# Automated Teller Machine (ATM)

## Specification

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# Personas

1: **Misc** Category

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### Account Holder (Visually Impaired) Persona: PSA-005

Victor Mendes, 53

Married to Joanna.

In an accident, when he was 7, Victor lost his eye sight for about 95%. Since then he can only see coloured areas and distinguish between bright and dark.

Victor is working as an accountant for one of the major employers in town.
One of the reasons for being a customer of "ABC Bank Ltd." is that there is an ATM just around the corner of his workplace.

Luckily there is a bus stop just opposite of his work and another one a few steps from their flat. This enables Victor to commute without any further assistance.

### Alien Customer Persona

Liam Taylor, 54

Liam is sales representative and drives a lot across the south-west of the country.

Usually when pulling in for gas he uses an ATM at the gas station to get some cash.

### Manager of Local Branch Persona

Adam Smith, 57

Married, father to a daughter of 19, owns a golden retriever named Jessie.

Manages the local branch of ABC Bank Ltd. and is resposible for 5 ATMs within the borders of the town. So he is responsible that there is always enough cash stored in the ATMs. The cash is provided with strongboxes into the ATM by his security staff.

## Operations Manager <span style="color:gray">Persona</span>

Olivia Williams, 37

Olivia started working for ABC Bank Ltd. as a maintenance executive. After two years she was promoted operations manager responsible for all 107 ATMs of ABC Bank being installed and maintained in a save and solid manner.
This includes among other tasks planning the shifts of the maintenance executives, coordinating software releases, procurement of replacement parts and new ATMs.

For Olivia it is important to quickly get an overview about the status of "her babies" - as she calls the ATMs - and to be notified in timely manner or even up-front about irregularities.

## Account Holder <span style="color:gray">Persona</span>

Emma Jones, 42

Married, two children of age 9 and 11.

Works part time as a teacher at an elementary school at the capital of the district.
Since 2003 she is a loyal customer of "ABC Bank Ltd." and has two savings accounts plus - together with her husband Mark - a mortgage at this bank.

Besides the online banking to pay the bills, Emma regularly collects some money at the ATM outside the local branch of ABC Bank between dropping off her younger daughter at school and picking up the older one from dance lessons.

# User Stories

1: **Misc** Category

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## Account Holder Wants to Know the Balance of the Account User Story

**As a / an**

account holder or visually impaired account holder

**I want to**

know the actual balance of my account

**so that**

I can plan my further spendings in a better way.

## Check Status of ATM User Story

**As a / an**

operations manager

**I want to**

know the status of the ATMs

**so that**

I can plan the shifts of my staff accordingly.

## Customer Withdraws Cash User Story

**As a / an** account holder or alien customer

**I want to**

withdraw cash from an ATM

**so that**

I can get money even when the bank is closed.

## Check Amount of Cash in Stock at ATM User Story

**As a / an**

manager of local branch

**I want to**

check the amount of money that is in stock at the ATMs I am responsible for

**so that**

I can make sure there is always enough cash disposable.

# BDD Scenarios

1: **Misc** Category

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## **Account Has Sufficient Funds** BDD Scenario

**Given**

- I have an account with ABC Bank
- the card is valid
- the balance of my account is high enough
- I have not exceeded the daily or monthly limit/remainder yet
- the ATM contains enough money

**when**

I request a certain amount of money

**then**

- the balance of my account is reduced by the amount
- the remainders of the daily and monthly limits are reduced accordingly
- the card is returned

and finally cash is dispensed.

## **Account Has Insufficient Funds** BDD Scenario

**Given**

- I have an account with ABC Bank
- the card is valid
- I have not exceeded the daily or monthly limit/remainder yet
- the ATM contains enough money

but the balance of my account is not high enough

**when**

I request a certain amount of money

**then**

the ATM should say there are insufficient funds and the card should be returned.

## Cash Withdrawal with Daily and Monthly Limits Not Exceeded BDD Scenario

**Given**

- I have not an account with ABC Bank
- the card is valid
- I have not exceeded the daily or monthly limit/remainder yet
- the ATM contains enough money

**when**

I request a certain amount of money

**then**

- the issuer of the card will be notified about the withdrawal (cust-ID, amount, time-stamp)
- the remainders of the daily and monthly limits are reduced accordingly
- the card is returned

and finally cash is dispensed.

## Cash Withdrawal Exceeding Daily or Monthly Limits BDD Scenario

**Given**

- I have not an account with ABC Bank
- the card is valid
- the ATM contains enough money

but I have exceeded the daily or monthly limit/remainder

**when**

I request a certain amount of money

**then**

the ATM should say that the daily or monthly limit has been exceeded and the card should
be returned.

## Show Balance of Account(s) BDD Scenario

**Given**

- I have one or more accounts with ABC Bank

- the card is valid

**when**

I press the button to show the balance of my account(s)

**then**

for each account the balances are listed together with the remaining monthly limits for cash
withdrawal.

## Customer Uses Invalid Card BDD Scenario

**Given**

I have a card that is no longer valid

**when**

I insert this card into an ATM

**then**

- the ATM should tell me that the card is invalid

- the issuer of the card will be notified about the usage (cust-ID, time-stamp)

- the ATM should retain the card to be sent back to the issuer

  and the ATM should return to initial state.

## Get Amount of Money Currently Stored in ATM BDD Scenario

**Given**

I am logged in with the interface to manage ATMs

**when**

I select an ATM that is shown to me

**then**

the amount of money currently disposable at this ATM is shown together with other key indicators like 'health status', 'transactions today', 'amount disposed today' etc.

## Get List of ATMs <span style="color:gray">BDD Scenario</span>

### Given

I have the necessary access rights

### when

I log into the interface to manage ATMs with my credentials

### then

I get a list of all ATMs I am configured to get access.

## Get Status Overview of the ATMs <span style="color:gray">BDD Scenario</span>

### Given

I am logged in with the interface to manage ATMs

### when

the dashboard is loaded

### then

the overview of the ATMs shows the number of ATMs that are currently online or offline.

If there are any ATMs in a critical state, then additionally the most important indicators are listed for them i.e. temperatur, status of case, number of transactions today, time since last transaction, errors, and the remaining amount of cash.