Extension 11: Credit Card

To support clients that go abroad we want to introduce a new product to the banking system: a Credit Card. The product details:

- In principle it can be seen as an additional bank account attached to a regular bank account, similar to a savings account, but with a few differences.

- A CreditCard must be requested. While the corresponding card should be created directly, it should not become active directly. For now assume that it becomes active the day after it has been requested.

- The CreditCard account has a default credit of 1000 euro's. The balance of this account can never drop below 0.

- At the first of each month, the credit on the account is restored to 1000. The money required for this is withdrawn from the regular bank account. In addition, at the first of each month a 5 euro credit card fee is withdrawn from the main account. These actions are performed without exception, even if this violates the overdraft limit of the bank account.

- The CreditCard account has it's own card. It is only possible to access this credit through this card. The number of the Credit Card should adhere to this standard: 5248 86XX XXXX XXXX[1]. You are free on how to generate these numbers and whether or not you implement the check digit.

- For simplicity we assume that the credit card must be used in the same way as a regular card. It requires a pin code to pay with it. It can be used to deposit money into the regular bank account, but not the credit account.

The methods involved:

- **requestCreditCard:** A new method to request a CreditCard. It should return the info of the card.

- **payFromAccountMethod:** This existing method should be updated to also support Credit Cards. A Credit Card distinguishes itself throught the card number.

- **closeAccount:** We want to update this existing method to support either a credit card account a savings account or the actual bank account.

- **closeSavingsAccount:** This method should be deprecated.

- **getBalance:** This existing method should be updated to also show the credit of an account when applicable.

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[1]https://www.creditcardvalidator.org/mastercard/mastercard-issued/524886

requestCreditCard method

Method requestCreditCard

Description Method that requests the opening of a credit account for a bank account.

Authentication REQUIRED (account)

Parameters This method accepts the following parameters:

authToken The authentication token, obtained with getAuthToken

iBAN The number of the bank account

Returns A dictionary containing the following members:

pinCard The number of the created pin card

pinCode The pin code of the created pin card

Errors InvalidParamValueError: One or more parameter has an invalid value. See message.
NotAuthorizedError: The authenticated user is not authorized to perform this action.

Example

```
--> {"method":"requestCreditCard",
        "params":{
            "authToken": "some.long.auth.token!%&...",
            "iBAN": "NL69INGB0123456789",
        }}
<-- {"result": {
        "pinCard": 1234,
        "pinCode": 1234,
      }}
```

closeAccount

Method closeAccount

Description Method to close a credit, savings or bank account. Also invalidates the corresponding card if required. A credit or savings account is closed by adding a 'C' or 'S' respectively to the end of the IBAN. A bank account can only be closed if it has no active credit or savings accounts. If this is the customers last bank account, it also closes the customer account.

Authentication REQUIRED (account)

Parameters This method accepts the following parameters:

authToken The authentication token, obtained with getAuthToken

iBAN The number of the bank account

Returns An empty dictionary if successful

Errors InvalidParamValueError: One or more parameter has an invalid value. See message.

NotAuthorizedError: The authenticated user is not authorized to perform this action.

Example

```
--> {"method":"closeAccount",
      "params":{
          "authToken": "some.long.auth.token!%&...",
          "iBAN": "NL69INGB0123456789",
      }}
<-- {"result": {}}
```