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Console Java programming

**BANKING APPLICATION**

ABC Développement - Du 12/11/2019 au 09/04/2020

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# GENERAL SPECIFICATIONS

## Introduction

The client asked us to create a banking application on a console interface. The user will have an access from an interface. This interface will allow him to create an account if he is not a client or to connect to his bank account if he is already a client.

## Account creation

If the customer creates a bank account, he’ll be asked to provide some identity information. The app will check if new clients are sponsored by another one. Finally, the client must do a deposit at the opening.

### Asked informations

The information requested to feed the customer file are:

* Last name
* First name
* Sex
* Date of birth
* Phone number
* Email address
* Address

### Sponsorship

The new customer can submit a sponsor name when he’ll create his account. This sponsor will receive an amount of 50 euros from the bank. He may receive an additional sum which will depend on the new customer’s deposit.

The sponsor account will be automatically added to the beneficiary list of the new client.

### First deposit

The new customer must do a first deposit with a minimum of 100 euros amount.

#### More than 500 euros

Above 500 euros placed, the customer will be offered 3% of the deposited amount. The bank also offers 1% of this amount to the sponsor if the new client is sponsored.

#### More than 1000 euros

Above 1000 euros placed, the customer will be offered 6% of the deposited amount. The bank also offers 2% of this amount to the sponsor if the new client is sponsored.

#### More than 5000 euros

Above 5000 euros placed, the customer will be offered 9% of the deposited amount. The bank also offers 4% of this amount to the sponsor if the new client is sponsored

## Customer account interface

### View and modify information

There will be a menu dedicated to viewing and changing information.

#### Check your account balance

The user will be able to check the balance of his bank account.

#### View and modify your overdraft authorization

The user will be able to view and modify his overdraft authorization. If the user is already overdrawn, he won’t be able to modify it.

#### Consult and modify your beneficiary list

The user will be able to view his beneficiaries in a list. He will be able to suppress someone of the list and to add another client.

#### View and modify personal information

The user will be able to view his personal information. He can modify his email, his phone number and his address.

### Monetary transactions

There will be a menu dedicated to the monetary transactions.

#### Deposit money

The user will be able to deposit money. His bank account will be updated and the new amount will be prompt.

#### Withdraw money

The user will be able to withdraw money. His bank account will be updated and the new amount will be prompt.

If the withdrawal results in an unauthorized overdraft, it will be refused. A message informing the user will be displayed about this.

#### Make a transfer

The customer can make a transfer to other accounts that he should have previously informed. He will have to do a choice in a list. If the transfer generates an unauthorized overdraft, it will be refused. A message informing the user will be displayed to this effect.

### Management operations

#### Open a savings account

This functionality will be implemented later.

#### Delete the account

The client can delete his account. He has to transfer or withdraw all his money before. There will be a double check by asking the user to write his password.

### Quit the account

This option is used to quit the account, maybe if you want to consult another account.

## Quit the program

This option ends the program.

This application is a first launch and should be as scalable as possible so as to implement future functionalities easily.

# FUNCTIONAL SPECIFICATIONS

# TECHNICAL SPECIFICATIONS

# organisation