Extension 13: Child Bank Account

For this extension we ask that you implement a new type of bank account: A Child Bank Account. A Child Bank Account has a set of special properties:

- The primary Account Holder should be under 18.

- Requires at least 1 guardian who receives access to this bank account. A guardian must be 18+ and have an account at this bank.

- A Child Bank Account is a regular (checking) account and savings account in one, meaning it should be seen as a regular bank account on which interest is received.

- A special promotion because the Netherlands won the European cup this year: A child bank account has an interest rate of 2.017%.

- Maximum interest-bearing balance of a child bank account is 2500 euro's. Any amount above that value does not receive interest.

- A child bank account is not allowed to change the overdraft limit of 0 euro's.

- Account holder is not allowed to open an additional bank account. I.e. a child can only have one (child) bank account

- Account holder is now allowed to provide or revoke access to this account.

- Account holder is not allowed to request a CreditCard.

On the 18th birthday of the account holder this bank account becomes a regular bank account and the account holder becomes a regular account holder. Therefore a number of changes should be processed on this day.

- The access of all guardians is revoked. Only the account holder keeps access to this account.

- The interest up to this day should be calculated and deposited into the account.

- All other restrictions of the child-bank account are removed. The bank account should be as a newly opened bank-account with the balance of the child bank account with interest.

The main change to the protocol required for this extension is an update of the open account method. In addition to that requests of this account holder to perform accounts that are not allowed (i.e. revoke access of guardian) should result in a NotAllowed error.

openAccount method

Method openAccount

Description Open a bank account. This method also creates a CustomerAccount and PIN card for this account. Used to create both regular and child accounts.

Authentication (none)

Parameters This method accepts the following parameters:

name Customer name

surname Customer surname

initials Customer initials

dob Customer date of birth

ssn Customer SSN

address Customer address

telephoneNumber Customer telephoneNumber

email Customer email

username Customer username

password Customer password

type (optional) the type of bank account. By default this should be 'regular', but can also be 'child'

guardians (optional) An array of strings containing the usernames of the guardians of this account. If specified a minimum of 1.

Returns A dictionary containing the following members:

iBAN The number of the created bank account

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.

Example

```
--> {"method":"openAccount",
      "params":{
          "name": "Duck",
          "surname": "Kwek",
          "initials": "K",
          "dob": "2005-02-19",
          "ssn": "571376049",
          "address": "1313 Webfoot Walk, Duckburg",
          "telephoneNumber": "+316 12345679",
          "email": "kwek@gmail.com",
          "username": "ducky",
          "password": "80085",
          "type" : "child"
          "guardians": ["duckd", "daisyduck"]
      }}
<-- {"result": {
      "iBAN": "NL69INGB0123456789",
      "pinCard": 1234,
      "pinCode": 1234,
    }}
```