

## **PROJECT 2 : BANK ATM**

**420-P16-AS**

### **Structured Programming**

**Title : Automatic Teller Machine ATM (weight 20 %)**

#### **Description :**

Write a program in console mode with the C ++ language that simulates Automatic banking transactions (an ATM).

Your application would ask the user to enter his account number, then his nip, after the verification of the last 2, it will propose the types of transaction (Deposit, Withdrawal and Consultation).

#### **Deposit :**

The program requests an amount that will be deposited in the customer's account balance (this amount must be between \$ 2 and \$ 20,000).

#### **Withdrawal :**

The program requests an amount that will be withdrawn from the customer's account balance, however the following conditions must be respected:

- the minimum amount to withdraw is \$ 20
- the amount must be a multiple of 20
- the maximum amount per withdrawal is \$ 500
- the amount must be less than the balance of the account

#### **Consultation :**

The program displays all the informations about the account.

This option is called after each transaction.

### **Technical Considerations**

Software: Visual Studio 2012++

Langage : C++

Data Structures : Structures, Array of structures, Fonctions, texte files.

The informations about the accounts are stored in a text file, when the program starts, the contents of the file will be read and stored in a array of structures. You will use this array to find the desired account and apply the transactions on it.

At the end of the program, the contents of the array will be overwrite into the text file.

```

C:\WINDOWS\system32\cmd.exe

BANQUE ROYALE
Guichet Automatique Bancaire

Entrez votre numero de compte : CP001
    Bienvenue Bill Gates
Entrez votre nip : windows

Choisir votre Transaction
    1 - Pour Deposer
    2 - Pour Retirer
    3 - Pour Consulter
Entrez votre choix (1-3) : 2

Entrez le montant a retirer $ : 200

--- la transaction a reussi ---

Les infos du compte
    Numero : CP001
    Client : Bill Gates
    Nip : windows
    Solde $ : 4000600

Merci d'avoir utiliser nos services
Appuyez sur une touche pour continuer...
  
```

PS) The example is in french, the display must be in french, your client is a french quebecois.

## Evaluation Grid

Fonctionalities	Points
Creation of structures and text files	10 points
Reading text file (10 pts), Inserting comptes in Array (20 pts)	10 pts 20 pts
Finding the account via number Displaying name and verifying pin.	10 pts 15 pts
Transaction Deposit	5 pts

Transaction Withdraw	10 pts
Transaction Consult	5 pts
Overwrite accounts and type of coding	10 pts