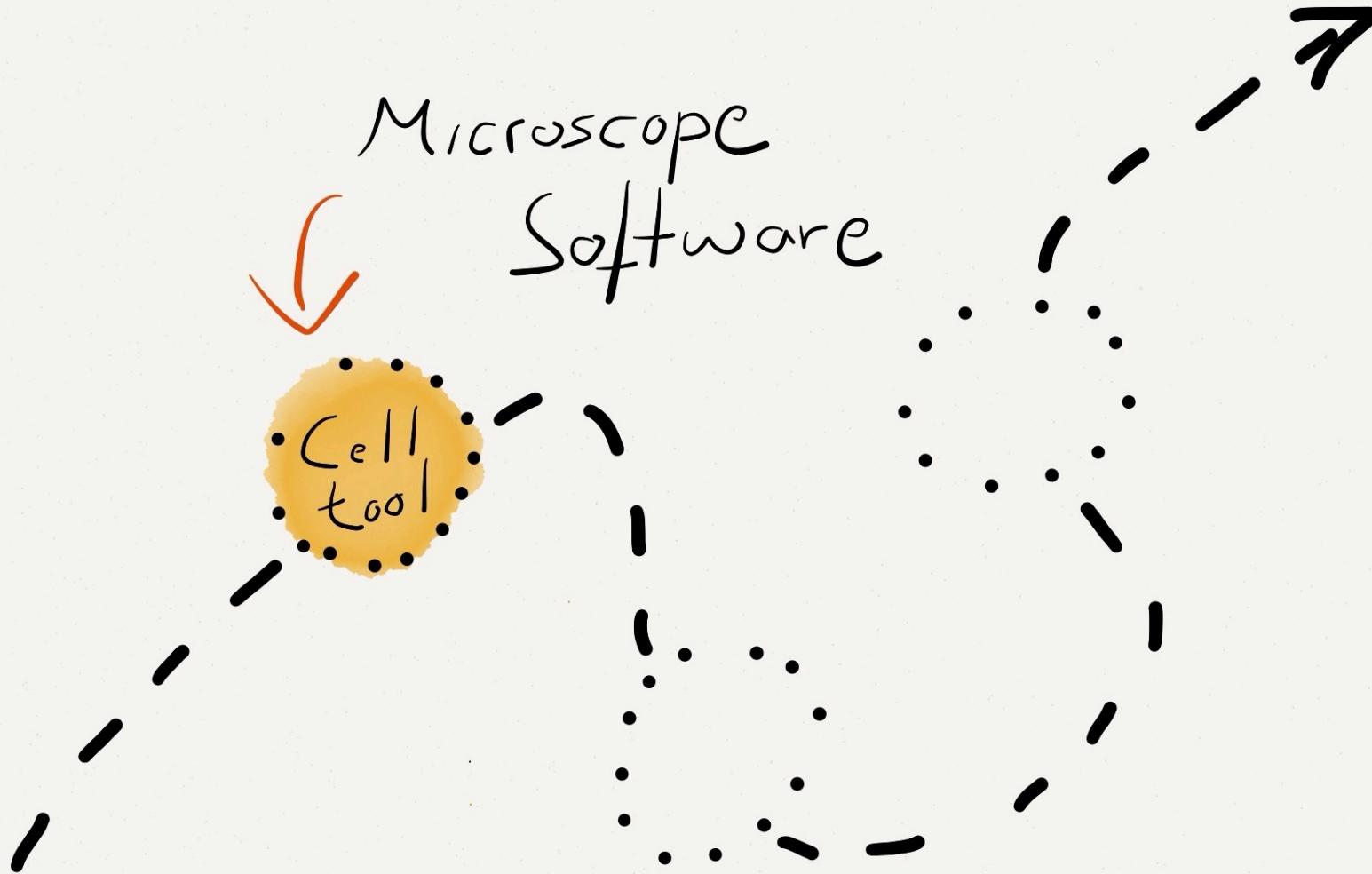


Cross Platform Application  
Development with CouchDB and Wallaby



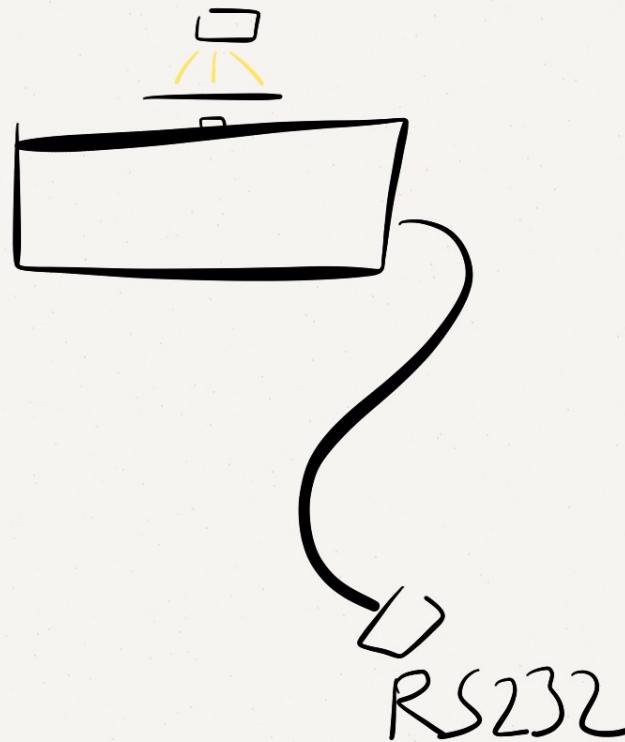


Microscopic  
Software



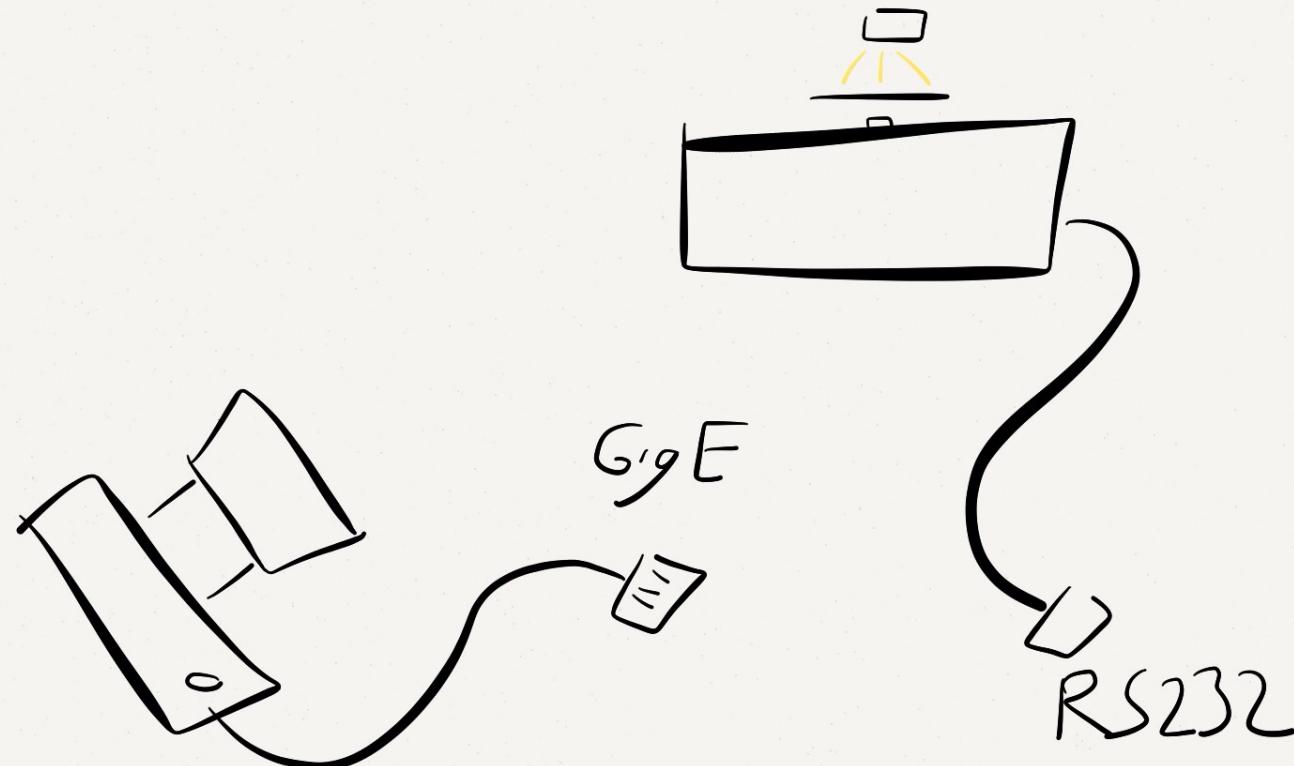


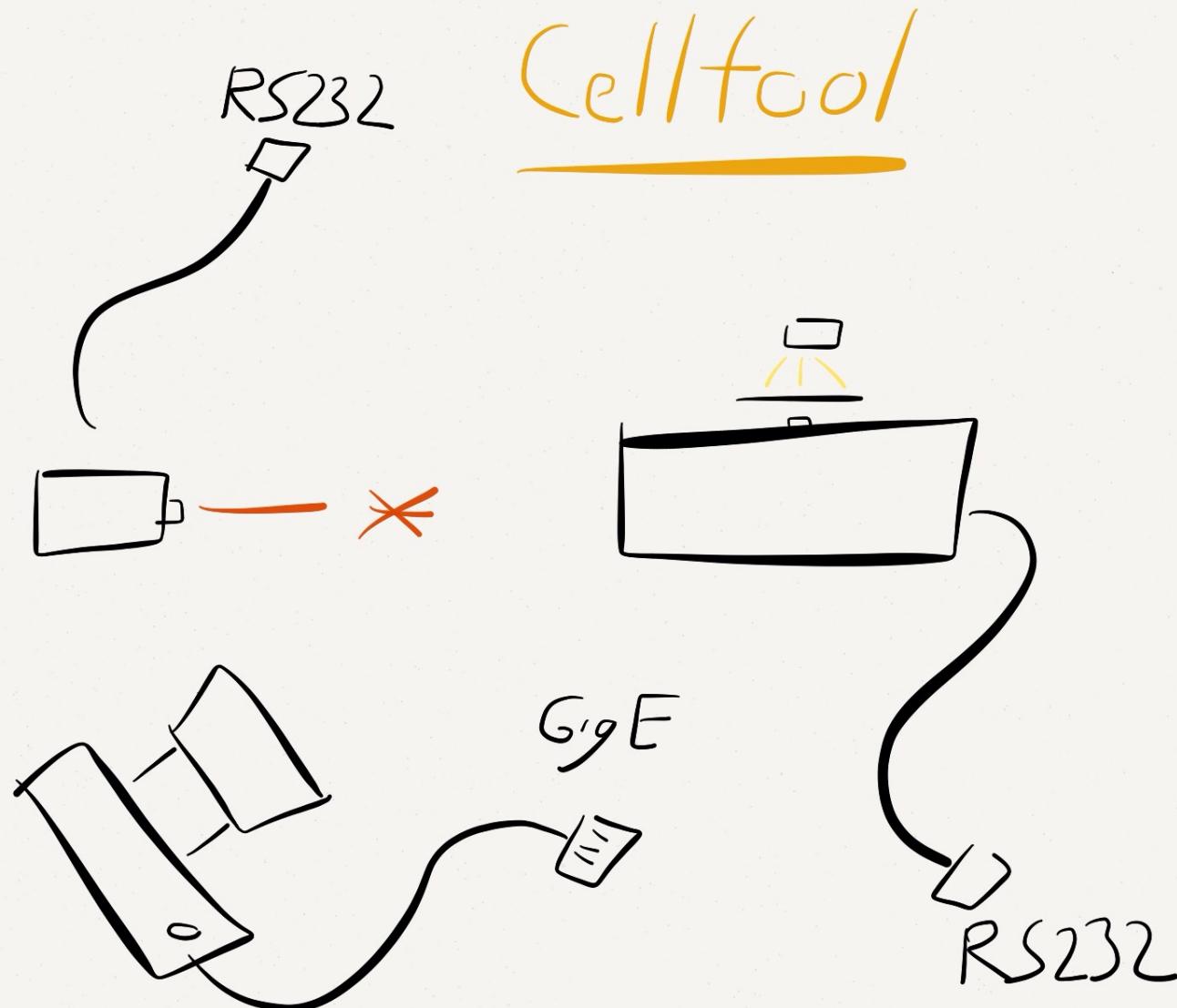
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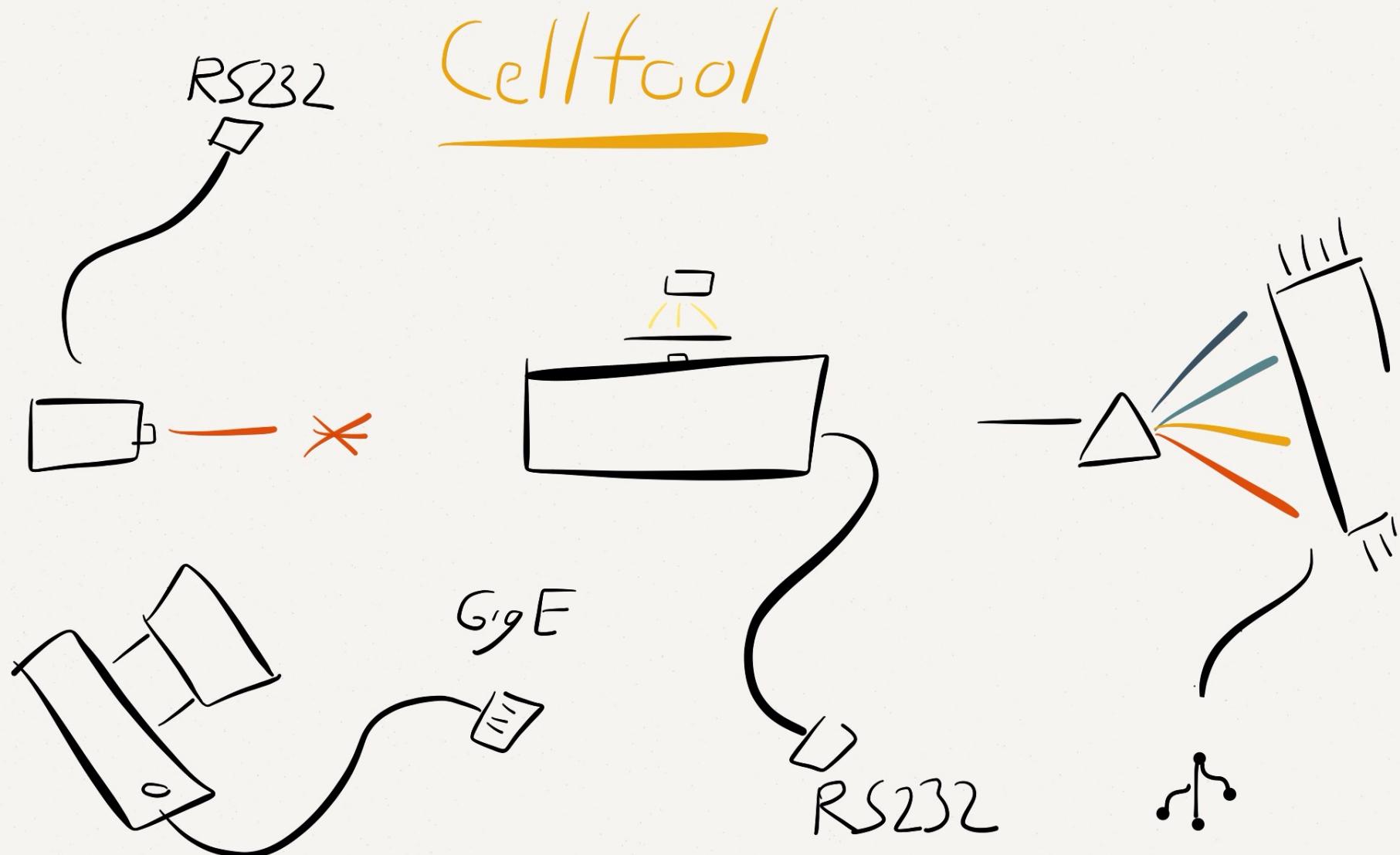


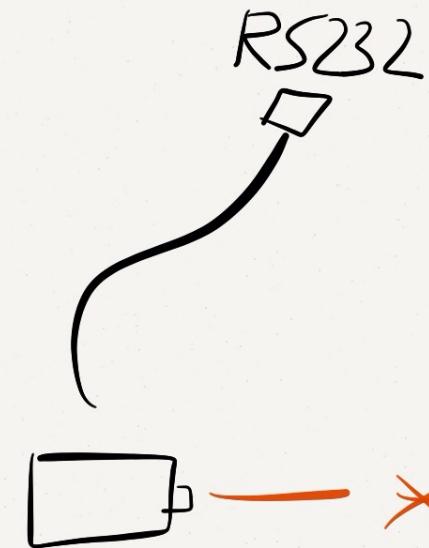


# CellTool

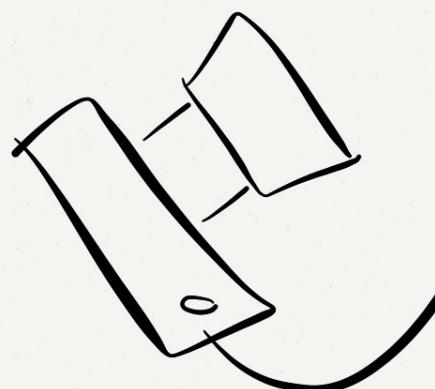
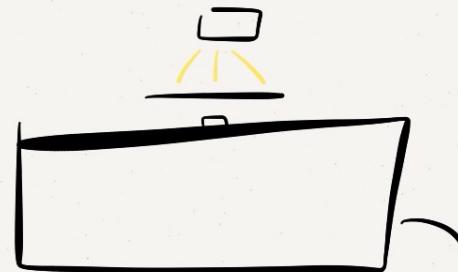




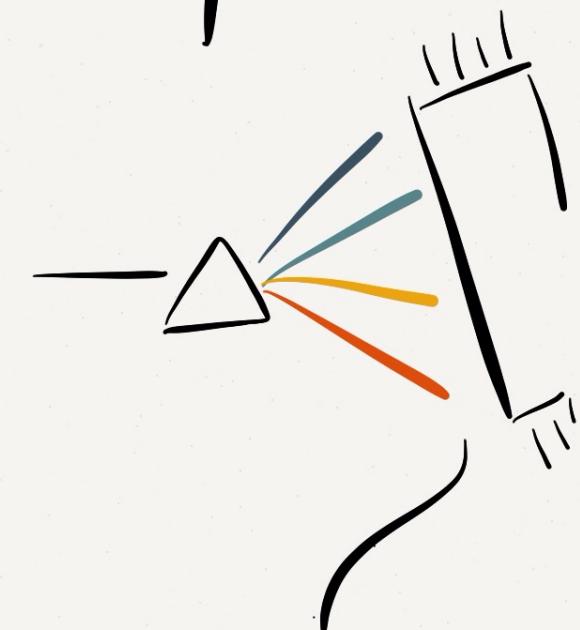


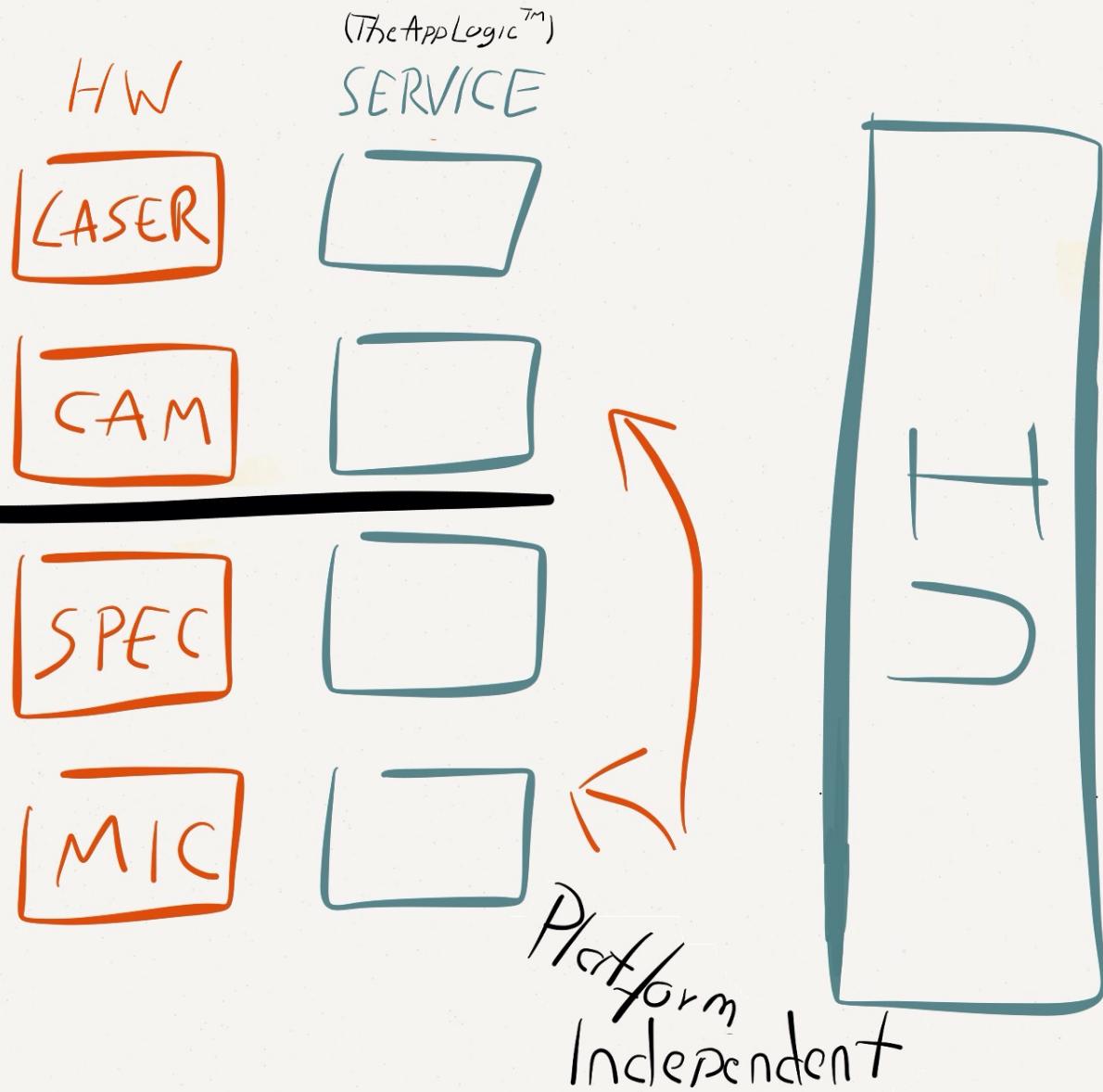
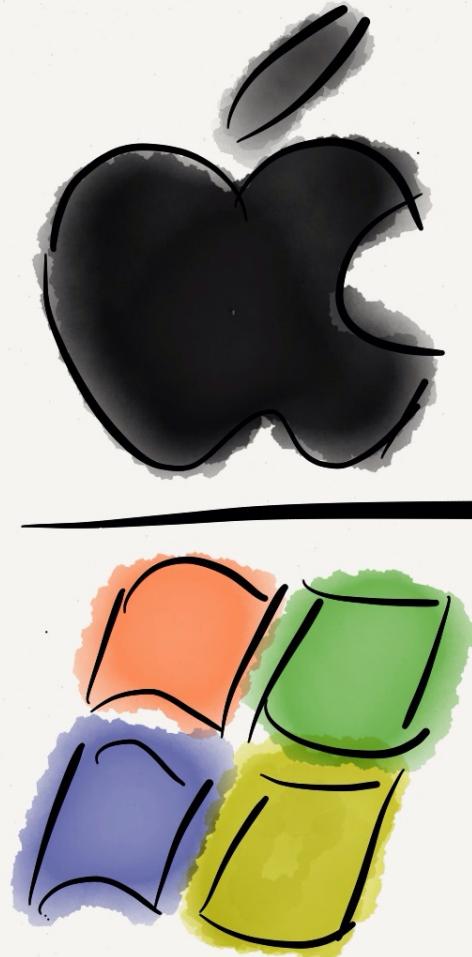


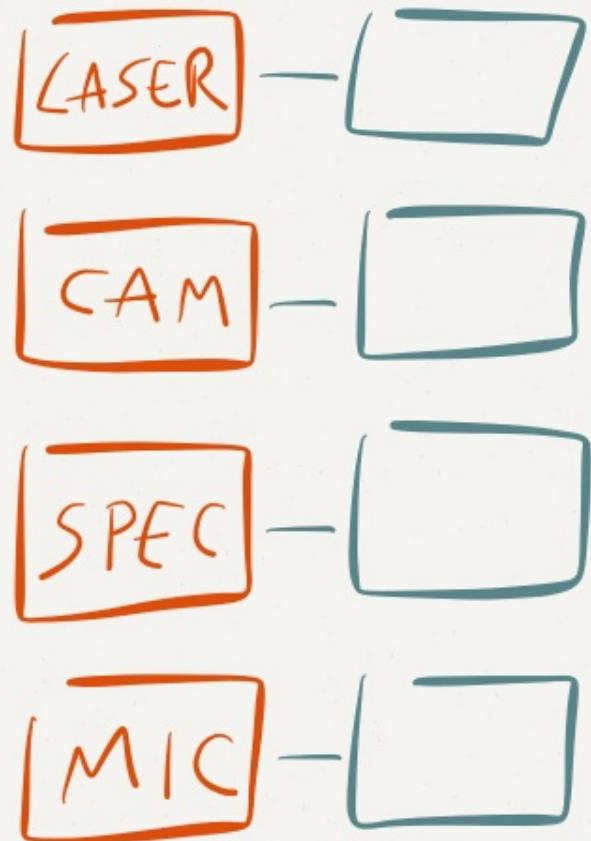
CellTool



GigE



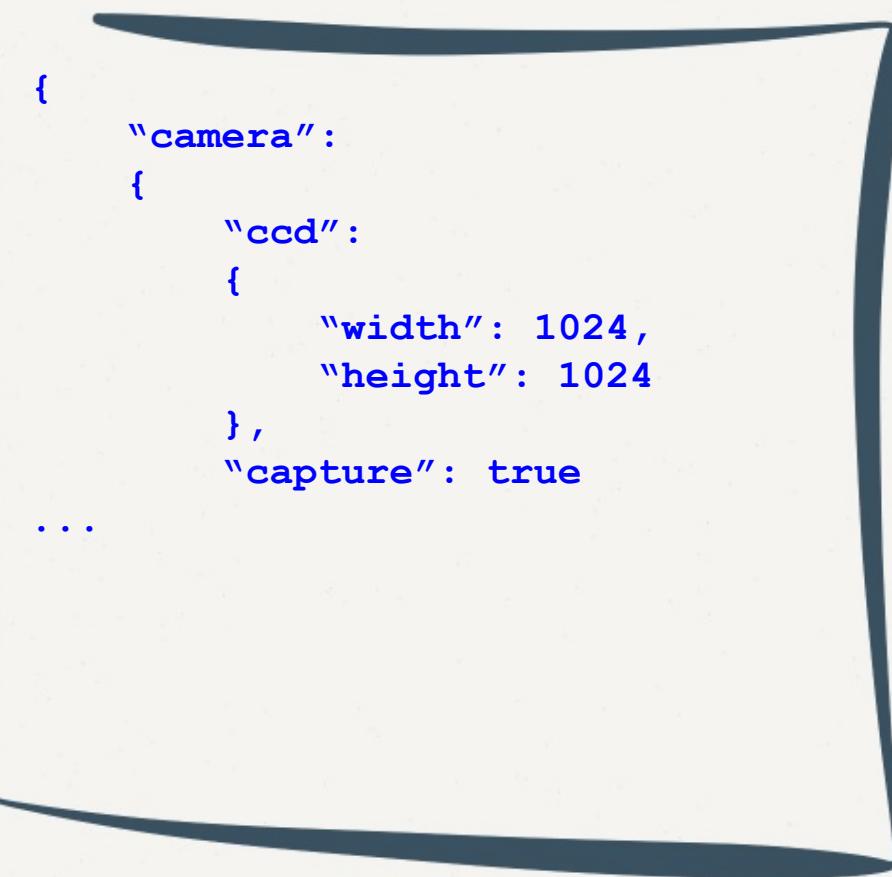
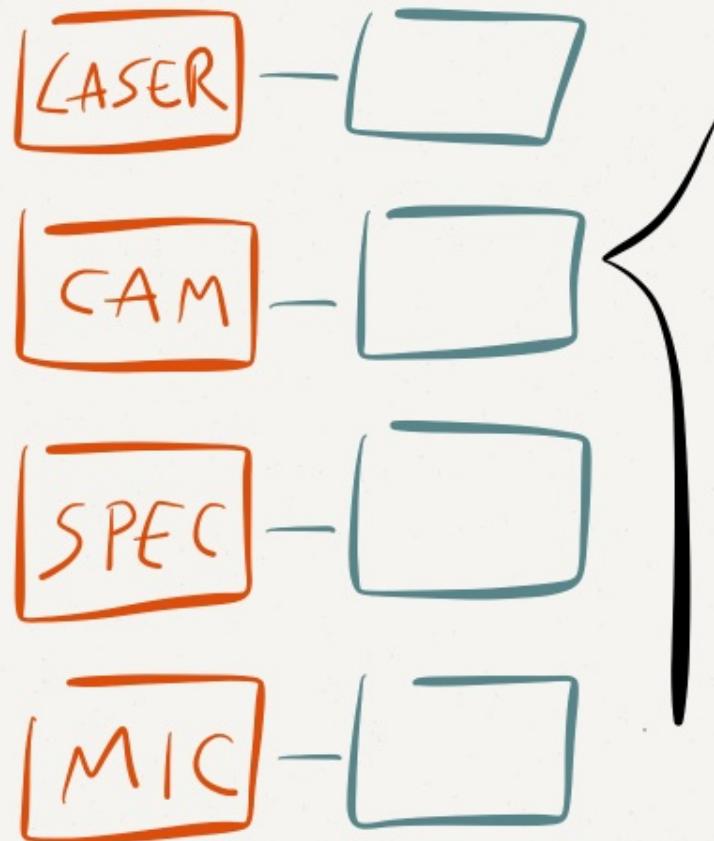




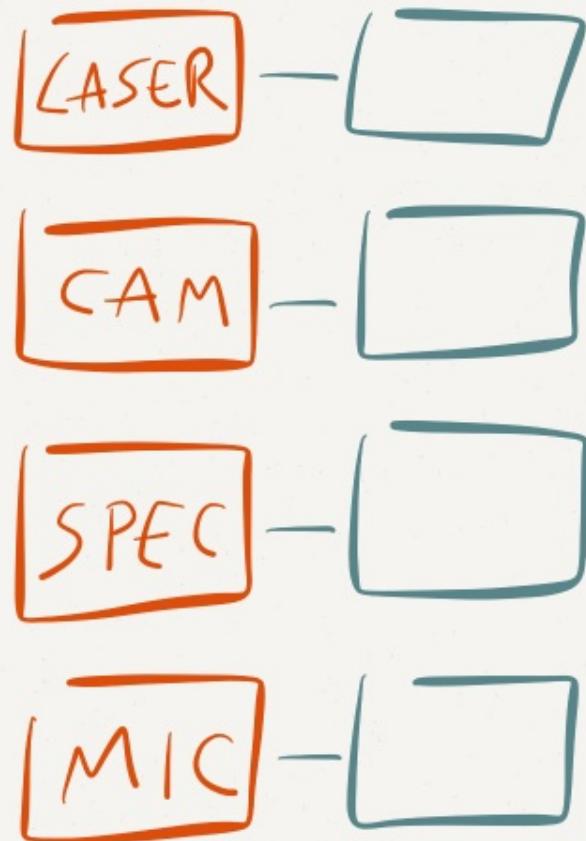
H/W SERVICE

State

“laser”:  
{  
    “power” : 80.0,  
    “on” : true,  
    “sysTemp” : 43.0  
...}



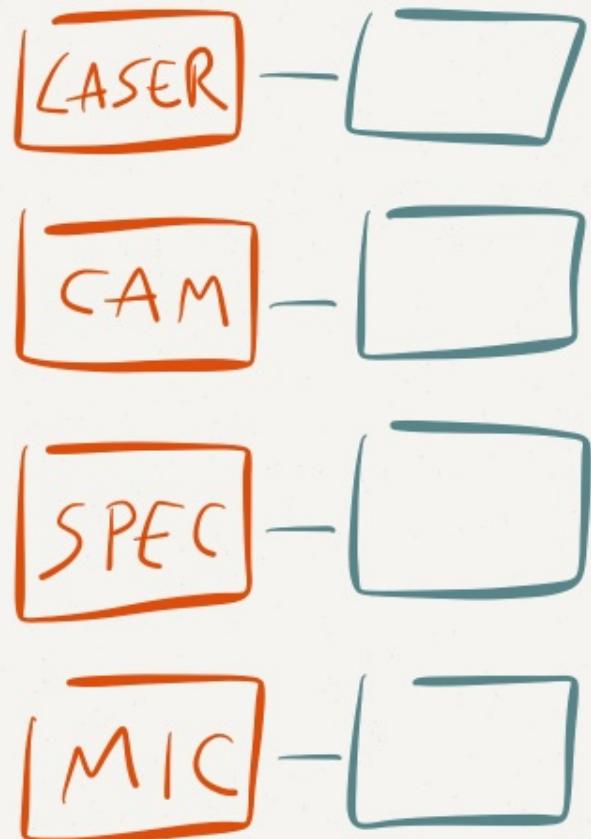
H/W SERVICE



H/W SERVICE

A large blue-bordered box contains the following JSON-like configuration data:

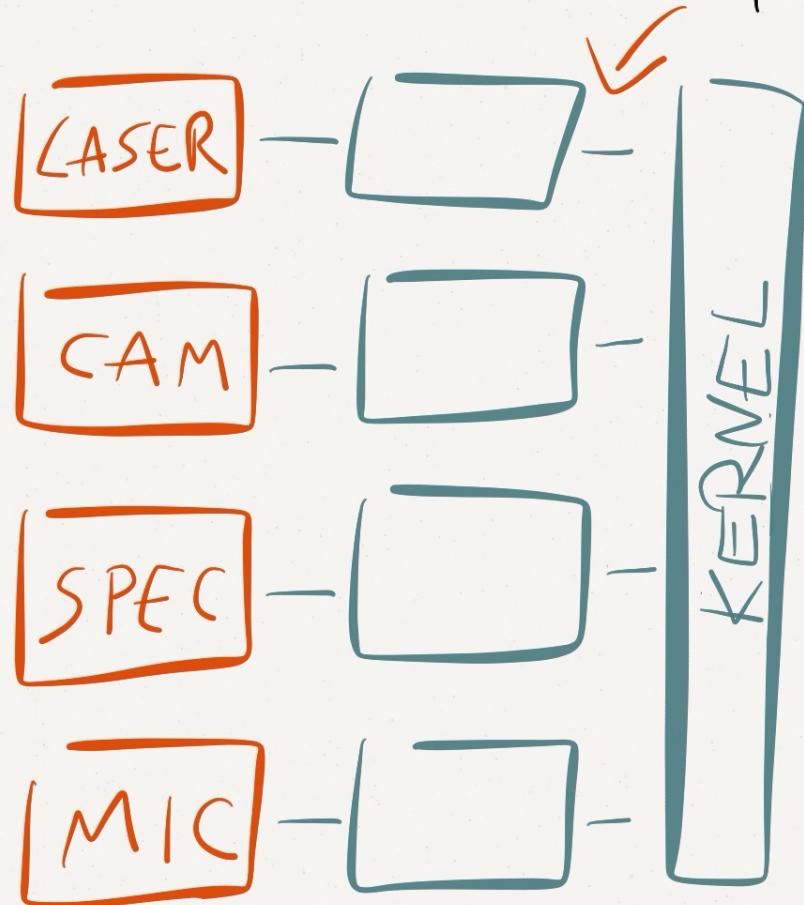
```
"spectrometer": {  
    "exposureTime" : 1.0,  
    "cooler" : true,  
    "temp" : -80.0  
}  
...
```



```
{  
  "microscope":  
  {  
    "leds" :  
    {  
      "green" : true,  
      "red" : false  
    },  
    "stage"  
    {  
      "x" : 55.00,  
      "y" : 12.3123,  
      "z" : 8.554357  
    }  
  ...  
}
```



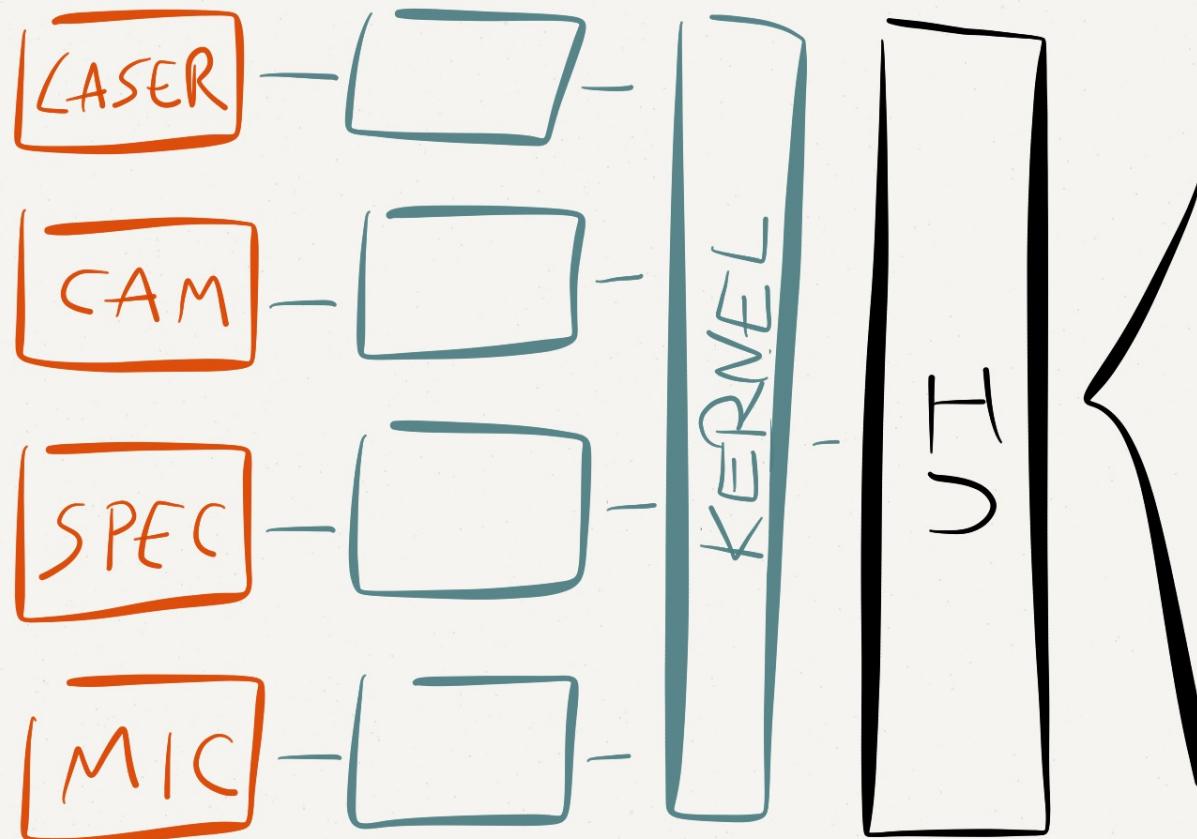
# Network



```
{
    "microscope": {
        "leds": {
            "green": true,
            "red": false
        },
        "stage": {
            "x": 55.00,
            "y": 12.3123,
            "z": 8.554
        }
    },
    "spectrometer": {
        "exposureTime": 1.0,
        "cooler": true,
        "temp": -80.0,
        ...
    },
    "laser": {
        "power": 80.0,
        "on": true,
        "sysTemp": 43.0,
        ...
    },
    "camera": ...
}
```

H/W SERVICE

Distributed State  
⇒ Measurement



# H/W SERVICE

# WIDGETS





```
{  
  "microscope":  
  {  
    "leds":  
    {  
      "green": true,  
      "red": false  
    },  
    "stage":  
    {  
      "x": 1.35,  
      "y": 12.3123,  
      "z": 8.554357  
    }  
  ...  
}
```

1.35

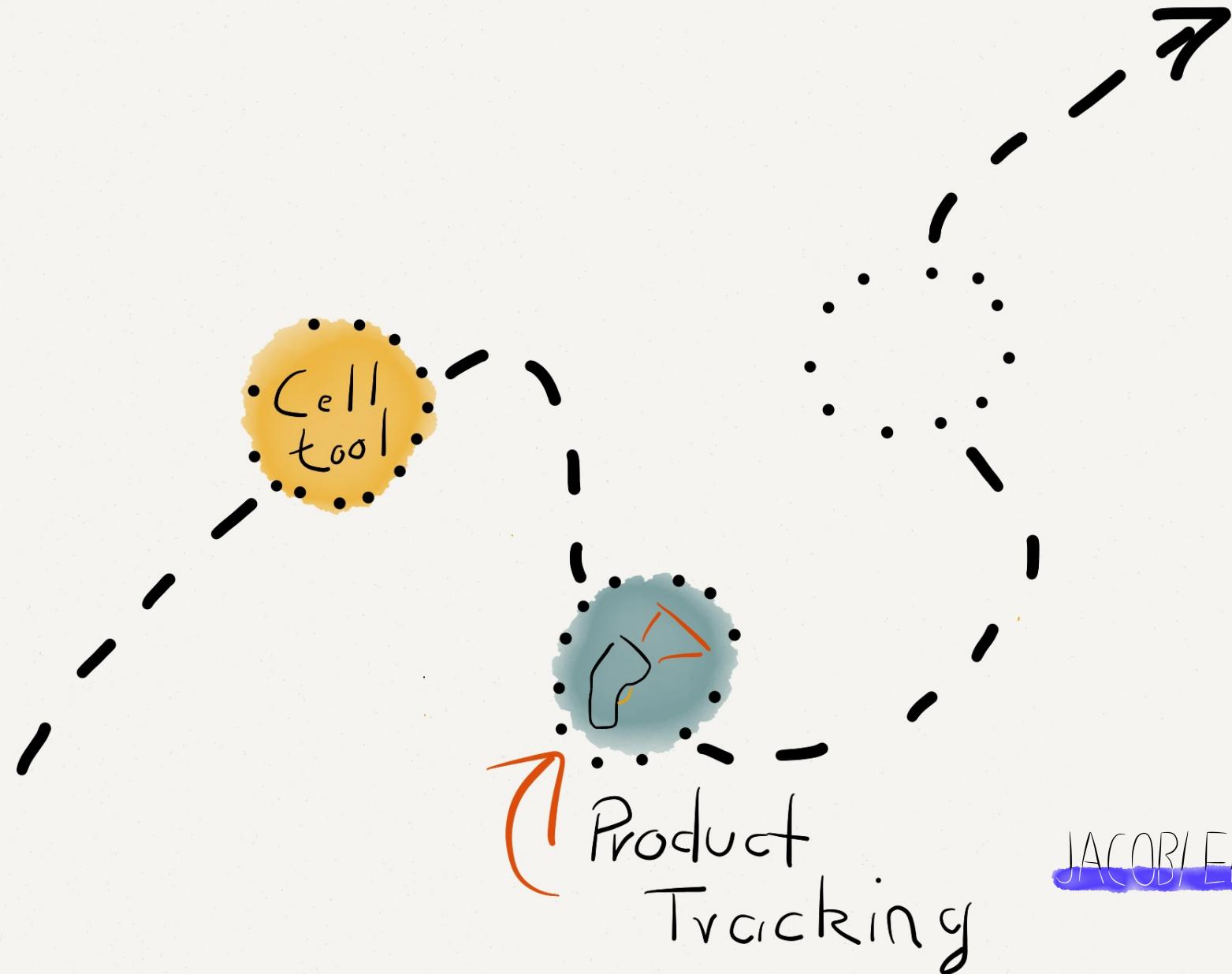


microscope.stage.x

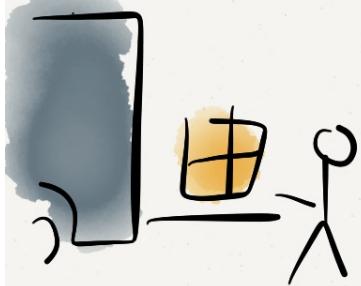
Path to value  
in State-Doc



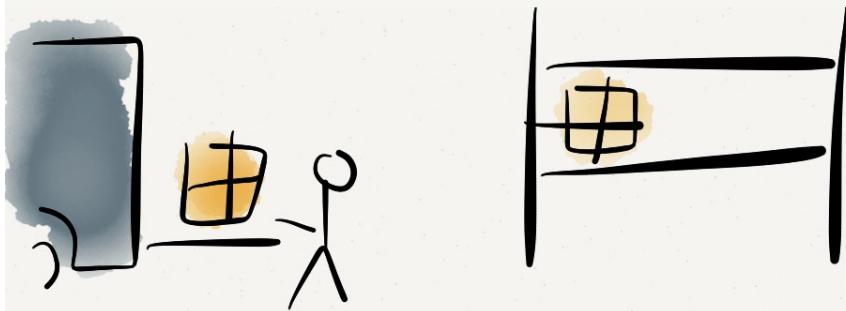
- × Platform independent services and deployment
- × Configurable Doc-manipulating Widgets (in Qt-Designer)
- × Doc wrappers for easy access by path

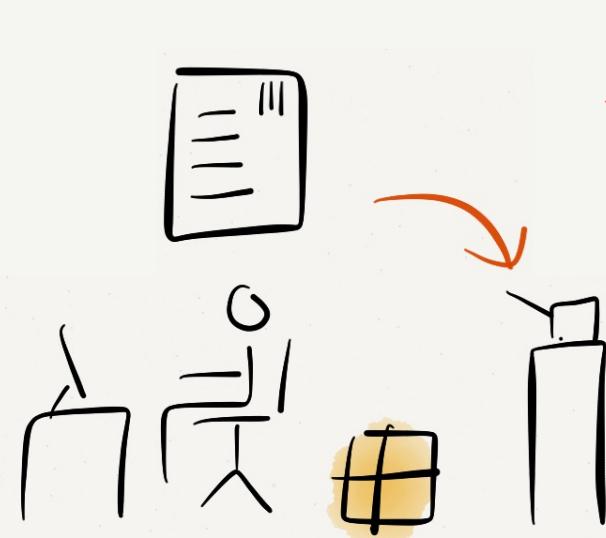
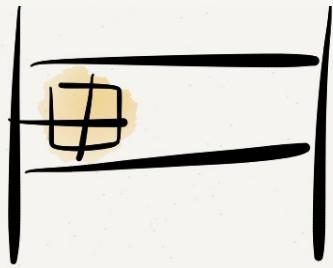


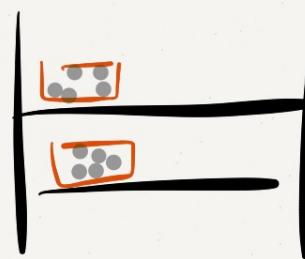
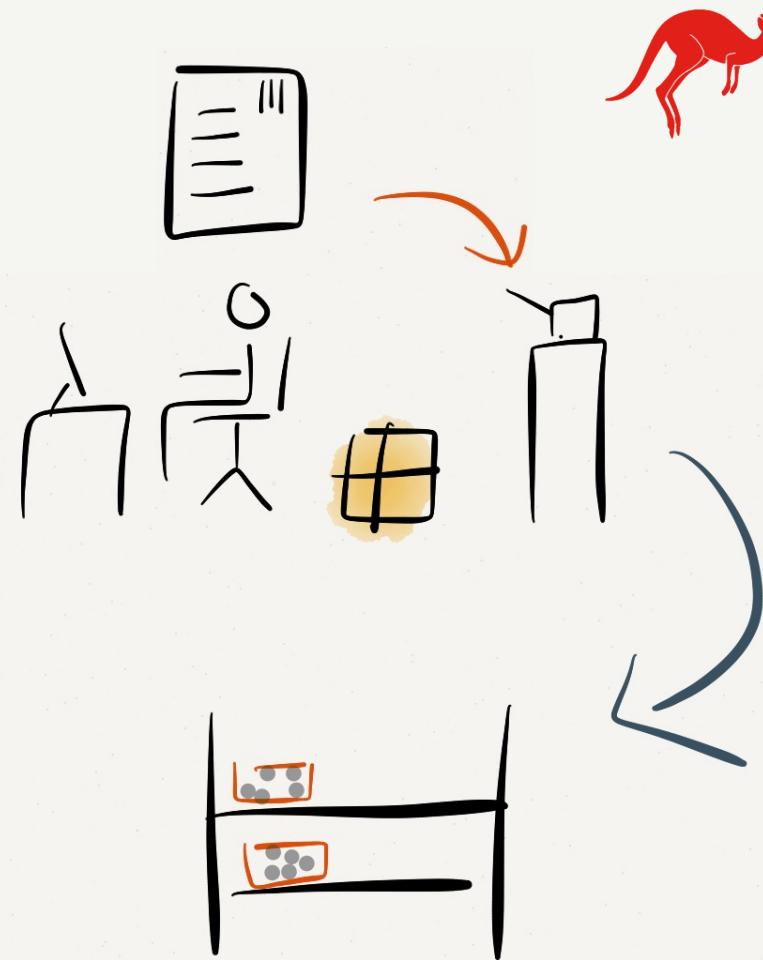
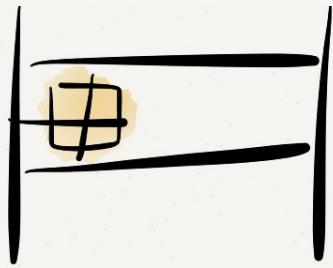
**freshX**  
Entwicklung und Beratung

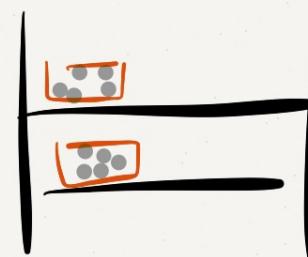
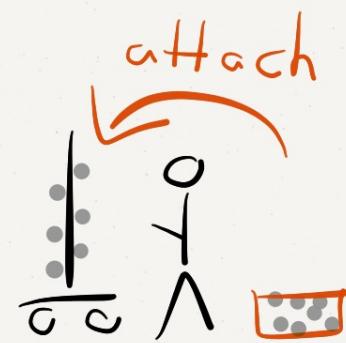
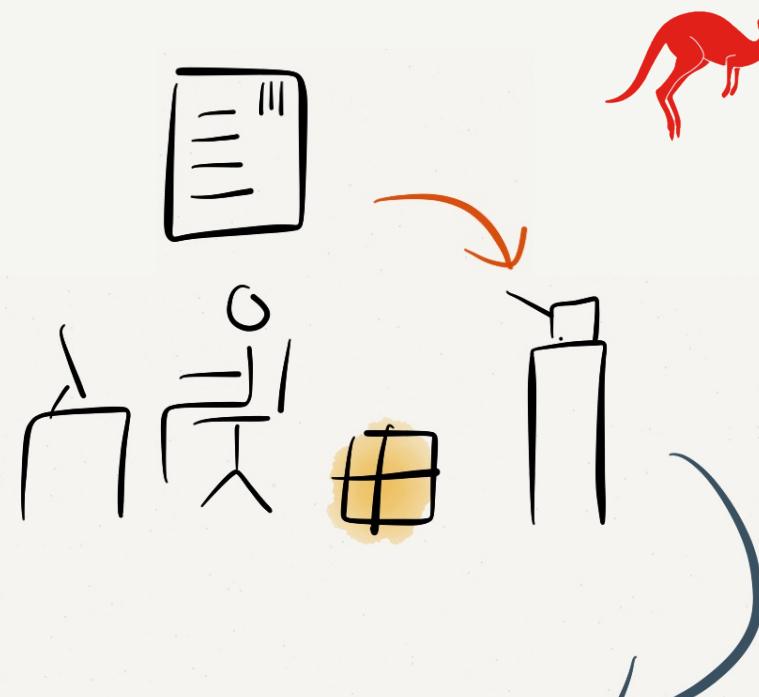
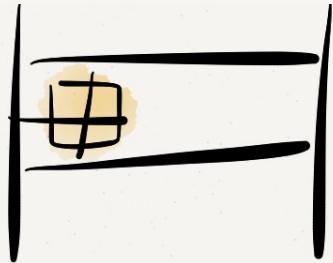


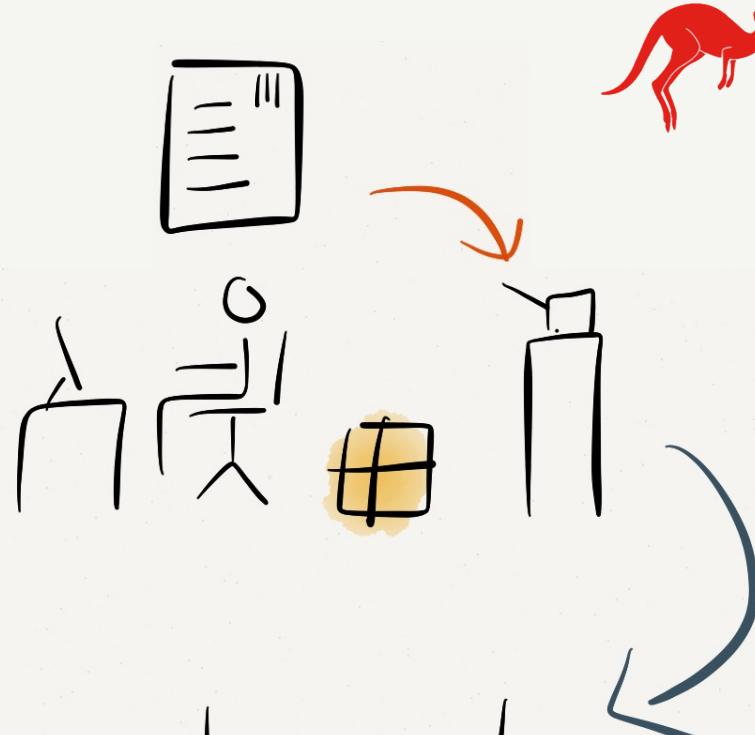
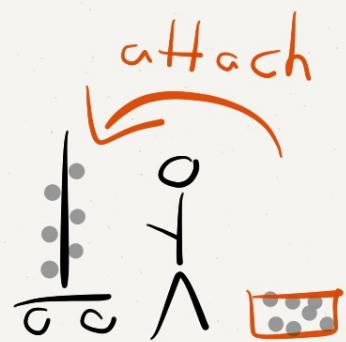
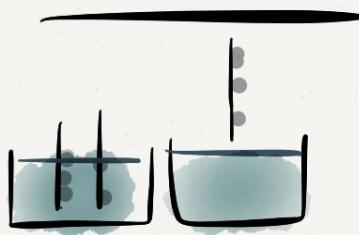
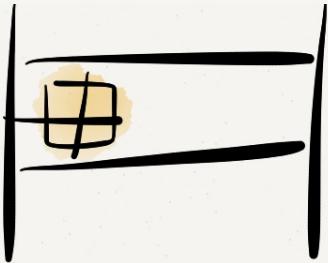
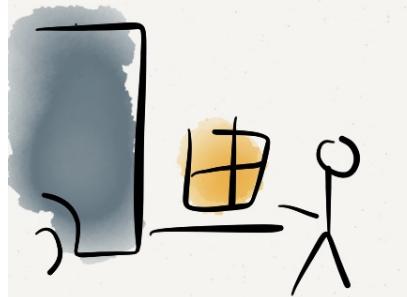
**freshX**  
Entwicklung und Beratung

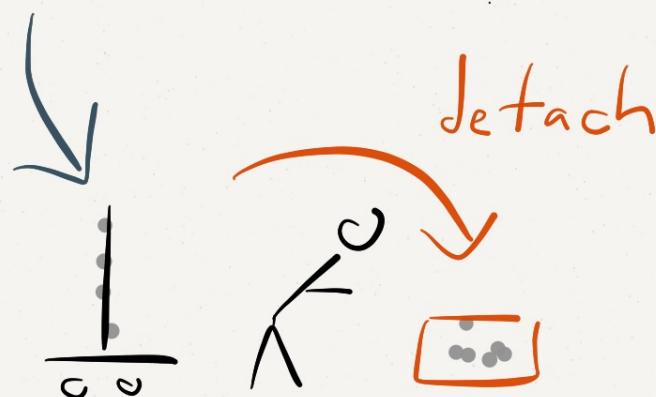
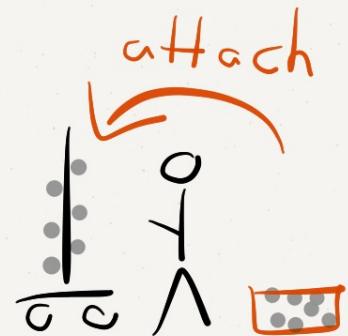
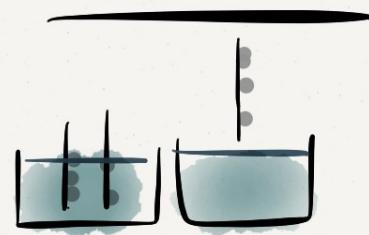
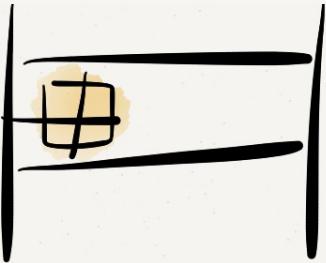


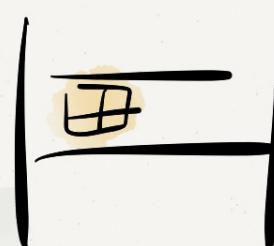
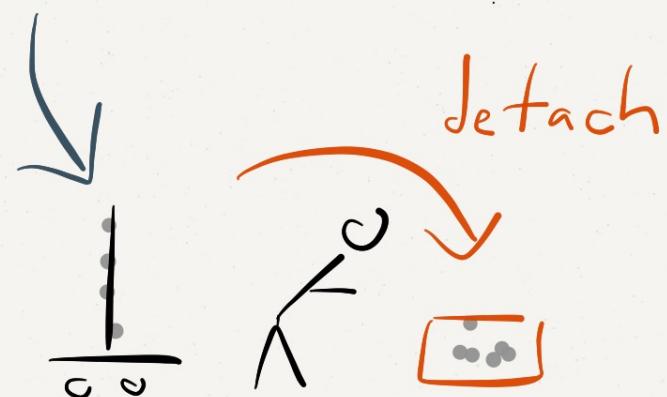
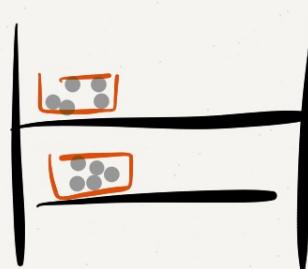
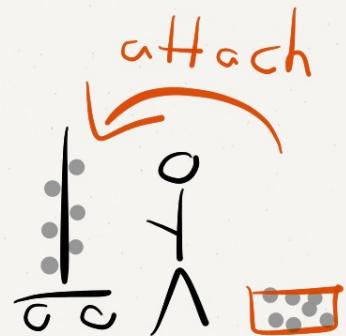
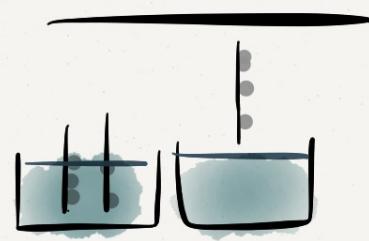
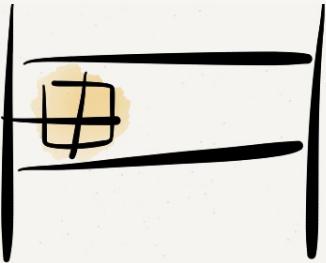


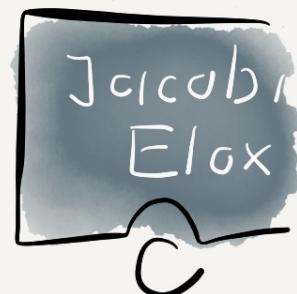
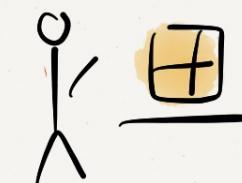
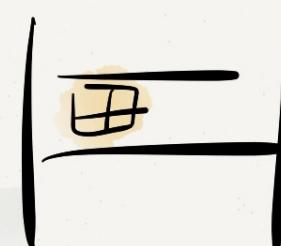
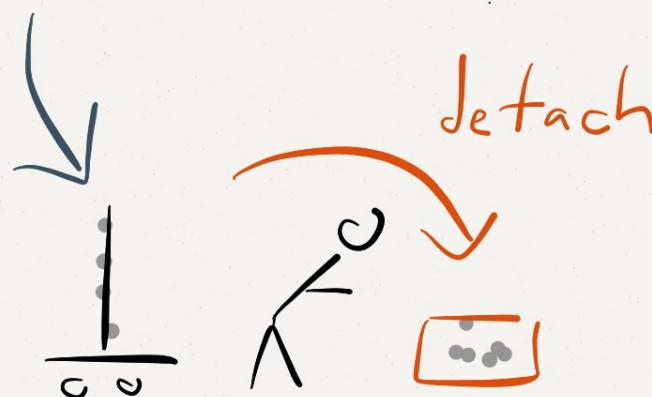
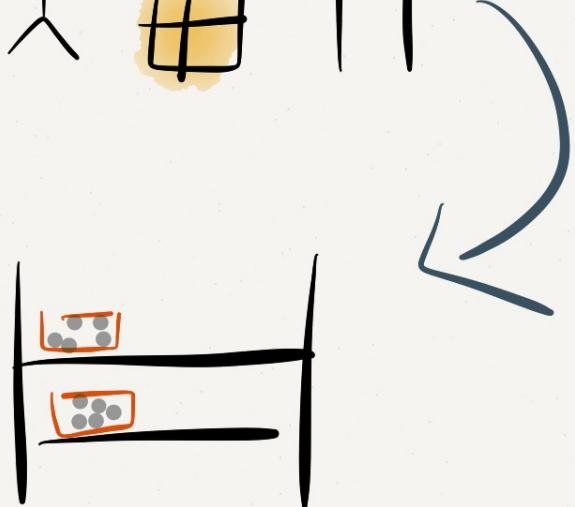
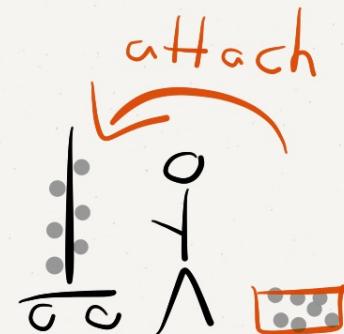
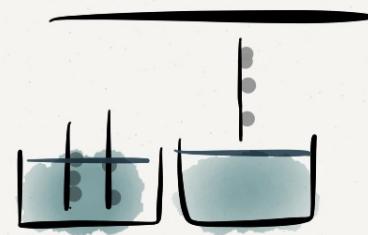
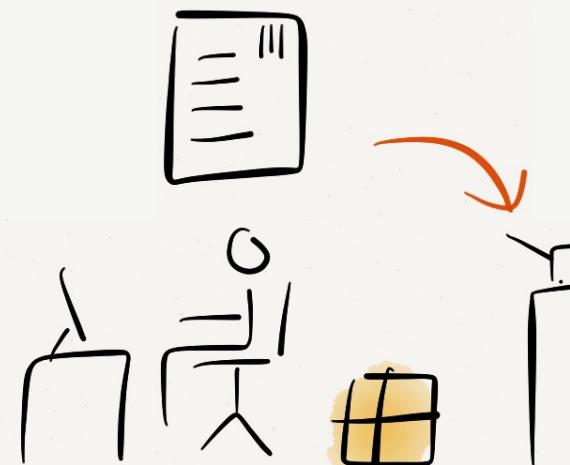
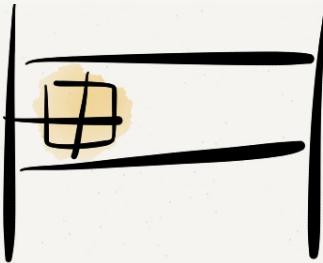


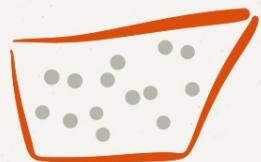
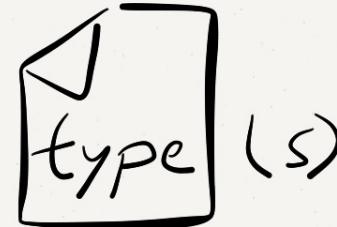




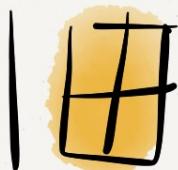








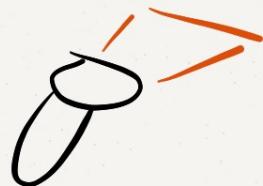
tracked article



storage



employee



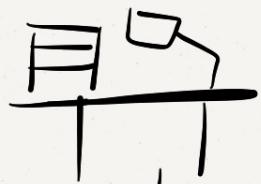
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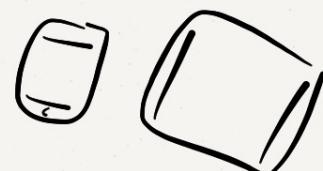
order



CUSTOMER



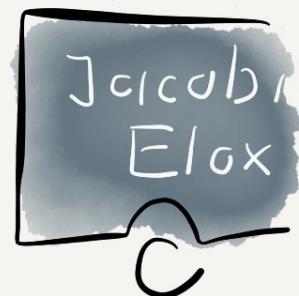
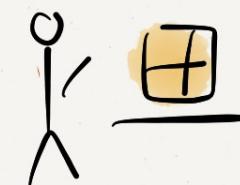
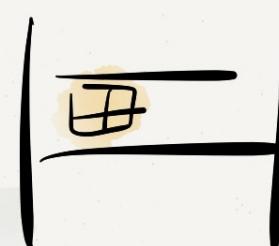
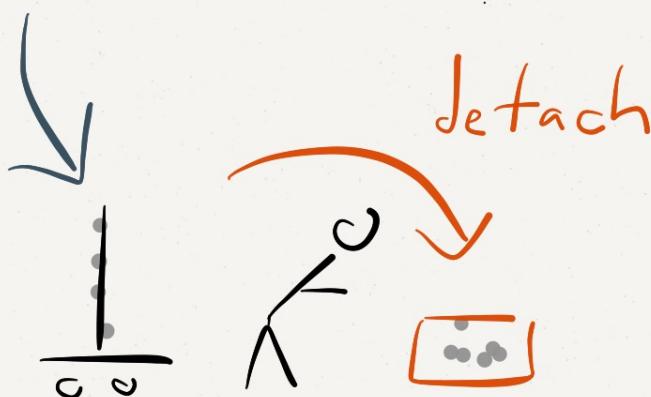
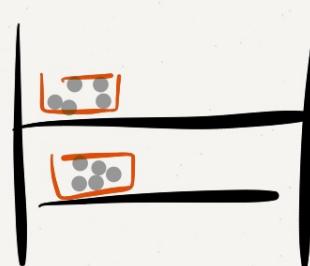
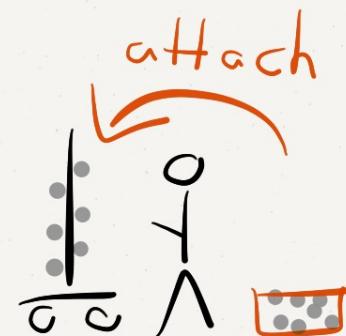
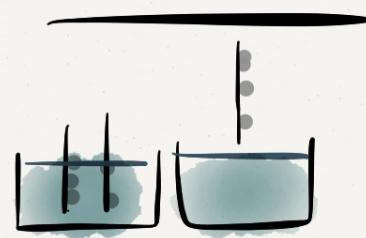
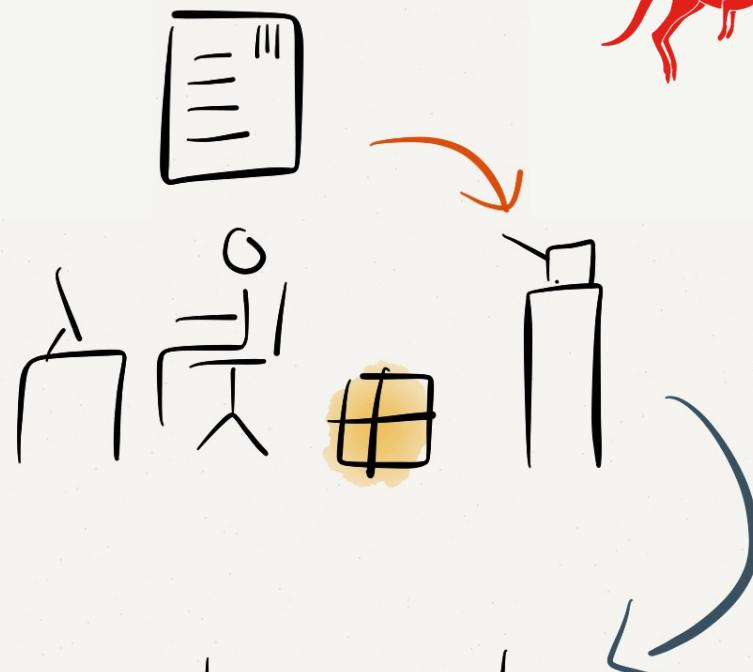
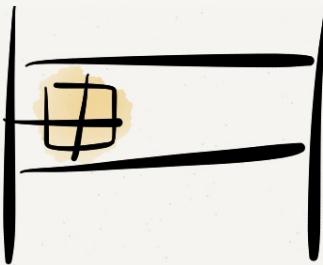
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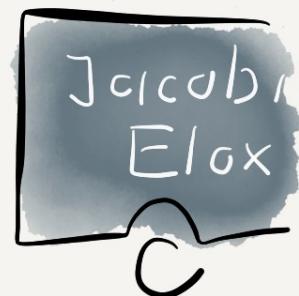
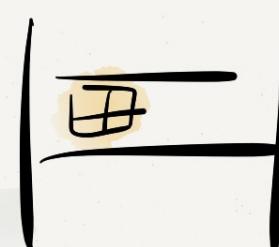
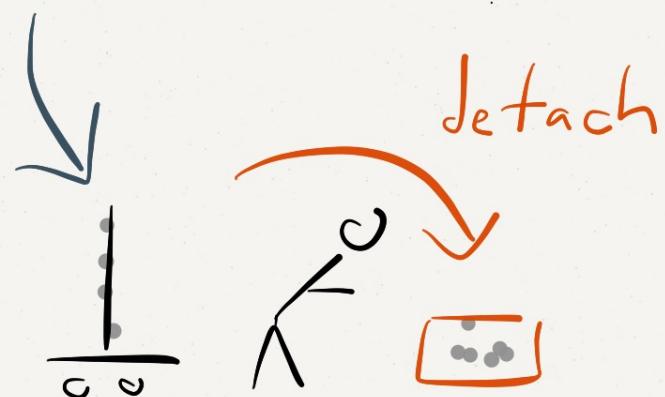
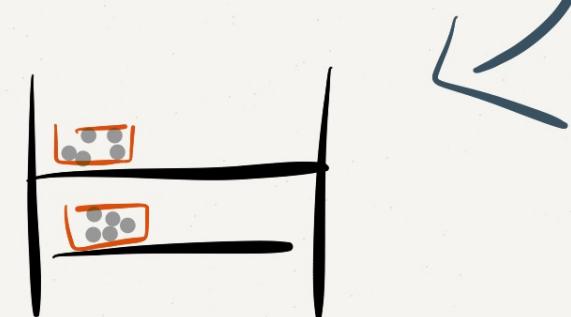
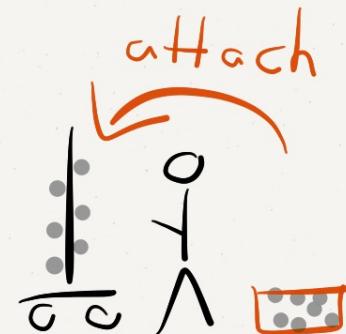
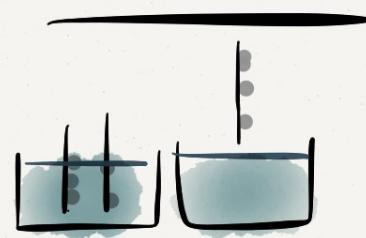
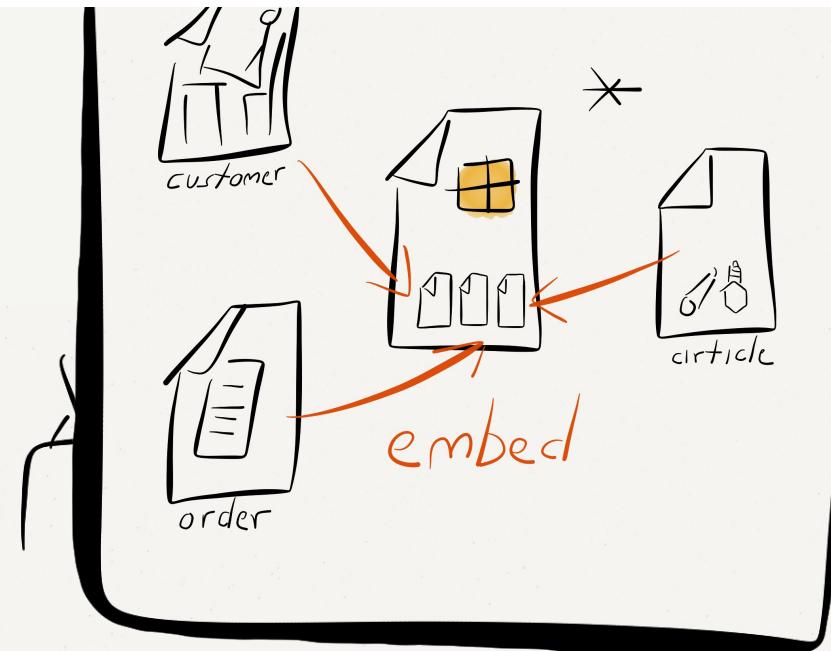
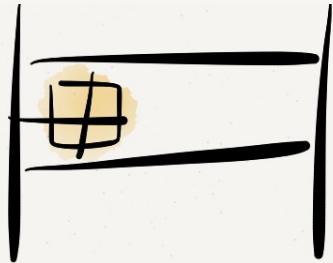
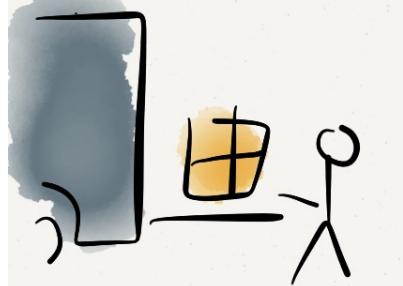


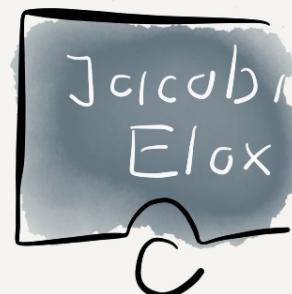
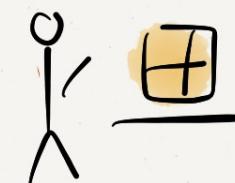
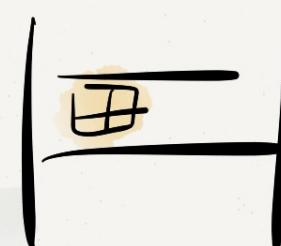
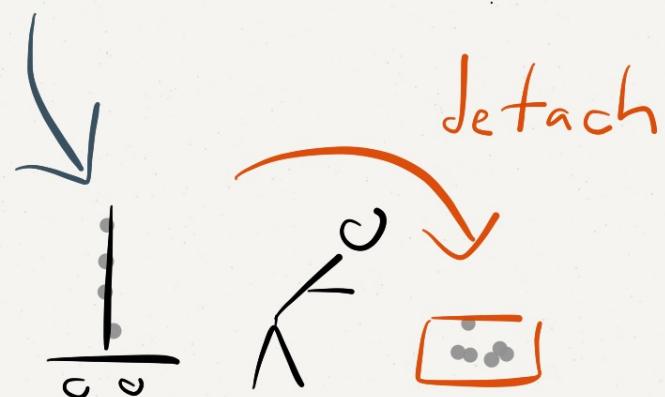
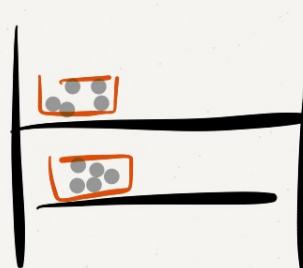
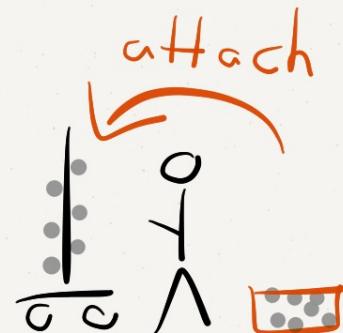
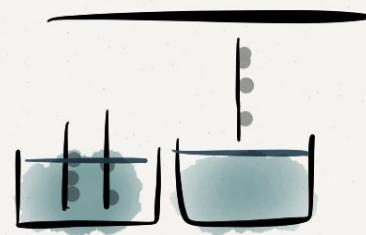
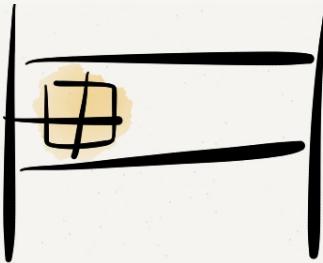
terminals

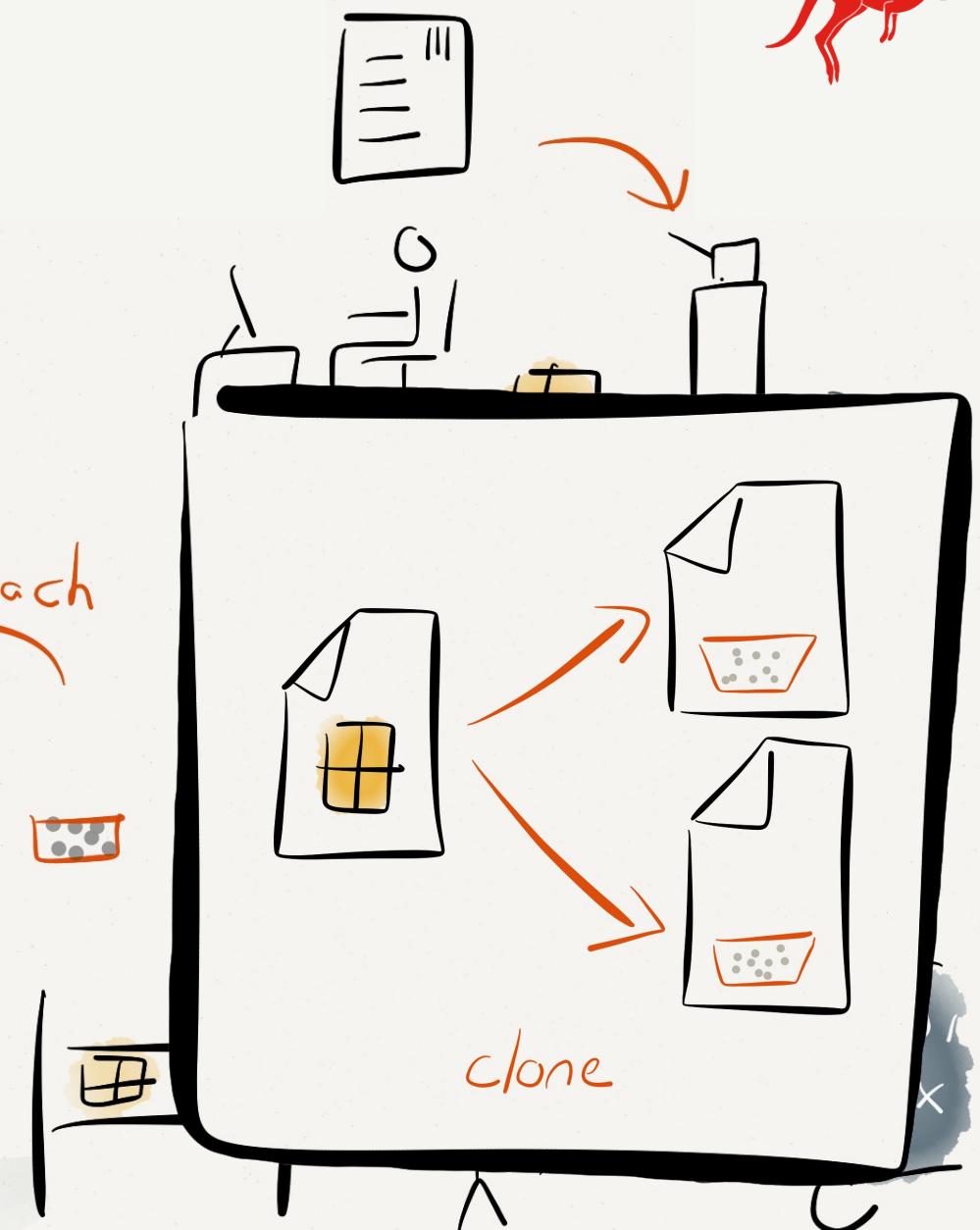
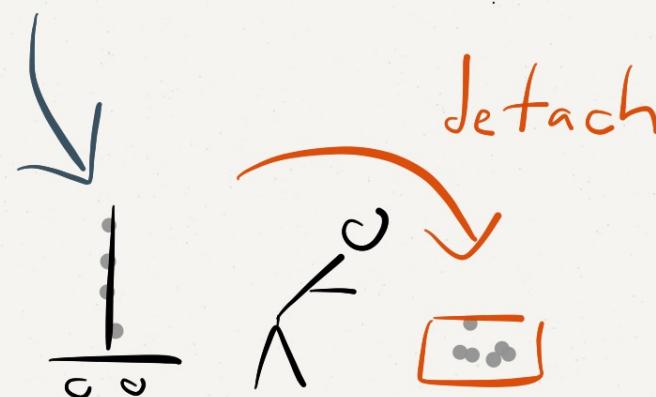
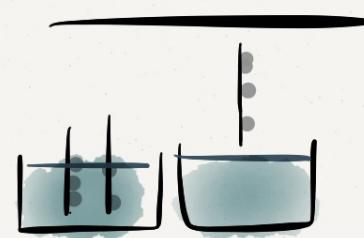
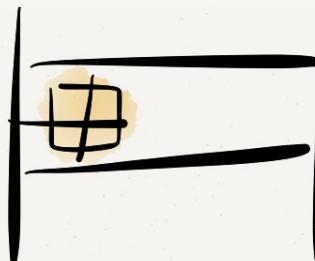
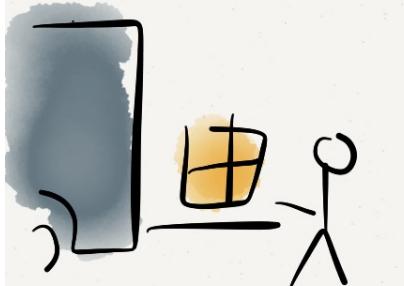


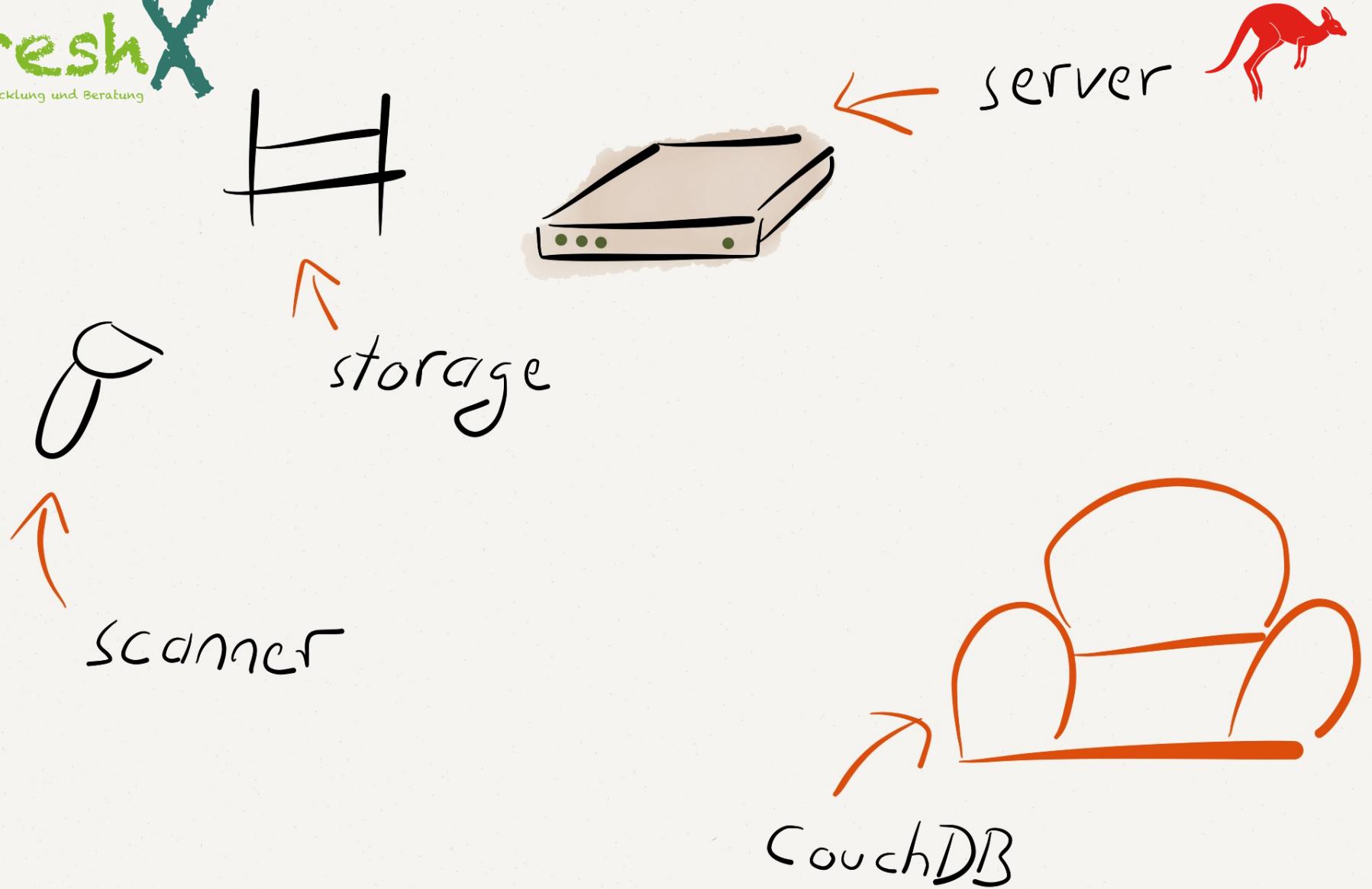
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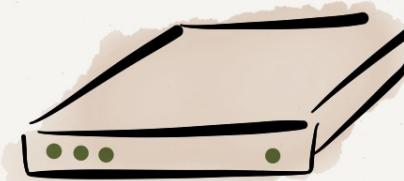
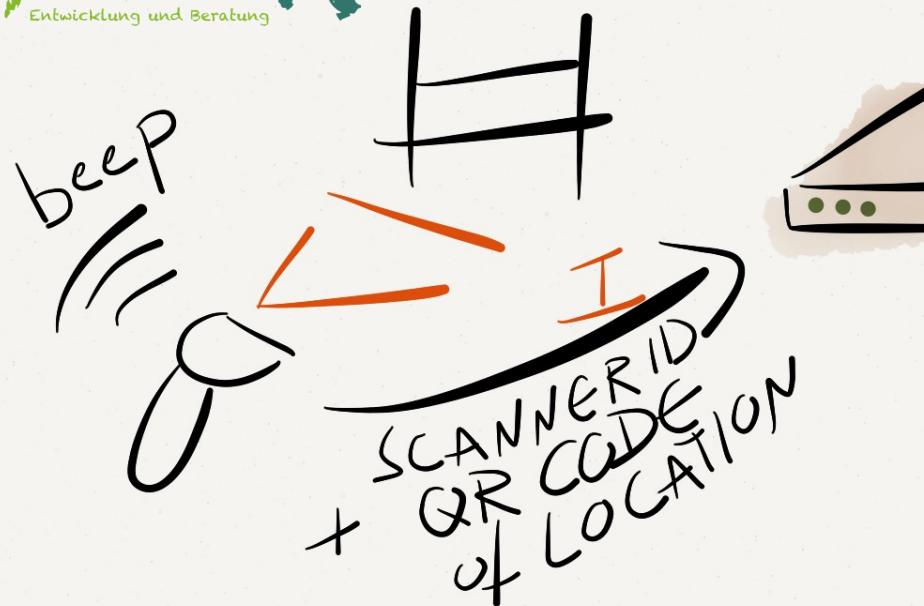


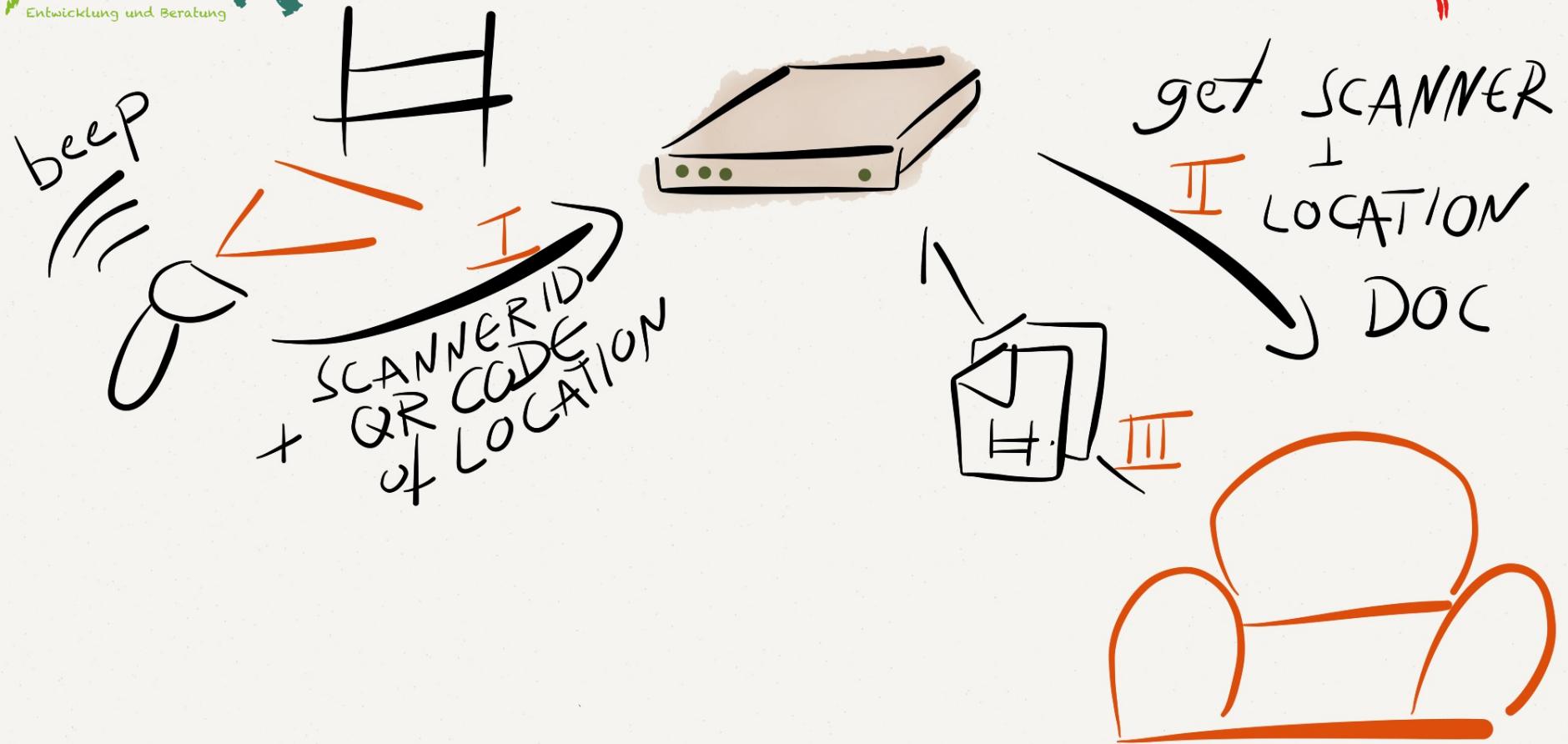


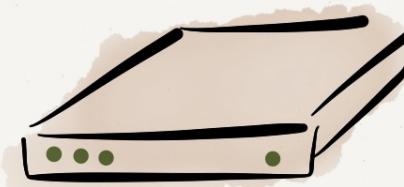
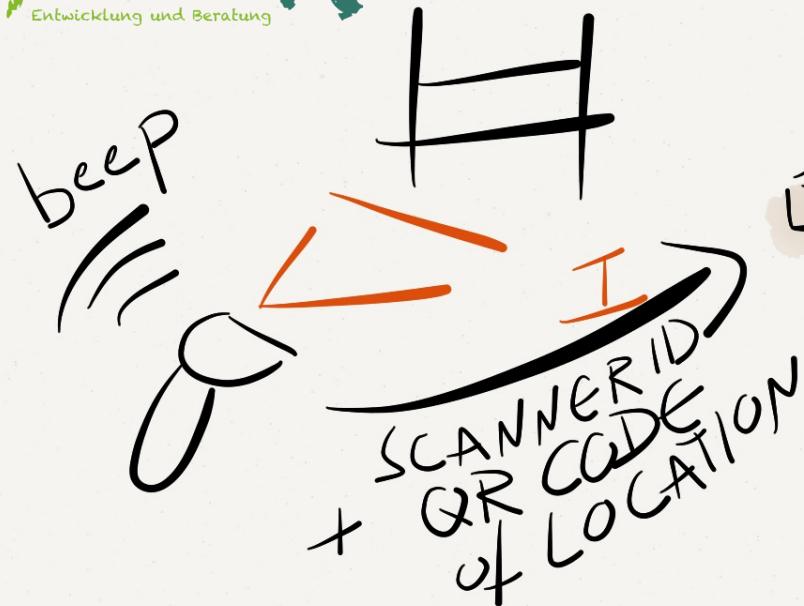




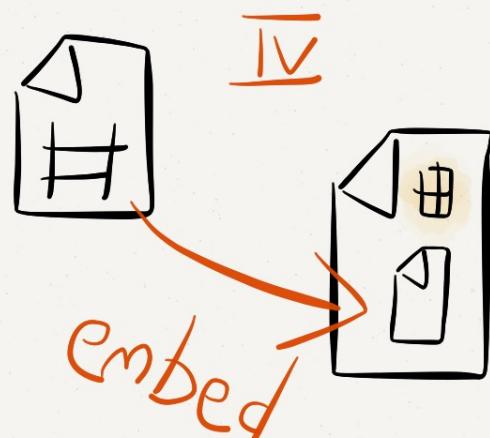


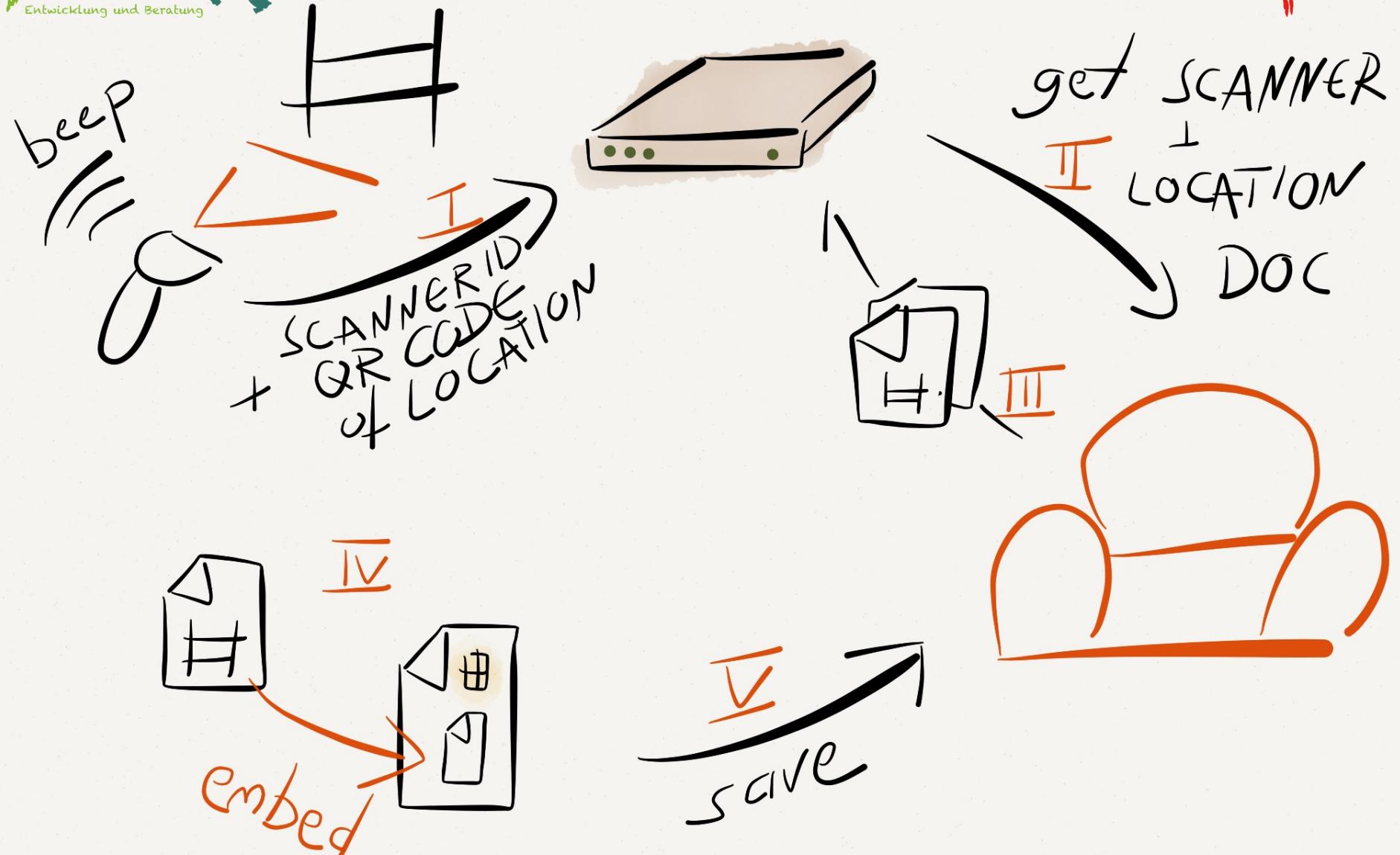


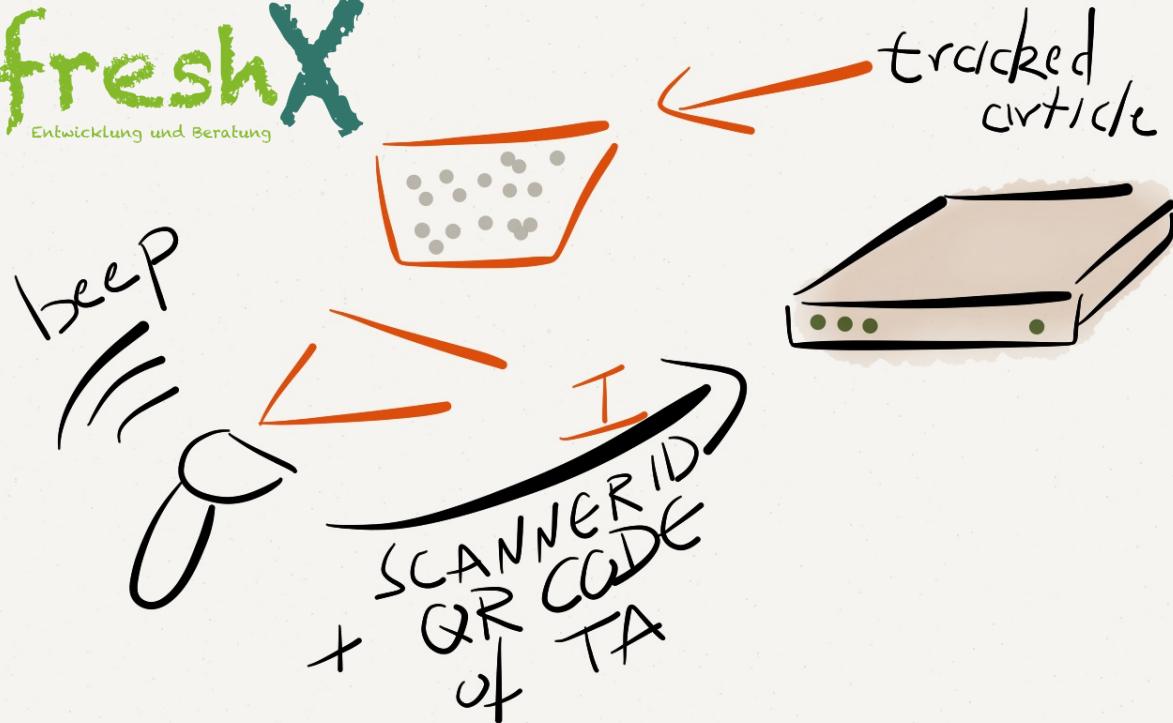


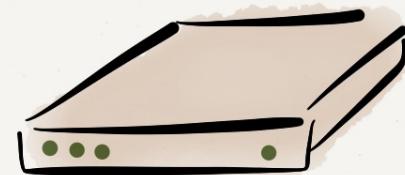
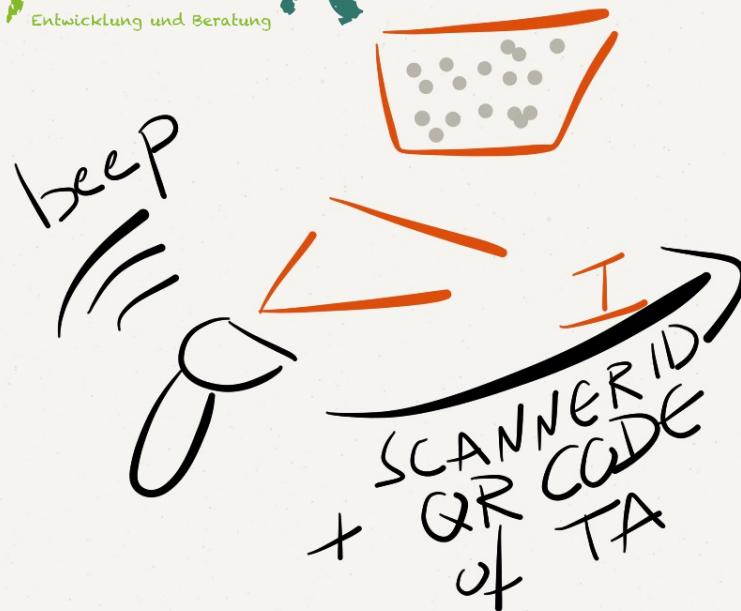


get SCANNER  
LOCATION  
DOC







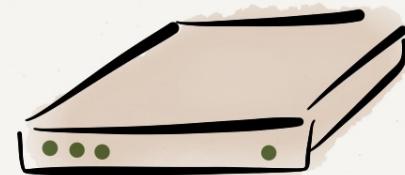
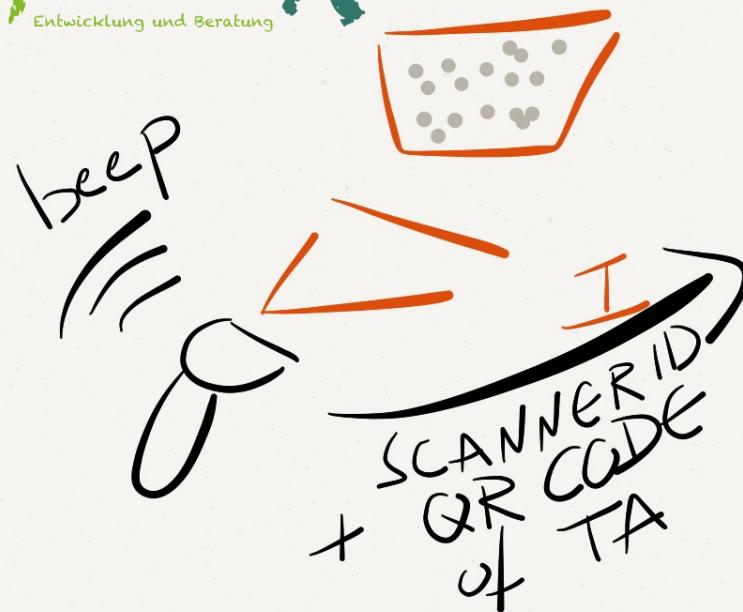


get SCANNER  
II + TA  
DOC

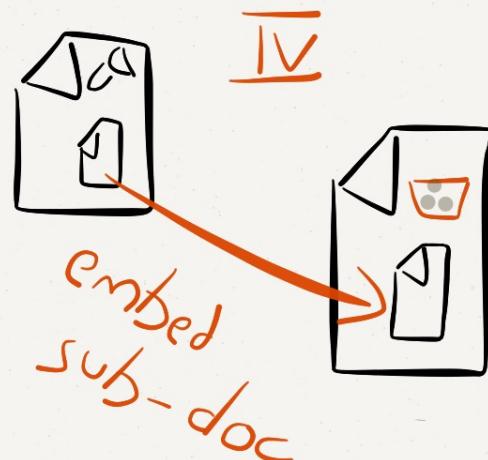


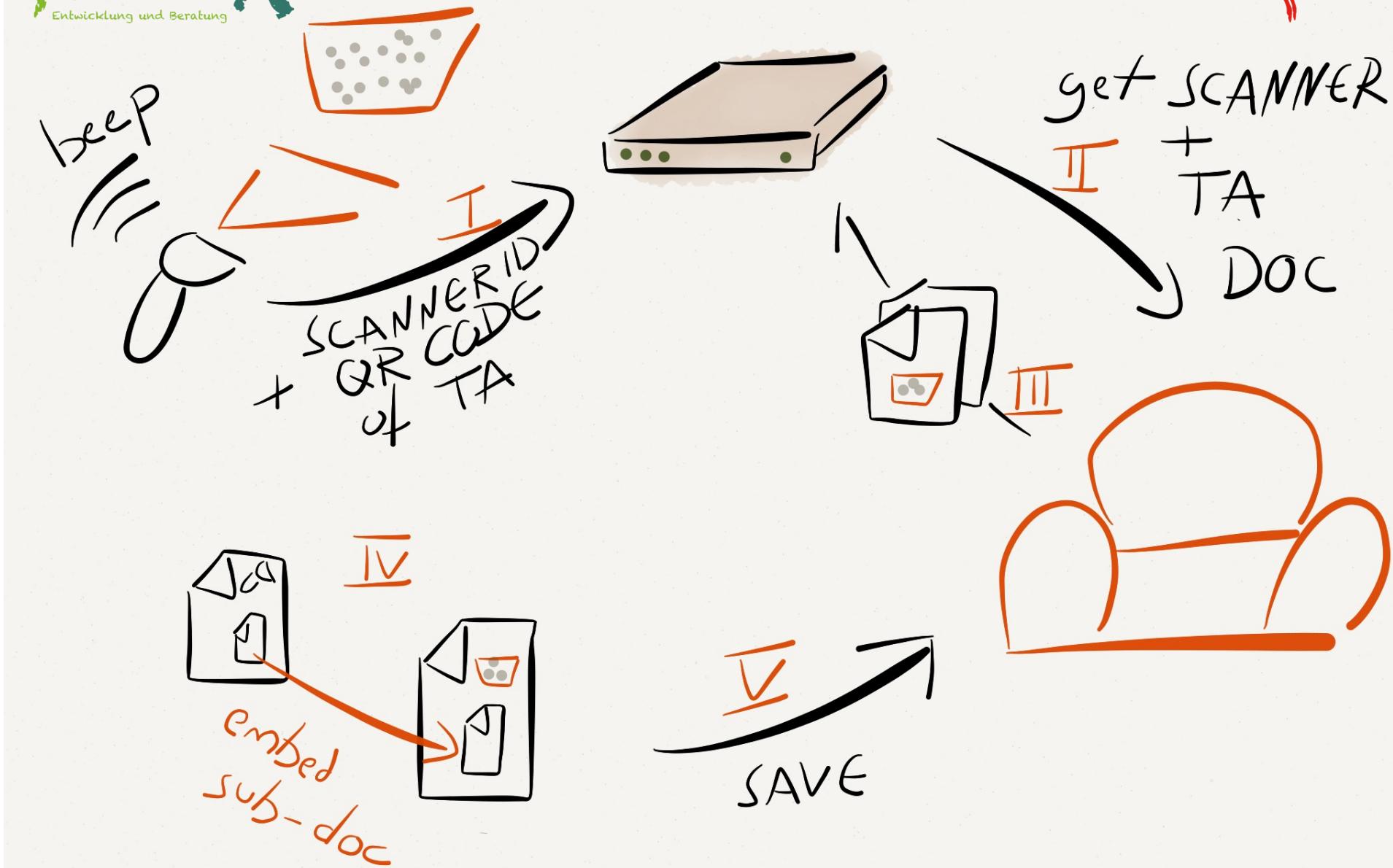
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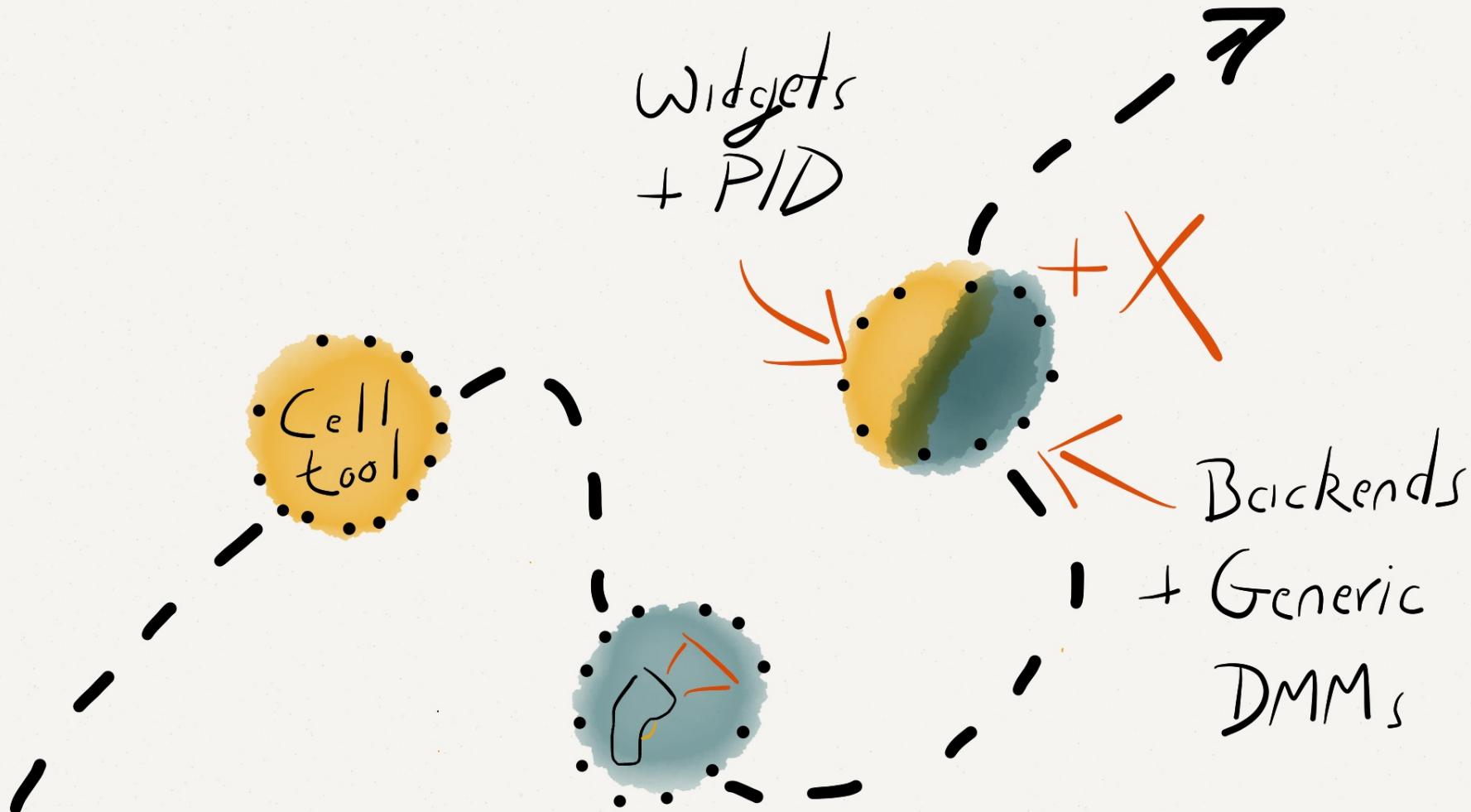
get SCANNER  
+ TA  
DOC

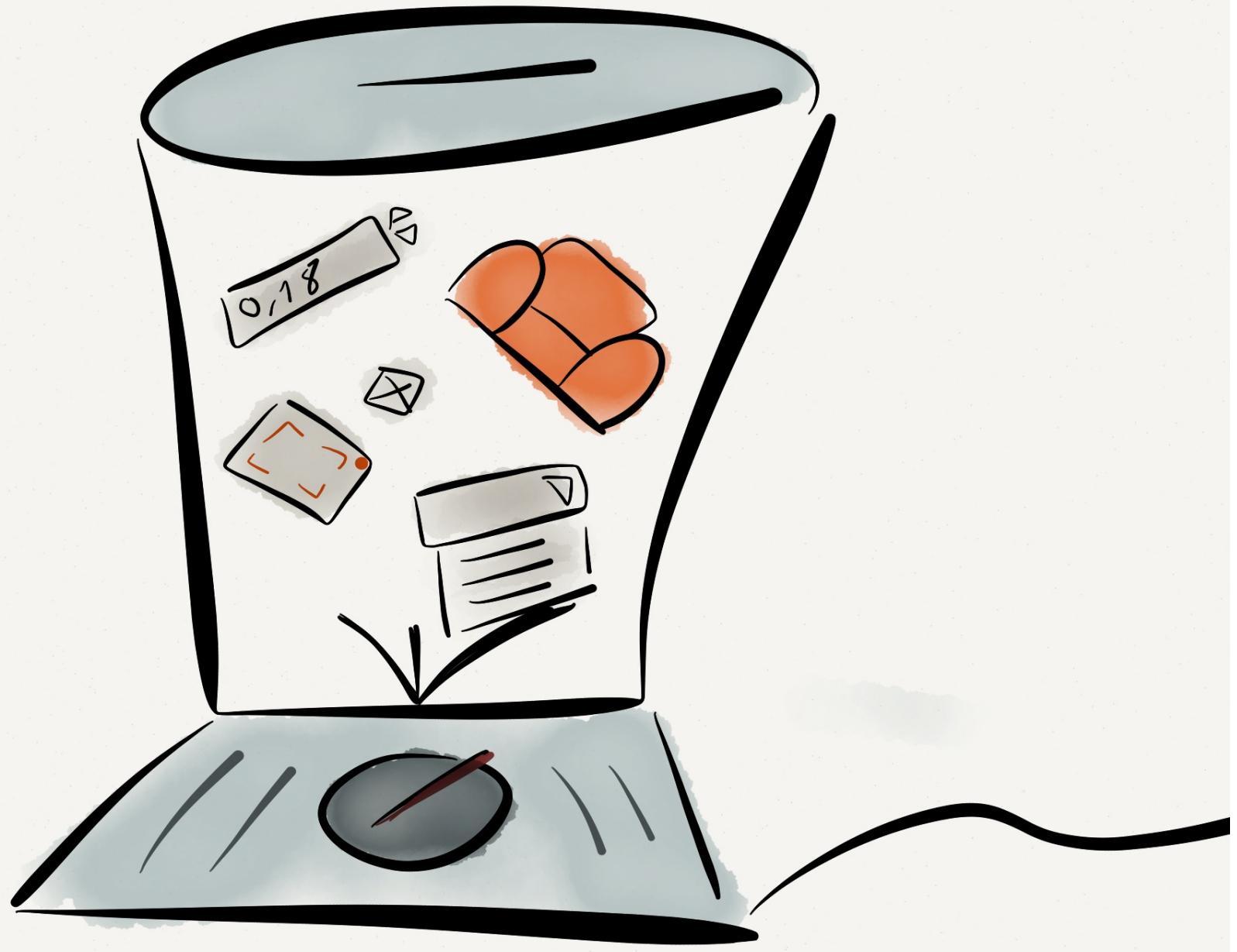






- ✗ generic doc-manipulation methods (clone, embed, merge ...)
- ✗ backends for couchdb + elasticsearch
- ✗ experience w/ CouchDB
- ✗ inspiration







Result

GO

[+]

-

NAME

STREET/#

ZIP/CITY

CONTACT

[>]

[+]

-

SAVE CANCEL



SEARCH

GO

Result

+

-

NAME

STREET/#

ZIP/CITY

EDIT

CONTACT

>

+

-

SAVE

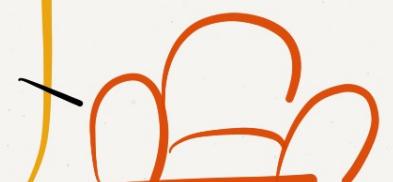
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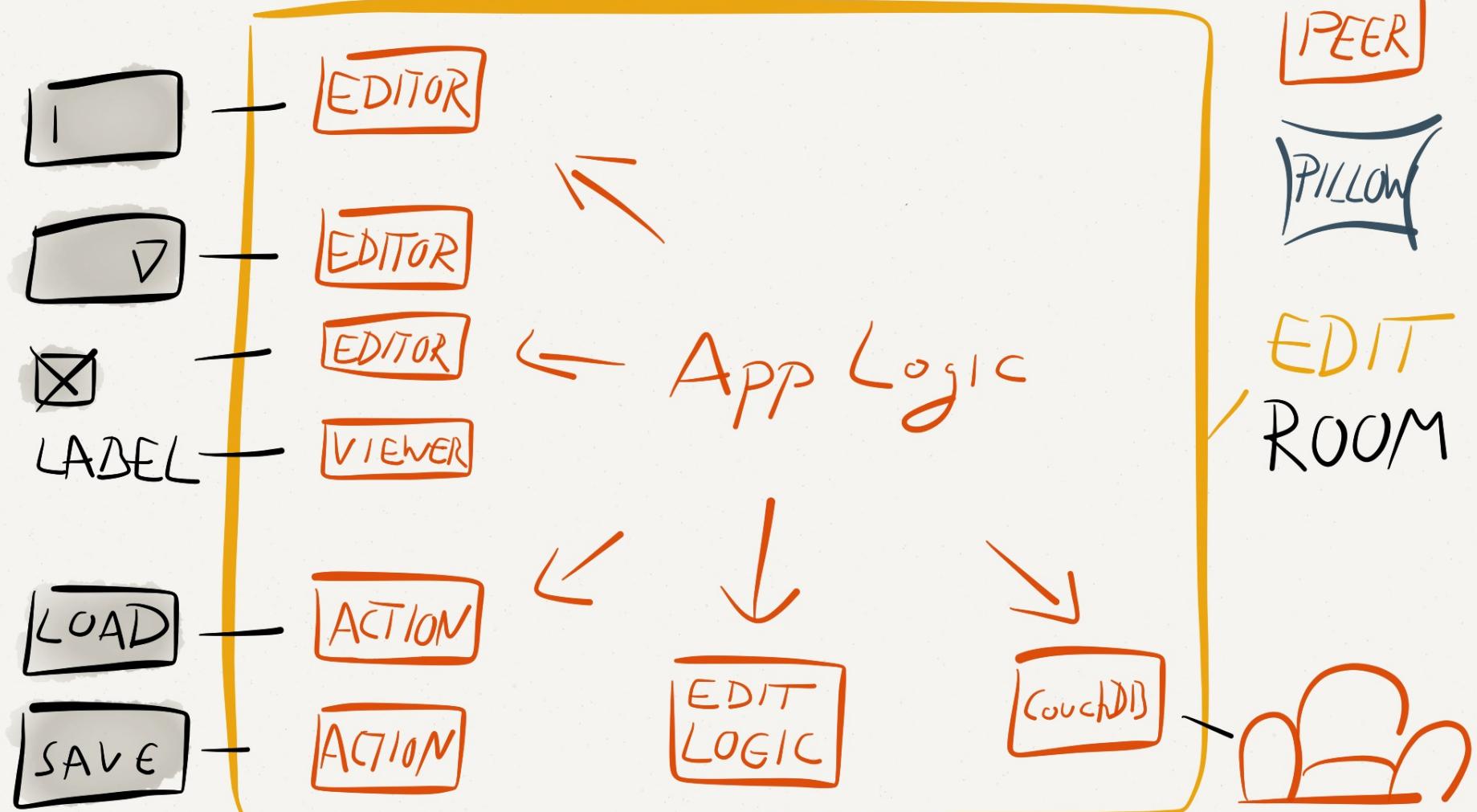


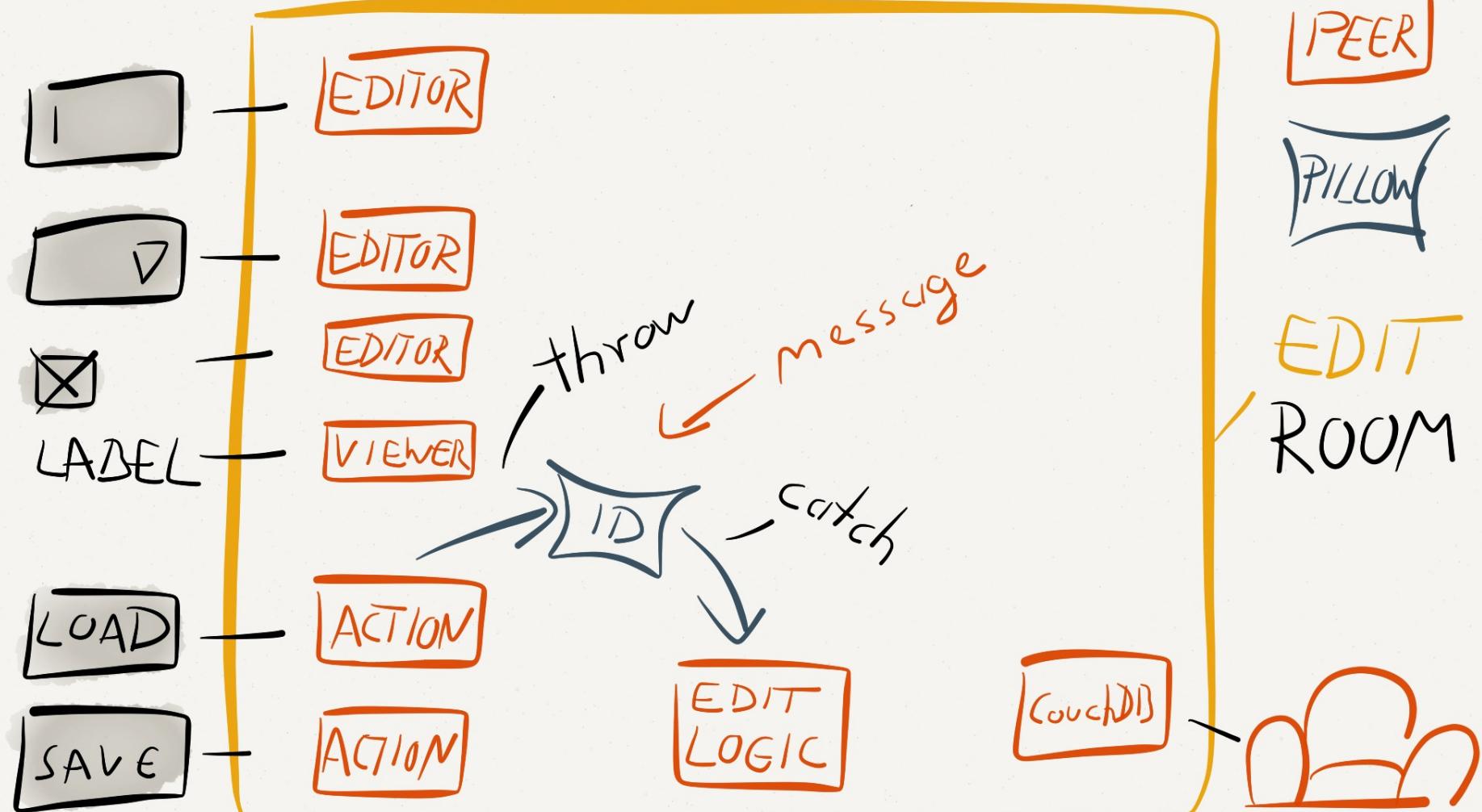
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D  
 LABEL  
LOAD  
SAVE

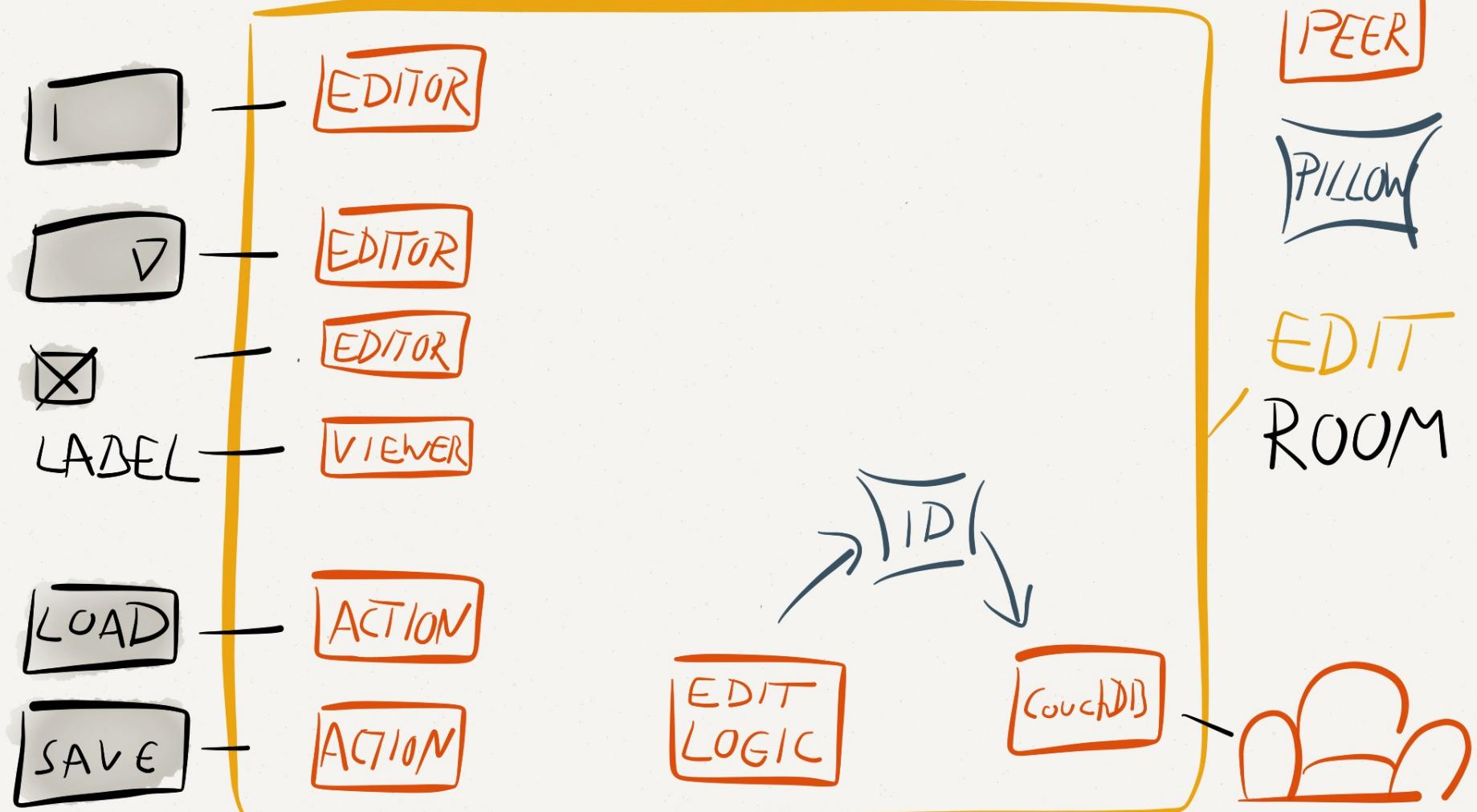


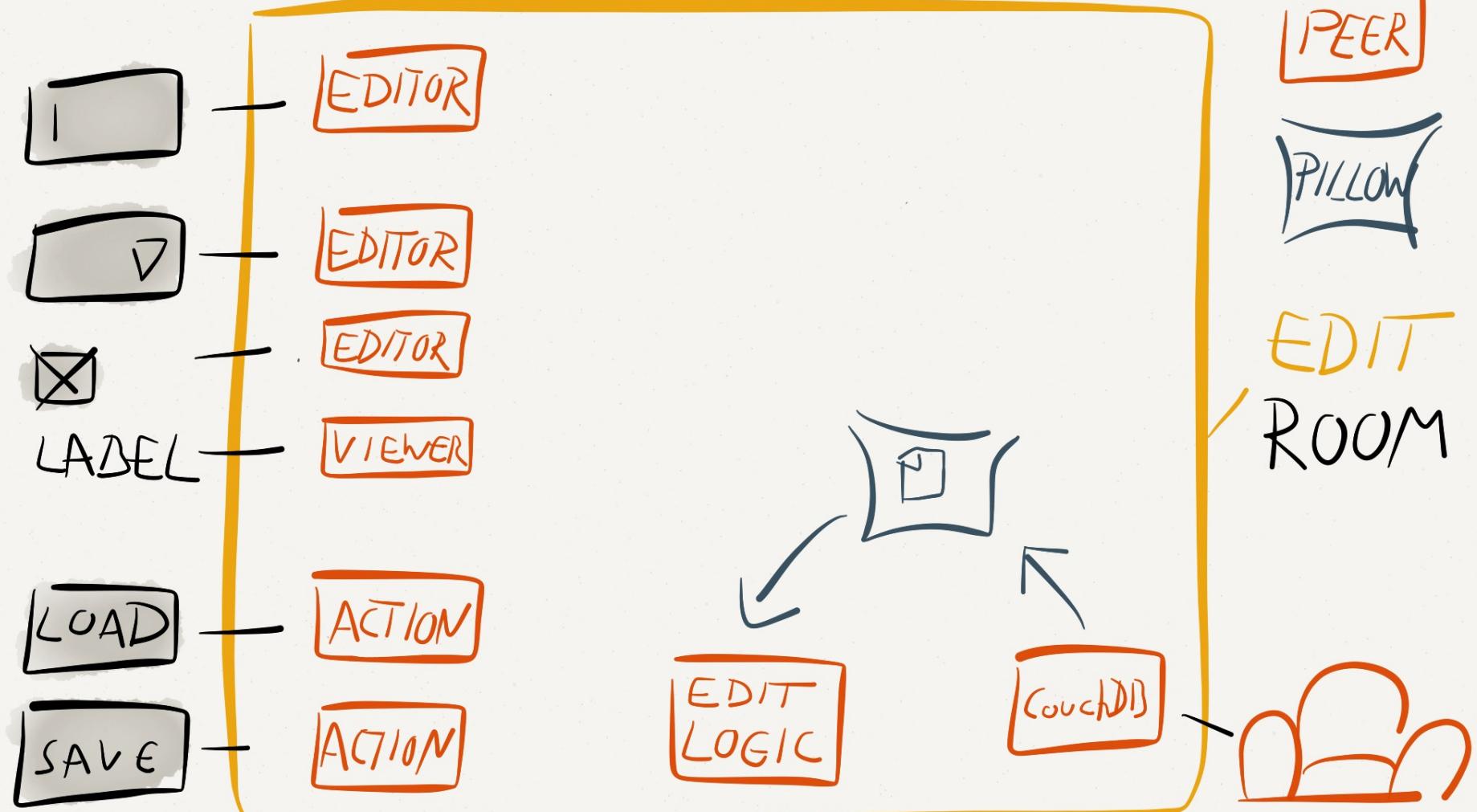
PEER  
PILLOW  
EDIT  
ROOM

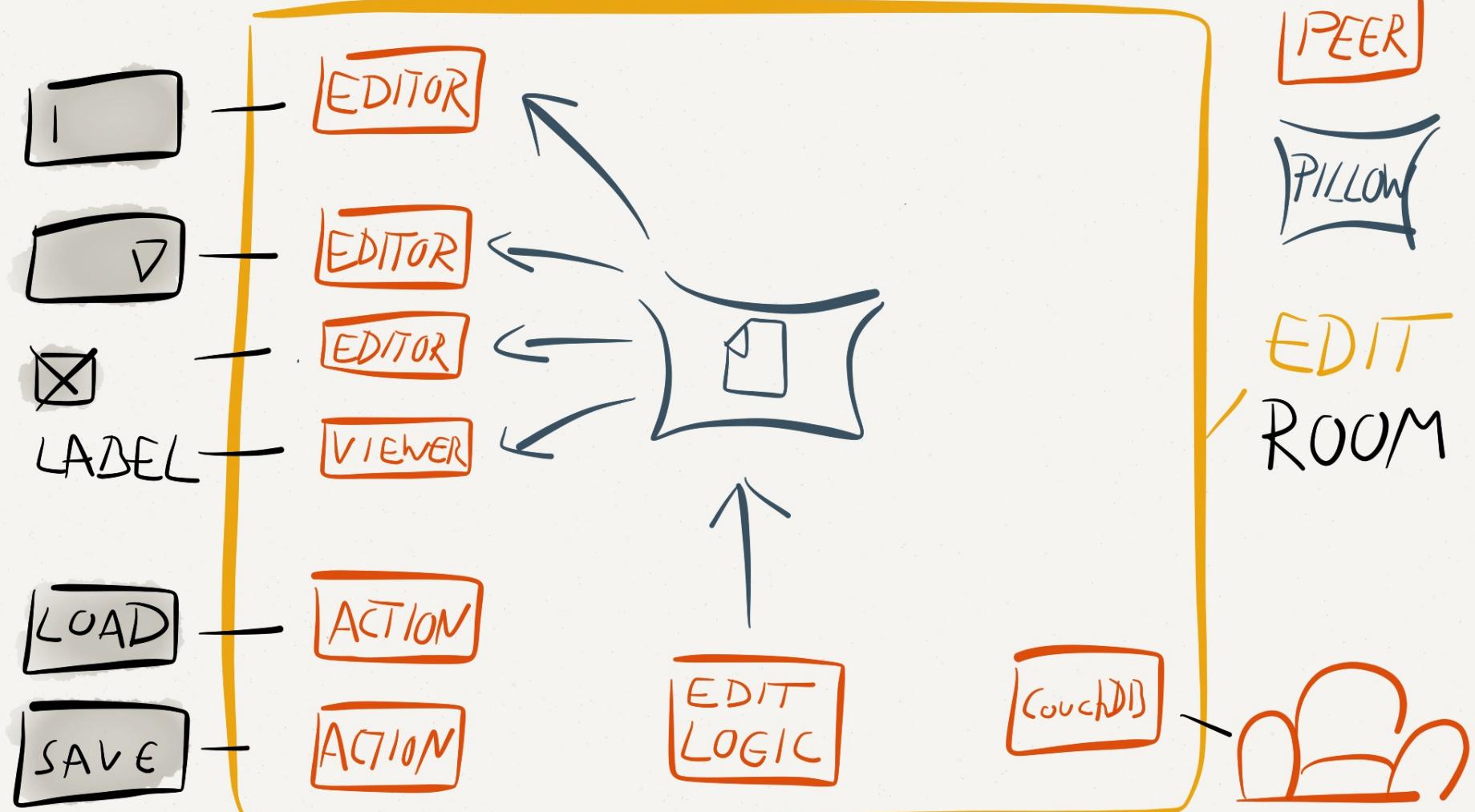


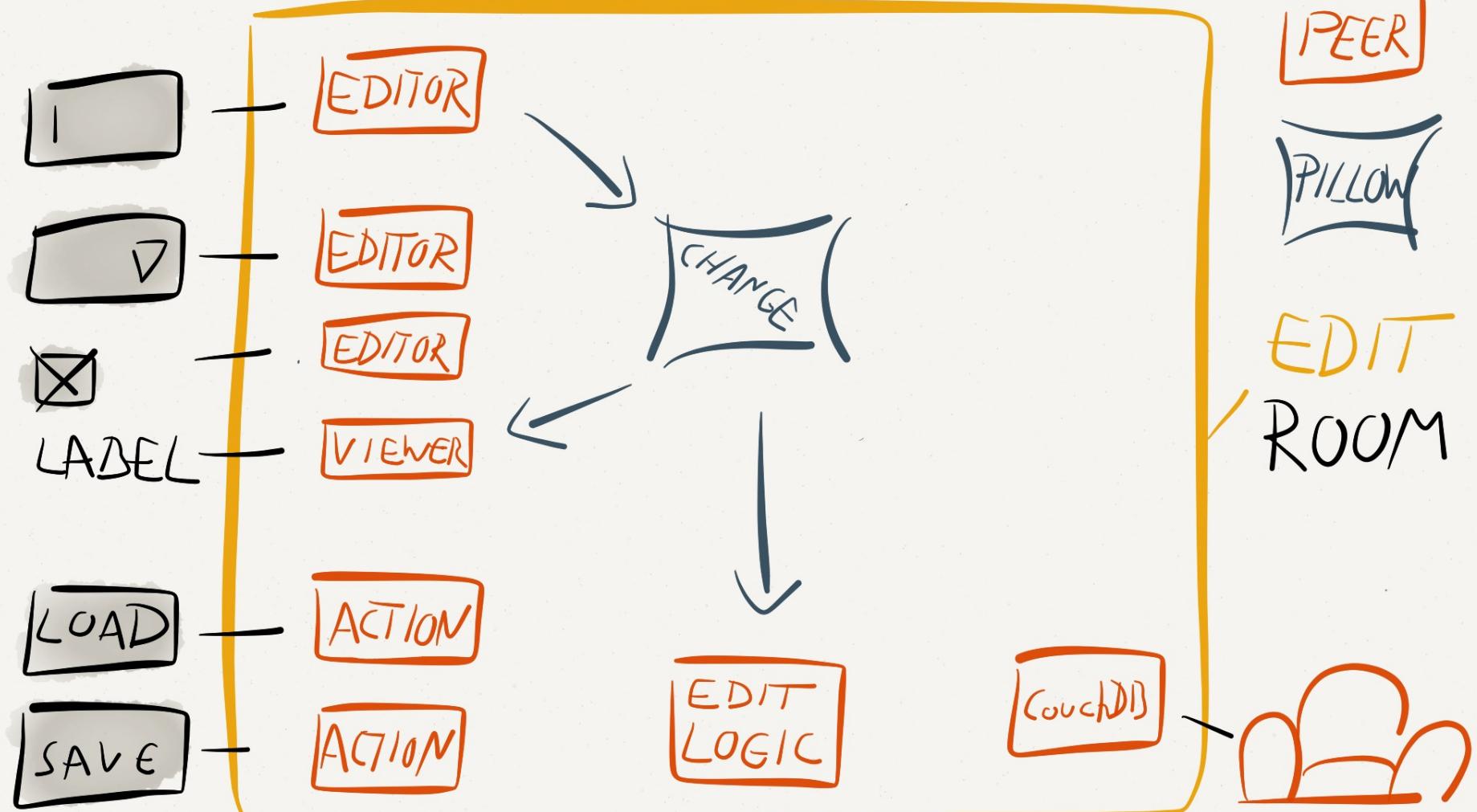


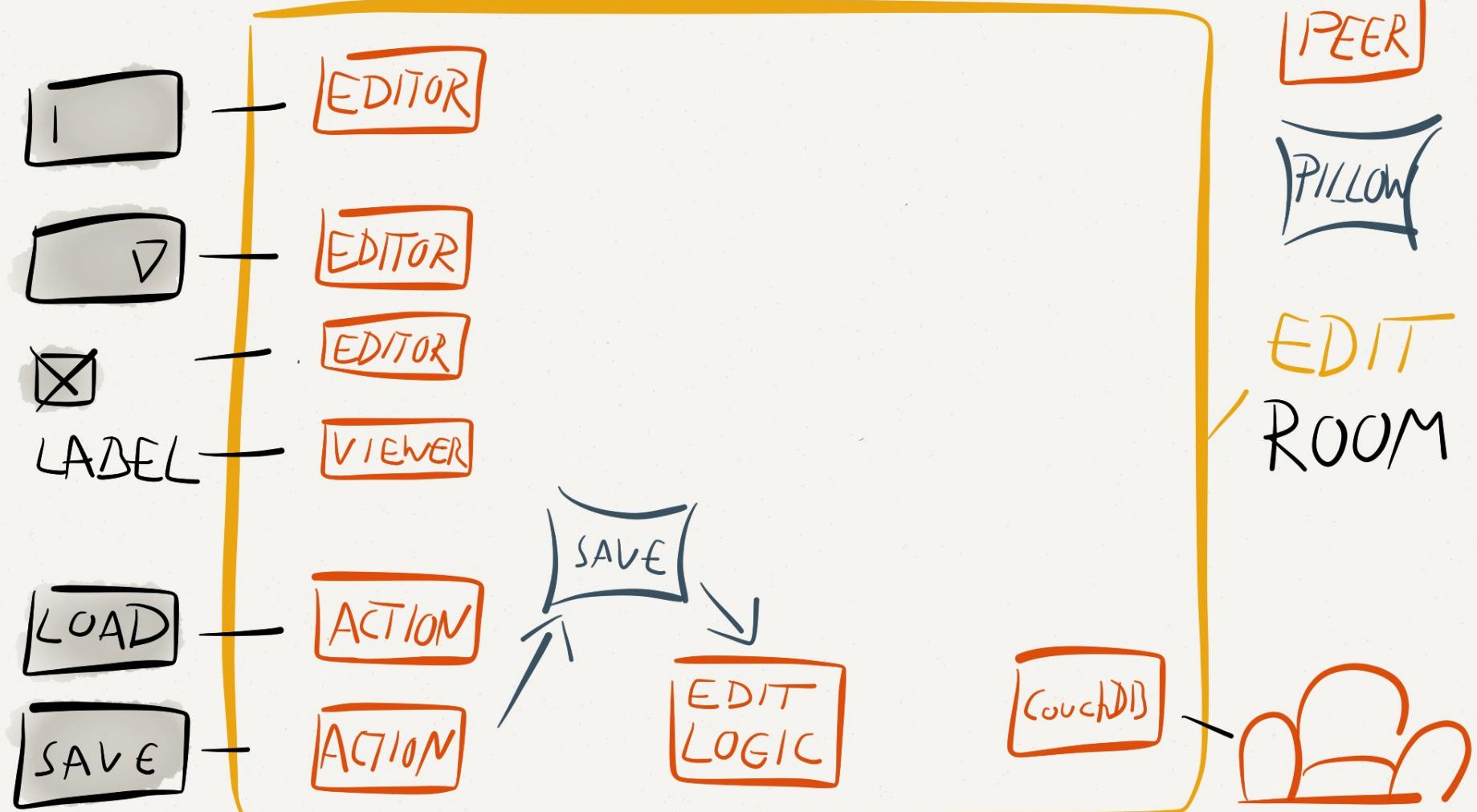


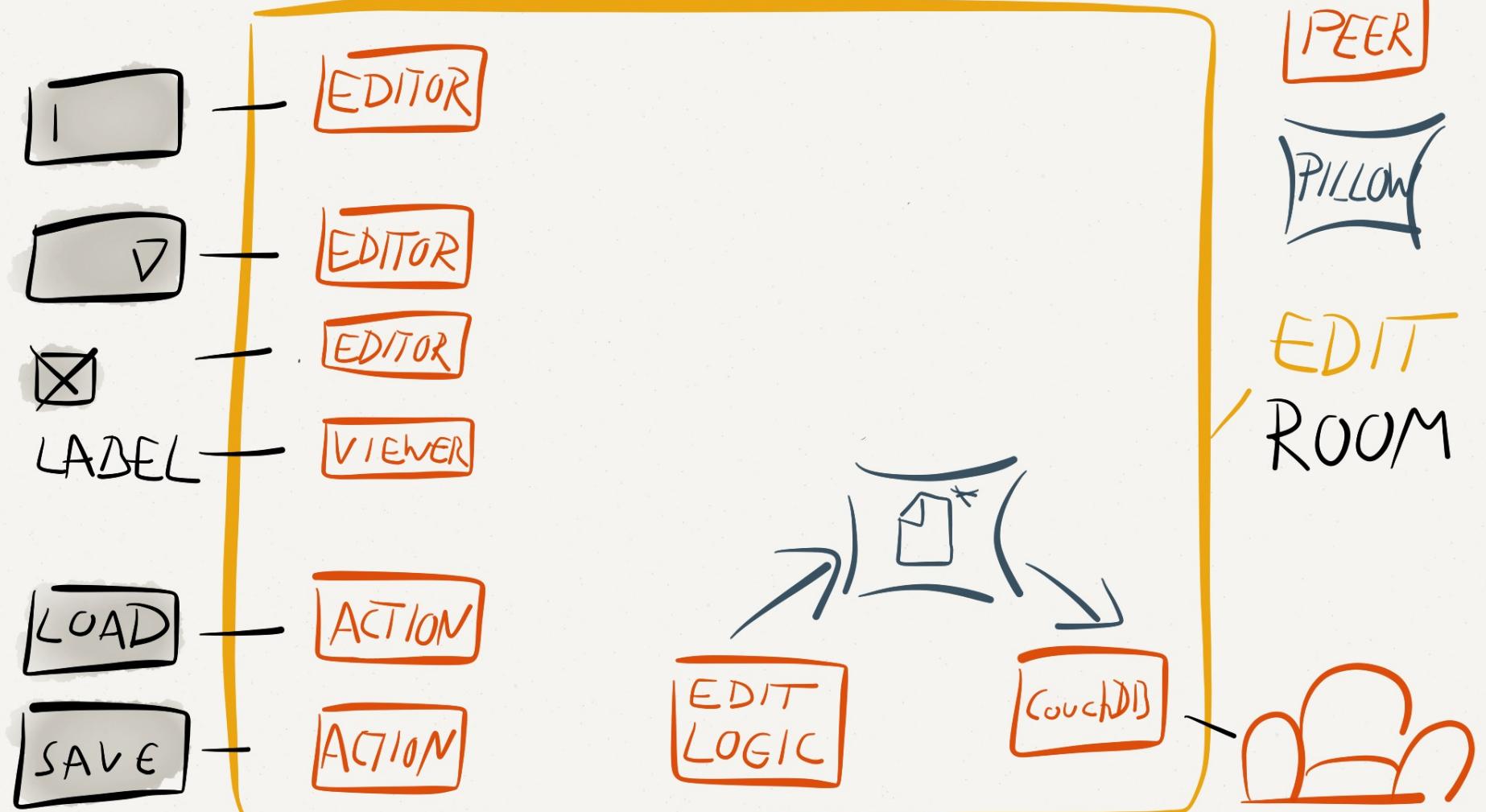














# WallaPy

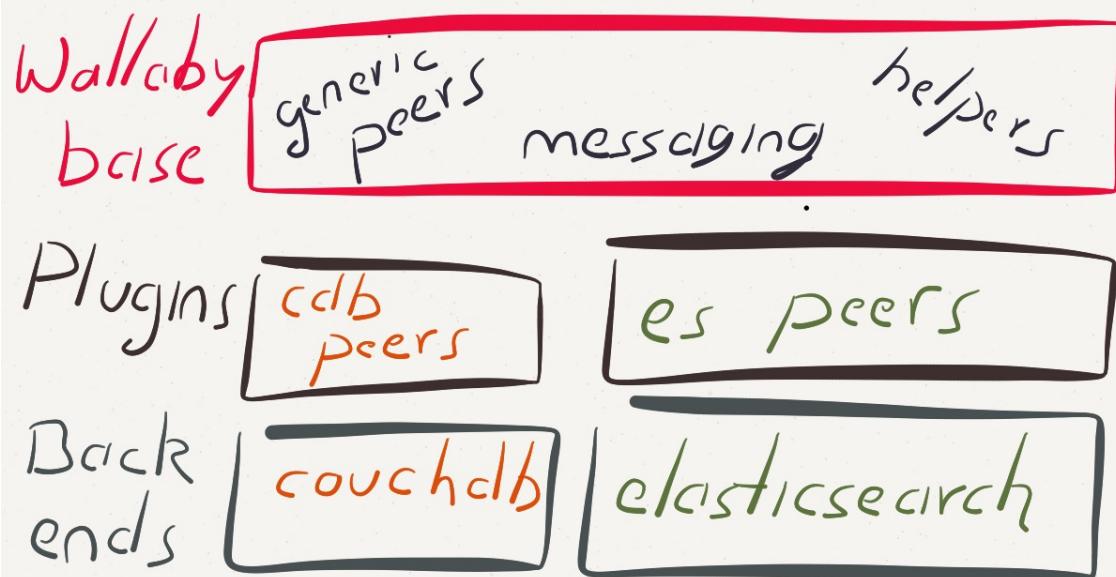
## Components

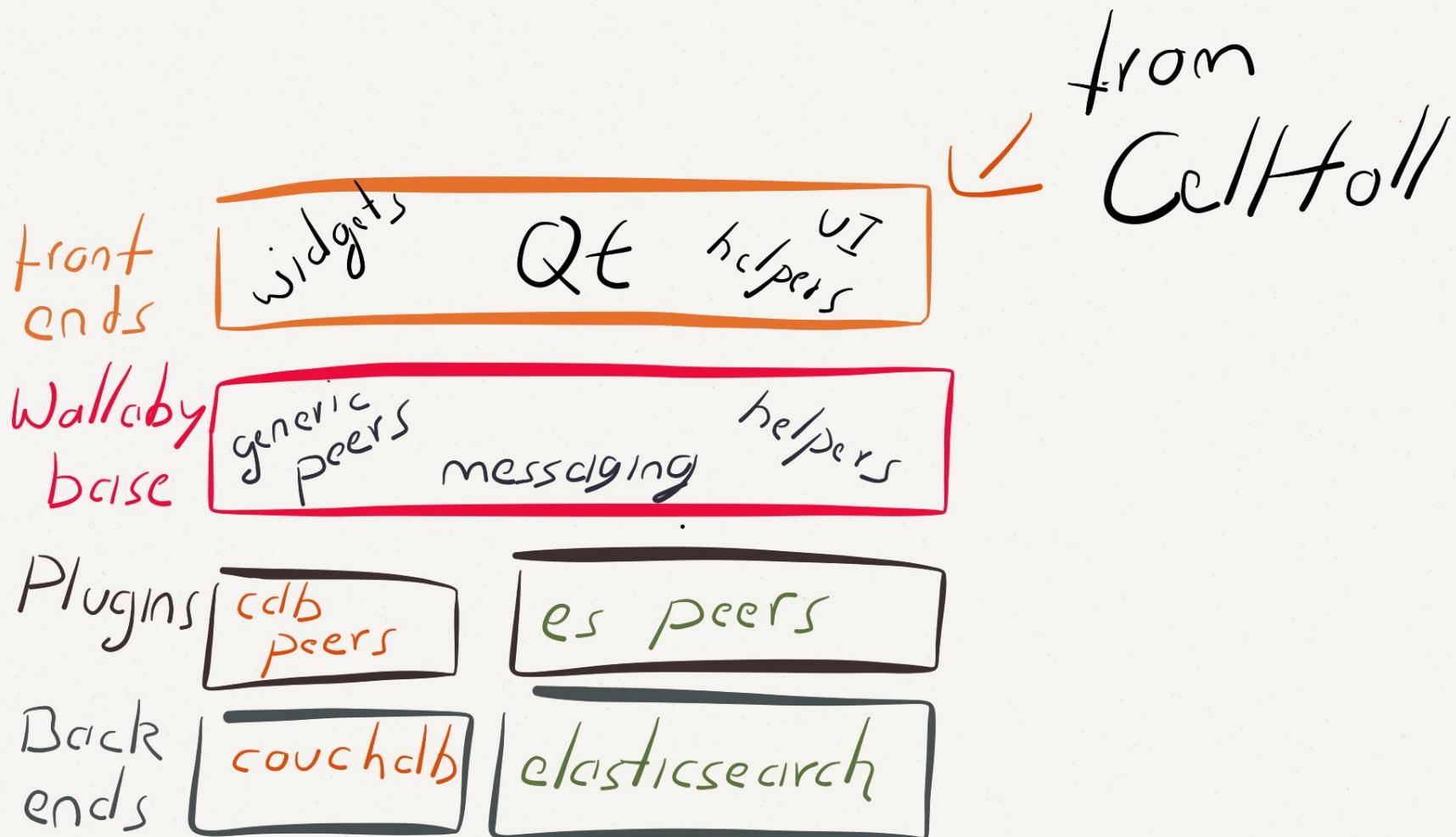
Back  
ends



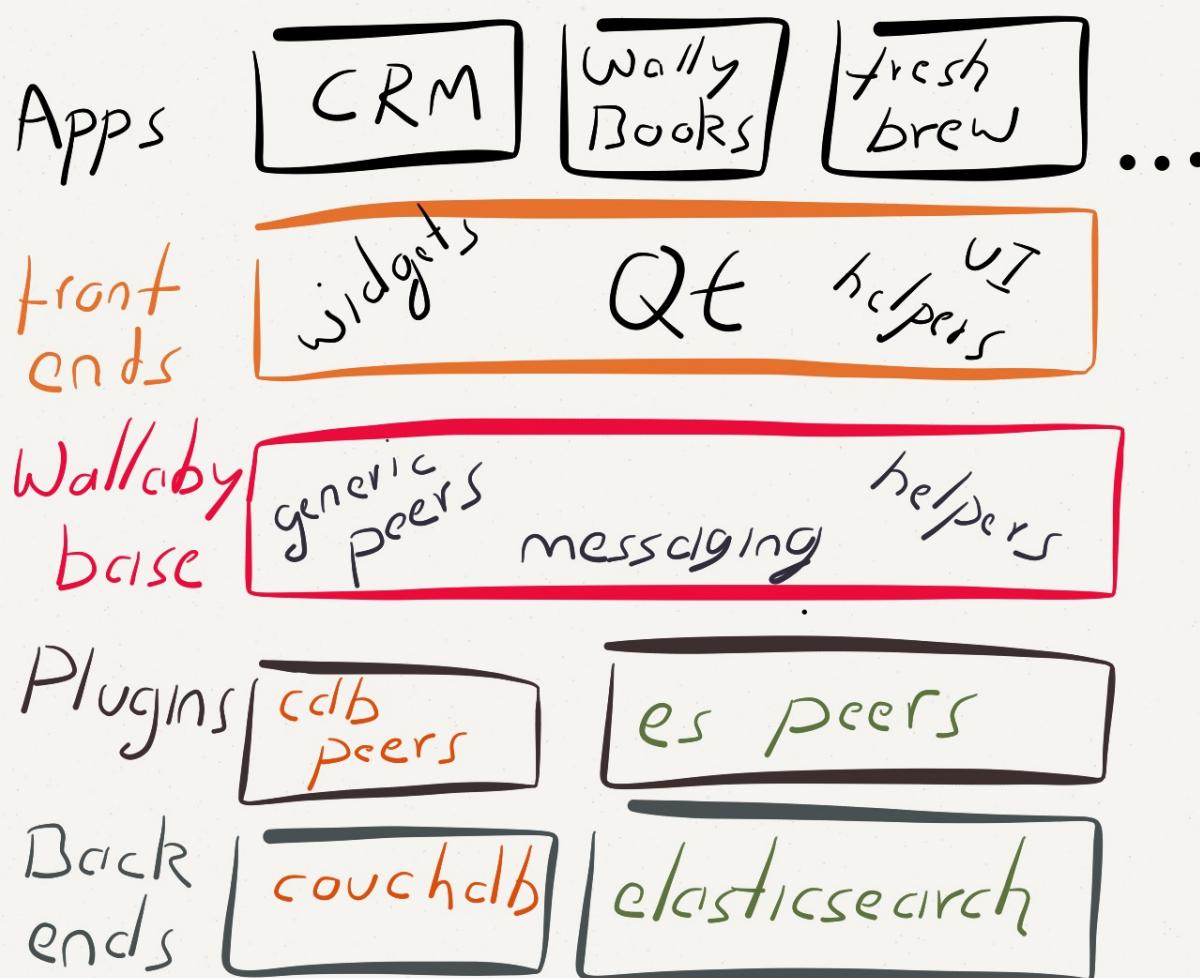
←  
product  
tracking

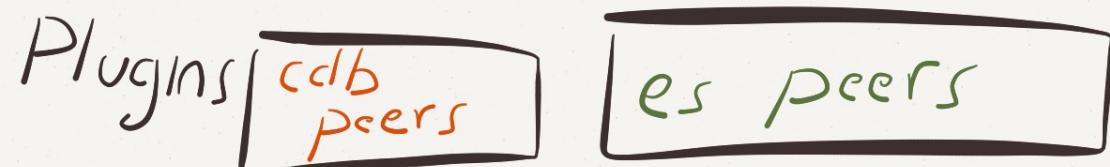
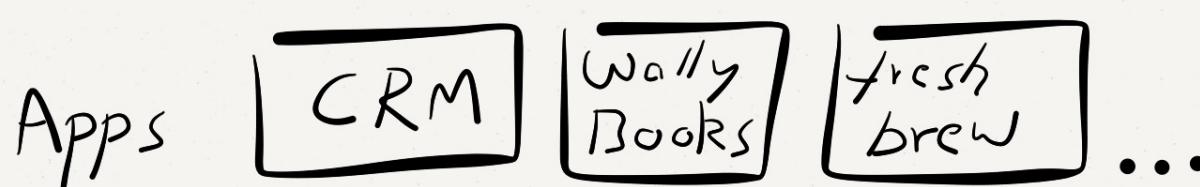












Inspector  
(IDE)

CLI

DIST UTILS



SHOW  
TIME





- <http://wlby.freshx.de> (Tutorials)
- <http://github.com/freshxopensource>
- # pip install wallaby
- Follow @FXWallaby on twitter!