Create an Anatomy for an ATM

**Automated Teller Machine**
Commonly called an ATM. A computer program located in a kiosk allowing the user to conduct certain banking transaction.

Functionality:
1. This ATM shall allow the user to withdraw cash and to check the balance of his/her account but only if the ATM card is OK and the PIN-code is correct.
2. Keep the ATM-card if wrong PIN is entered three times
3. A receipt shall be given for all transactions.
4. There shall be a possibility for the user to change his/her PIN-code.
5. If there are too few bank-notes left or the connection to the bank is lost, the ATM shall be automatically closed
Functions

- Communication
  ATM - bank
- Balance
- User Interface
- Authentication
- Cash With-Drawal
- Handling of bank-notes

Use Case model

- Cash With-Drawal
- CUSTOMER
- Check Statement of Balance
Technology Management

Anatomy

Cash Withdrawal

- Handling of Bank Notes

Balance

- Authentication
  - Communication ATM - bank

User Interface

Use Case model

- Cash Withdrawal
- CUSTOMER
  - Check Statement of Balance
Notation

Function A

Function B is dependent on Function C

A dotted line shows a dependency to be investigated

AND-symbol

OR-symbol

Function A and Function B are dependent on each other
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Step 1a: Identify functions

- Choose a level of abstraction not giving you more than 15 functions
- Create one Post-It per function
- Only use pens with a broad tip!

- Agree on what functional areas you have and then categorize all your functions based on this.
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Program

9.30 – 9.45      Introduction
9.45 – 10.15     Step 1a: Identify Functions (2 groups)
10.15 – 10.45    Step 1b: Evaluate and Agree on Functions
10.45 – 11.00    Coffee Break
11.00 – 11.45    Step 2a: Produce one Anatomy per group
11.45 – 12.15    Step 2b: Merge the Anatomies
12.15 – 12.30    Summary
Step 2a: Produce one Anatomy per Group

- Start working in parallel with the functions in the top and in the bottom of the Anatomy.
- Establish dependencies by drawing lines

- Ask yourself 1: Is this function possible to be fully tested provided that all functions it depends on are fully tested?

- Ask yourself 2: Are all Money-Making functions visible in the upper part of the Anatomy?
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Next Step: From Anatomy to Integration Plan
New Book:
The System Anatomy - Enabling Agile Project Management

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