ATM Machine Service - Assignment

This assignment is done using Java Spring boot framework. It uses maven as build tool. I have used in memory authentication for security. The server is configured to listen at port **8085**. All APIs would require basic auth with the account number to be passed in as username and pin to be passed in as password. During startup the application is initialised with below two account numbers and atm balances that were provided in the assignment.

* Account Number PIN Opening Balance Overdraft

123456789 1234 800 200

987654321 4321 1230 150

Initial ATM cash status : €1500 made up of 10 x €50s, 30 x €20s, 30 x €10s and 20 x €5s

I have exposed following APIs.

## Account Balance

This API is to retrieve the balance for the provided account number.

Sample URL : <http://localhost:8085/api/account/balance/123456789>

Authorisation details : Basic Auth : 123456789/1234

Input : <none>

Expected Sample Response::

{

"accountNumber": "123456789",

"balance": "800.00"

}

## Withdraw

This API is designed to withdraw money from the customers account.

Sample URL: <http://localhost:8085/api/account/withdraw>

Sample Input:

{

"account":"123456789",

"amount": 200

}

Expected Sample Response:

{

"notes": {

"Fifties": 4

},

"account": {

"accountNumber": "123456789",

"balance": 600,

"overdraftLimit": 200

},

"message": "SUCCESS"

}

## Deposit

This API is designed to add money to customer’s account balance.

Sample URL: http://localhost:8085/api/account/deposit

Sample Input:

{

"accountNumber":"123456789",

"balance": 200

}

Expected Sample Response::

{

"message": "SUCCESS"

}

## Atm Status

This API is designed to provide the cash status of the ATM.

Sample URL : <http://localhost:8085/api/atm>

Input: <none>

Expected Sample Response:

{

"cashRegister": {

"Fifties": 6,

"Twenties": 30,

"Tens": 30,

"Fives": 20

},

"totalCashAvailable": 1300.00,

"lowestCurrencyNoteAvailable": 5

}

## Atm Load Money

This API is designed to load cash into the ATM cash register.

Sample URL : http://localhost:8085/api/atm/load

Input:

{

"Fives": 20,

"Tens": 30,

"Twenties": 30,

"Fifties": 10

}

Expected Sample Response: SUCCESS