

**FINAL PROJECT**

**ADEO1 – Java course**

**Professor: Tahar Gherbi**



# ATM PROJECT

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## INTRODUCTION

Welcome to Nouveaux Riches bank's ATM application. In this paper, you will find all information you needed form installing and using the application. Nouveaux Riches bank's ATM is a computerized machine that allows clients to interact with us without cashiers. Clients can deposit money, withdraw cash, check their available balance, and money saving function. Moreover, it is free of charge's application for unlimited transaction and available in 24/24 hours.

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## PREPARATION

Please follow these instructions for installation:

Tools in used:

TOOLS		
NO.	NAME	DESCRIPTION
1	Java Platform (JDK 1.8.0)	Used to code
		
2	My SQL Workbench (database)	Used to store data
		
3	Microsoft Office Word 2016	Used to design document
		

## APPLICATION INSTALLATION INSTRUCTION

### **Software Requirement:**

Eclipse Java

My SQL Workbench 6.3 CE

### **Create database:**

1. Execute MySQL Workbench 6.3CE from your local window
2. Connect to default local database

(User : root & Localhost : 3306)

Note: No required password!!!

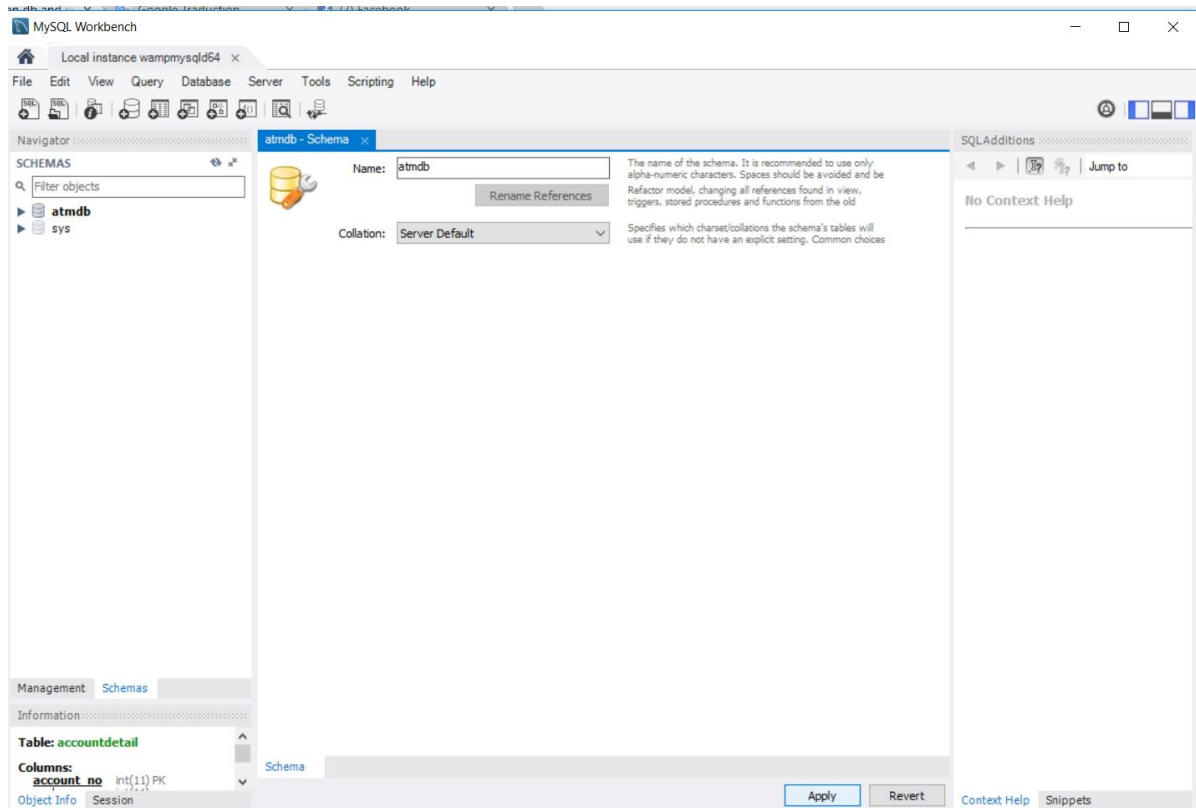
MySQL Connections ⊕ ⊖



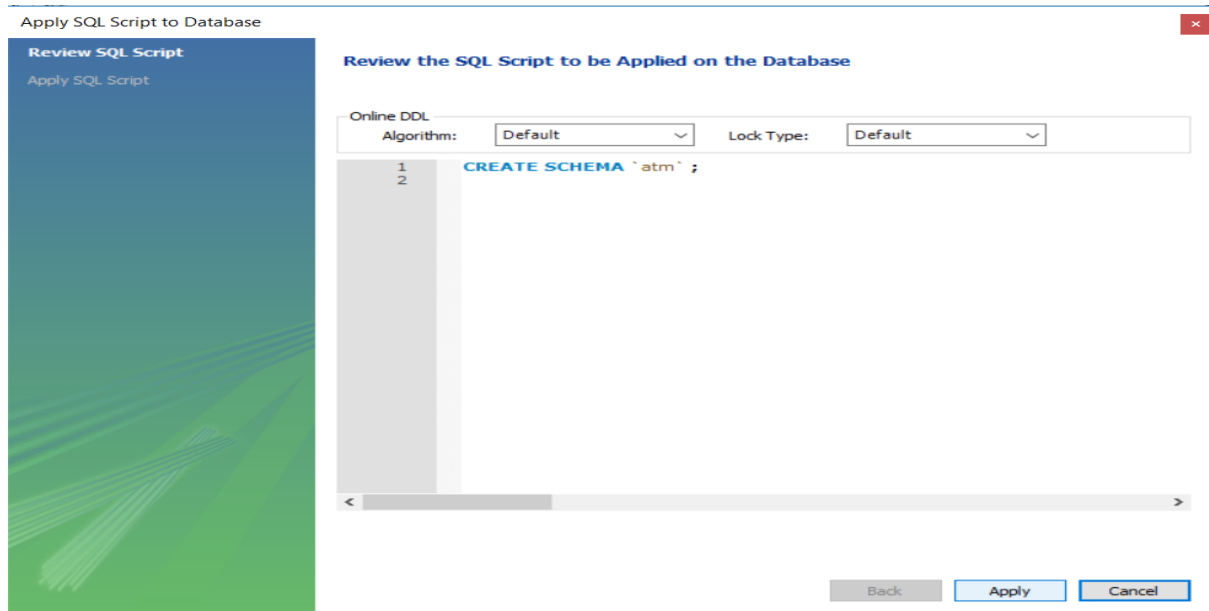
3. Create a new schema which named “atmdb” in your local connection server:

Choose icon: Schema

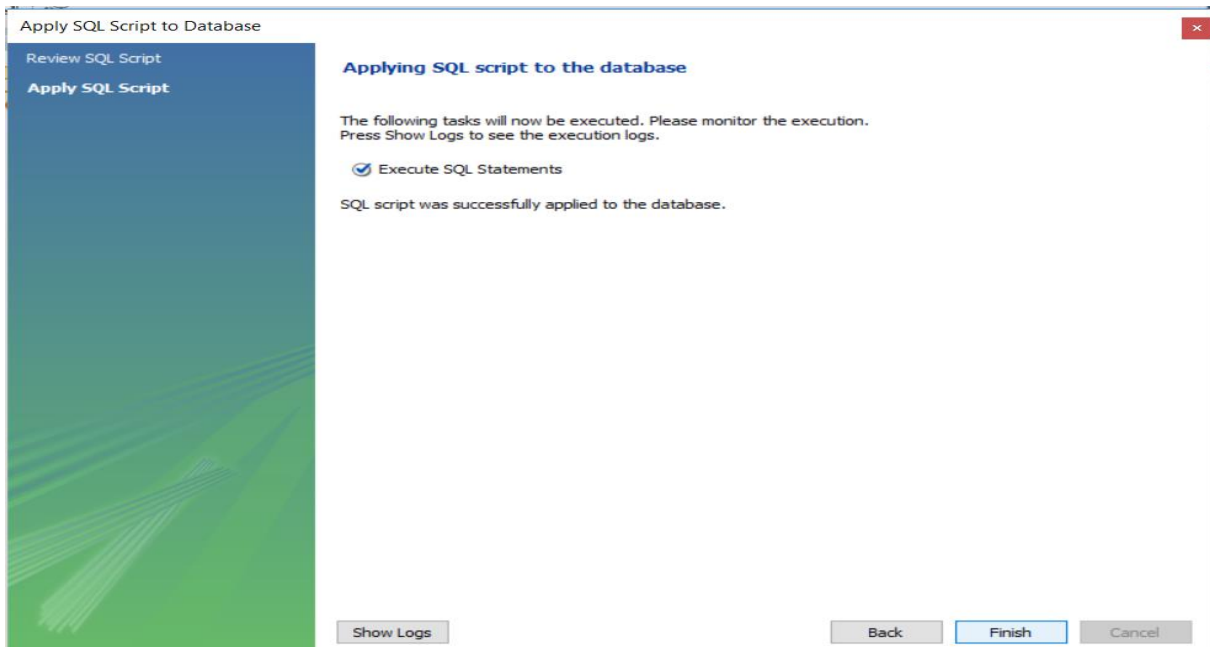
Type in Name: atmdb → click on Apply



Click on Apply (again)



Click on Finish



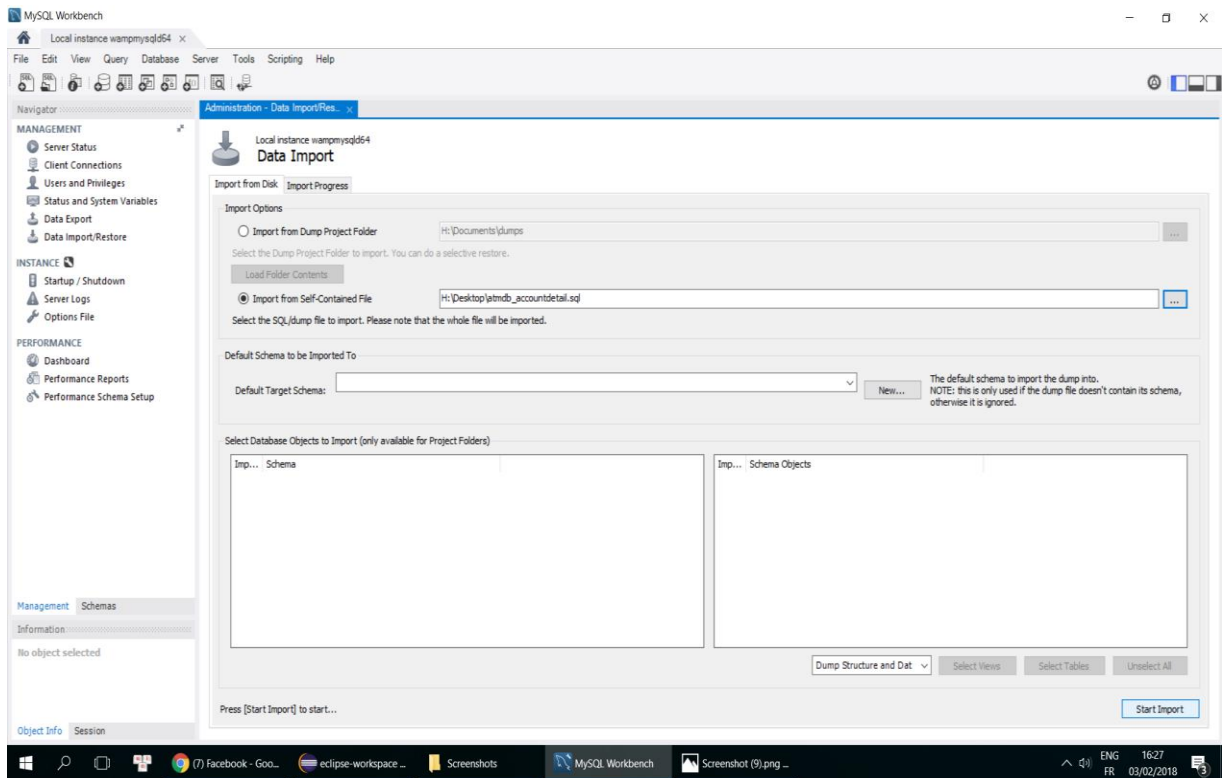
#### 4. Import sql file to your local “atmdb” database:

From Management → choose Data Import/Restore

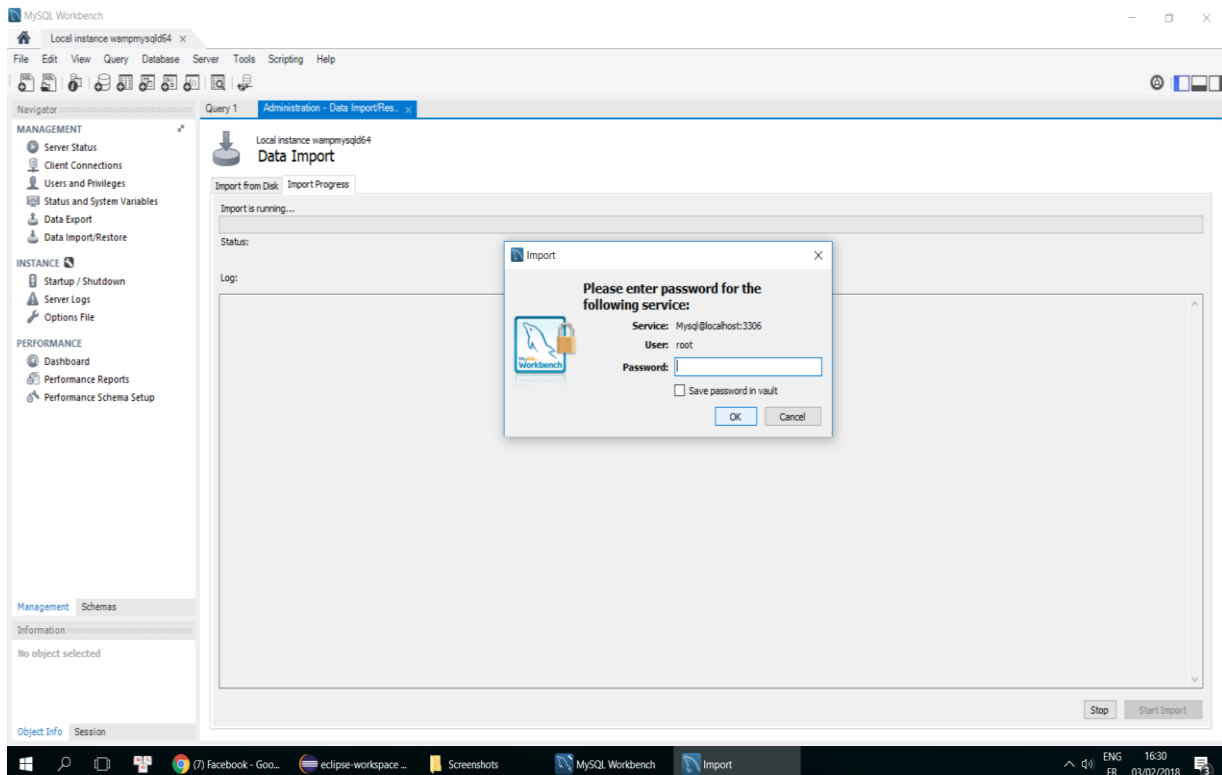
Choose Import from Self-Contained File → In the text field

Please type in your file path

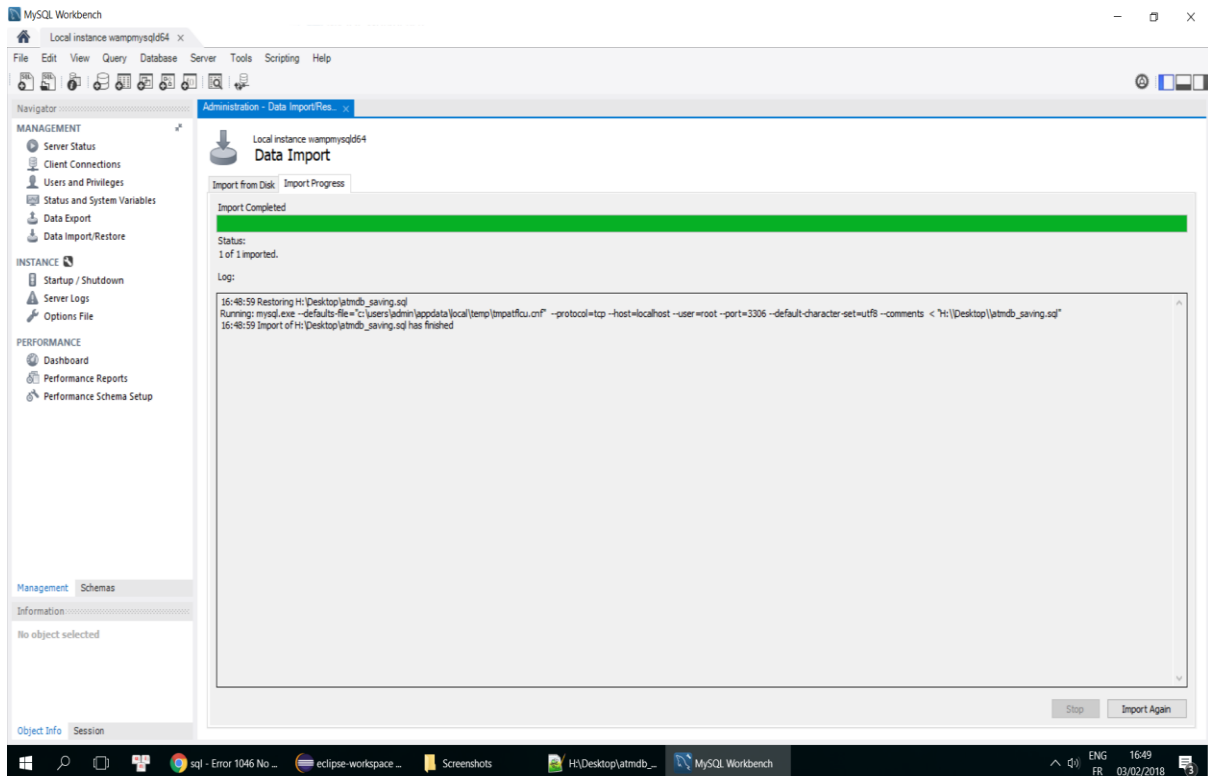
(My example: atmdb\_saving.sql in my desktop) → Click Start Import



No need to type in any password



As the picture, it is a successful import



Please repeat these process with two other files. At this step, you have successfully build up our database.

In case you want to test your database: Please file it in Database package.

### **Run program:**

Work with file \*.jar: Run ATM\_PROJECT.jar



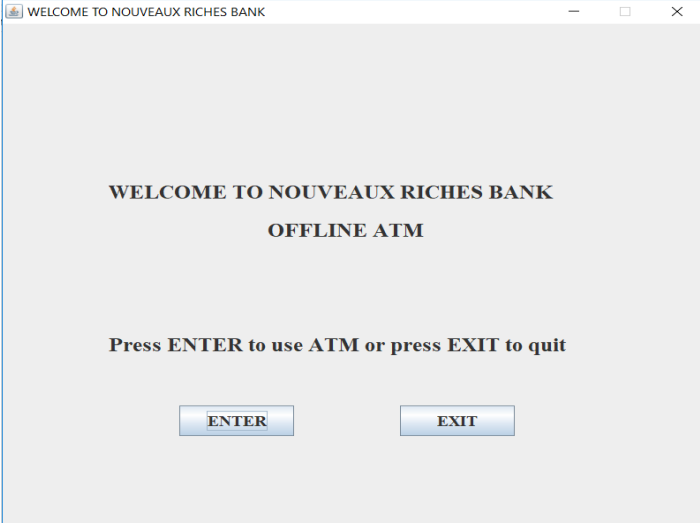
## Login interface:

### Welcome interface

Please choose Enter to Start

Or

Please choose Exit to end this transaction



WELCOME TO NOUVEAUX RICHES BANK  
OFFLINE ATM

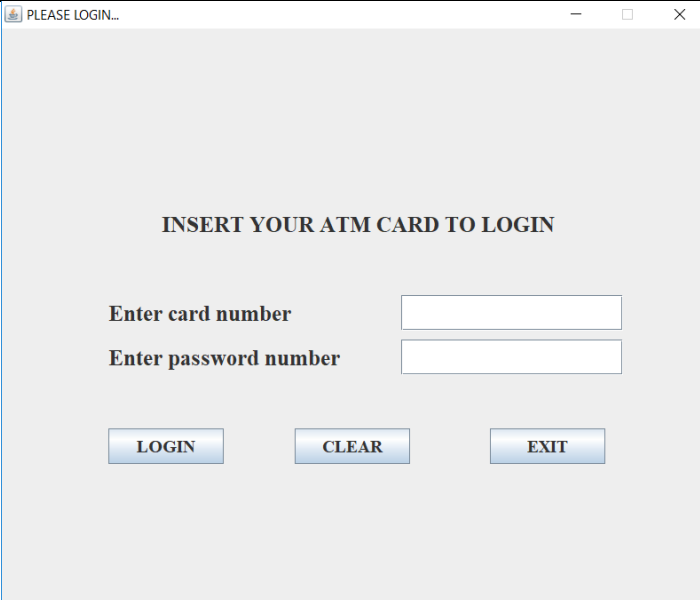
Press ENTER to use ATM or press EXIT to quit

ENTER EXIT

Please choose any account card\_no and password\_no below to start.  
Or you can make your new on in database

Mia/checking account: 1111& 1234  
Wills/saving account:8888 & 1234

	account_no	card_no	password_no	account_type	name	balance
	1111	1111	1234	checking	Mia	1000000
	6666	6666	1234	saving	Isabelle	0
	5555	5555	1234	saving	Julia	0
	4444	4444	1234	saving	Leo	0
	3333	3333	1234	checking	Wills	0
	2222	2222	1234	checking	Isabelle	0
	7777	7777	1234	saving	Mia	0
	8888	8888	1234	saving	Wills	1000000
	NULL	NULL	NULL	NULL	NULL	NULL



PLEASE LOGIN...

INSERT YOUR ATM CARD TO LOGIN

Enter card number

Enter password number

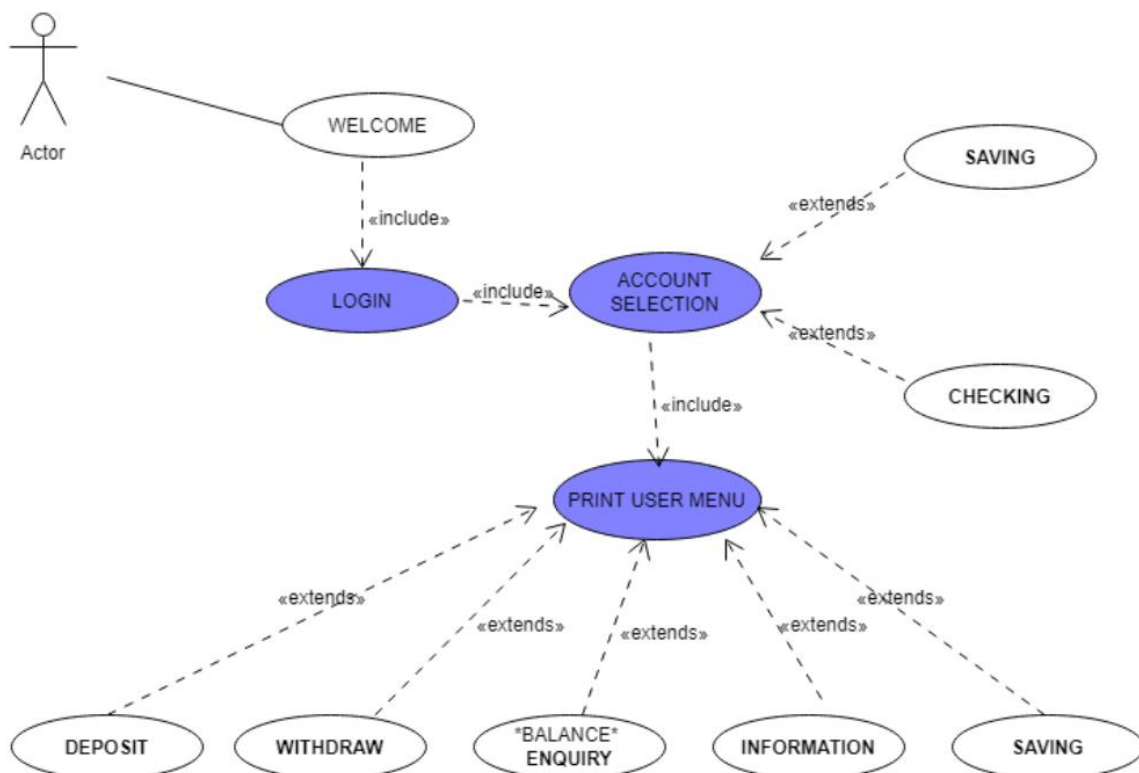
LOGIN CLEAR EXIT

## STRUCTURE

### 1. Use-case diagram:

Users activate Welcome interface, it is imperative to login for examining their card number and password number. After login interface, users are requested to choose either saving or checking account in the account selection interface. Next step, they interact with Transaction menu (print user menu), which contains functions: deposit, withdraw, balance enquiry, information and saving menu.

Picture 1 : Use case diagram

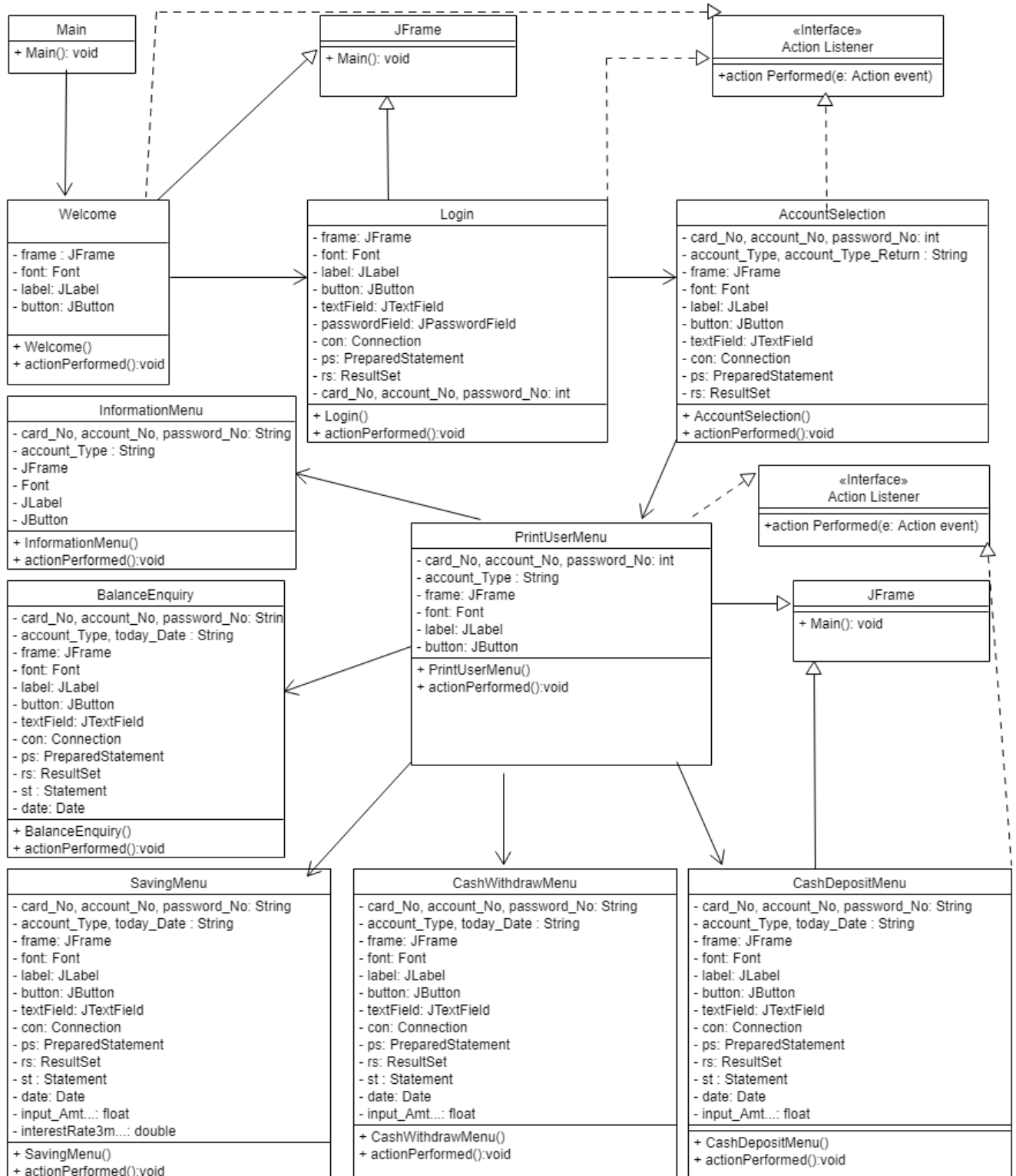


## 2. Class diagram:

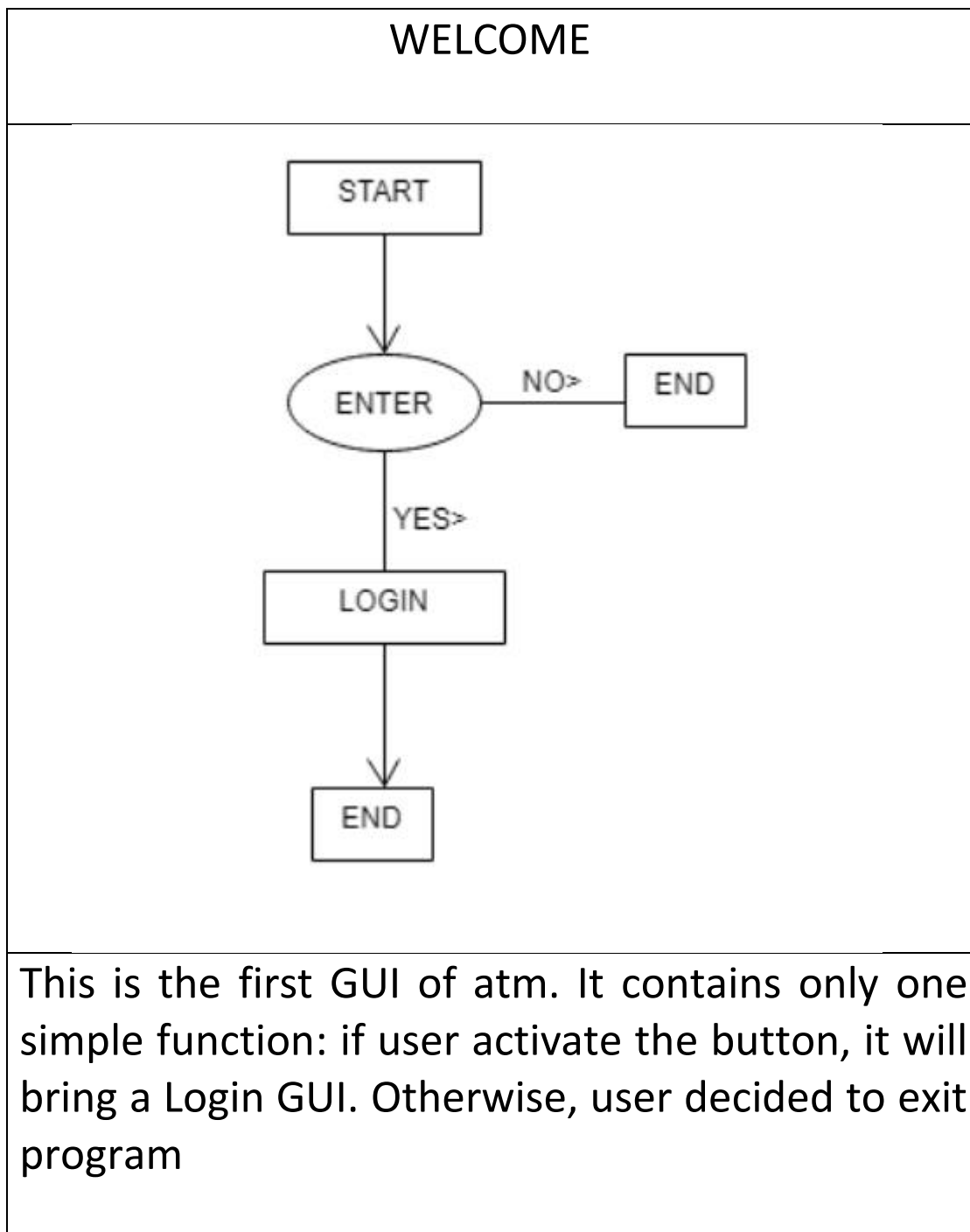
The goals of application are simple design, maximizing usability for the better user experience. Therefore, each functions are built in its own interface (all inhered from JFrame and implements ActionListener).

In order for better understanding of each and every functions, please refer to flow chart and GUI explanation, which comes after this section.

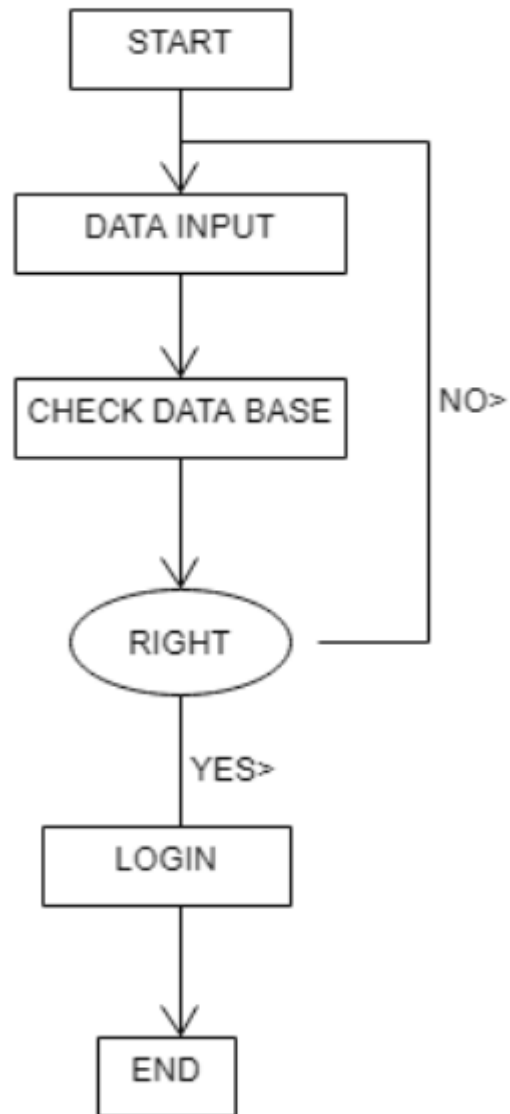
**Picture 2 : Class diagram**



### 3. Flow chart of each function:



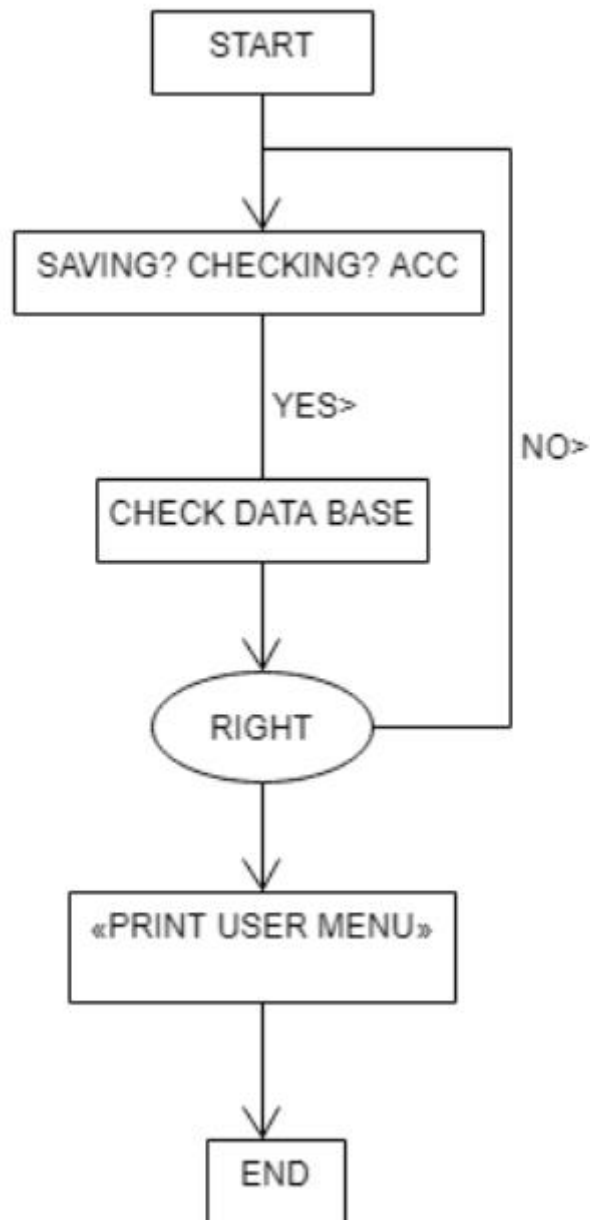
## LOGIN



Only when user's data inputs and database are matched, function will allow user to login and enter the system.

User' data is stored in the accountdetail table in the database.

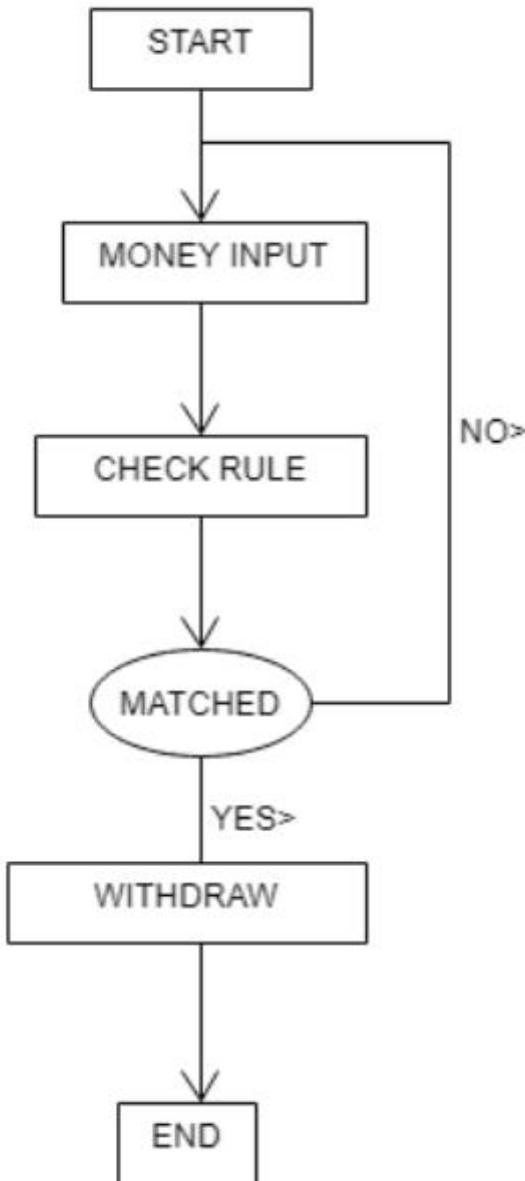
## ACCOUNT SELECTION



Only when user's chose account and database are matched, function will allow user to enter the system.

User' account information is also stored in the accountdetail table in the database

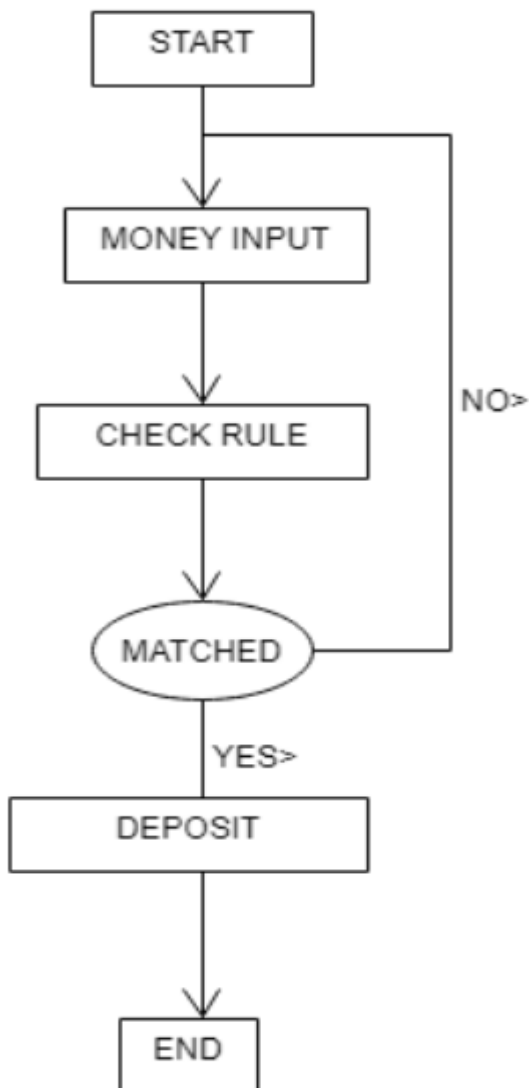
## WITHDRAW MECHANISIM



Withdraw allowed users to get money from their accounts. The user's input and information will examine through database. After, all information will be written in the transaction table in the database

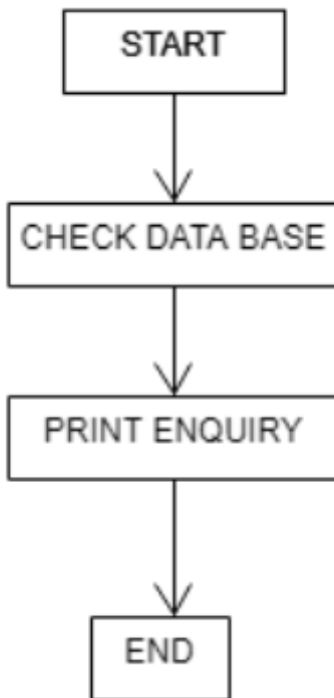


## DEPOSIT MECHANISIM



Similar to withdraw, deposit function allowed users to put money from their accounts. The user's input and information will examine through database. After, all information will be written in the transaction table in the database

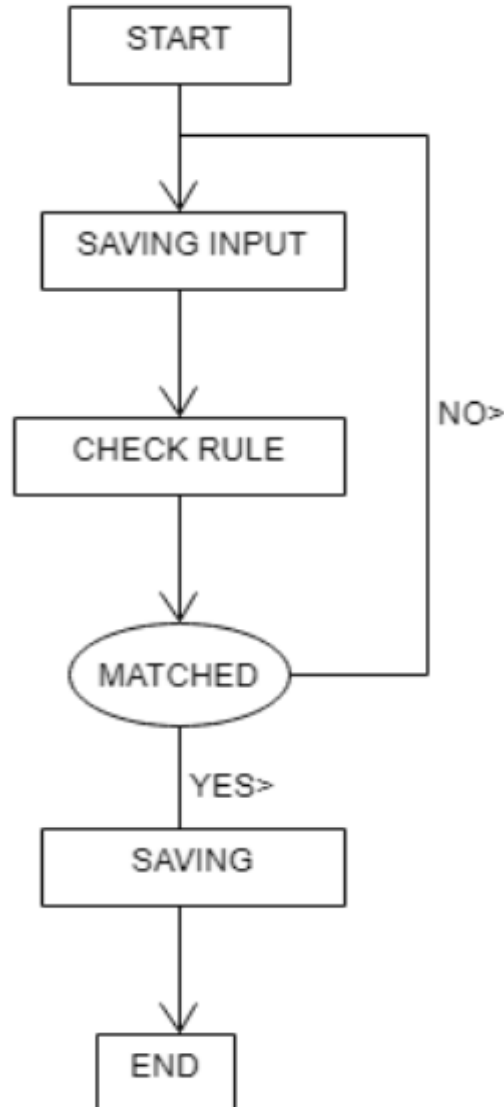
## BALANCE ENQUIRY



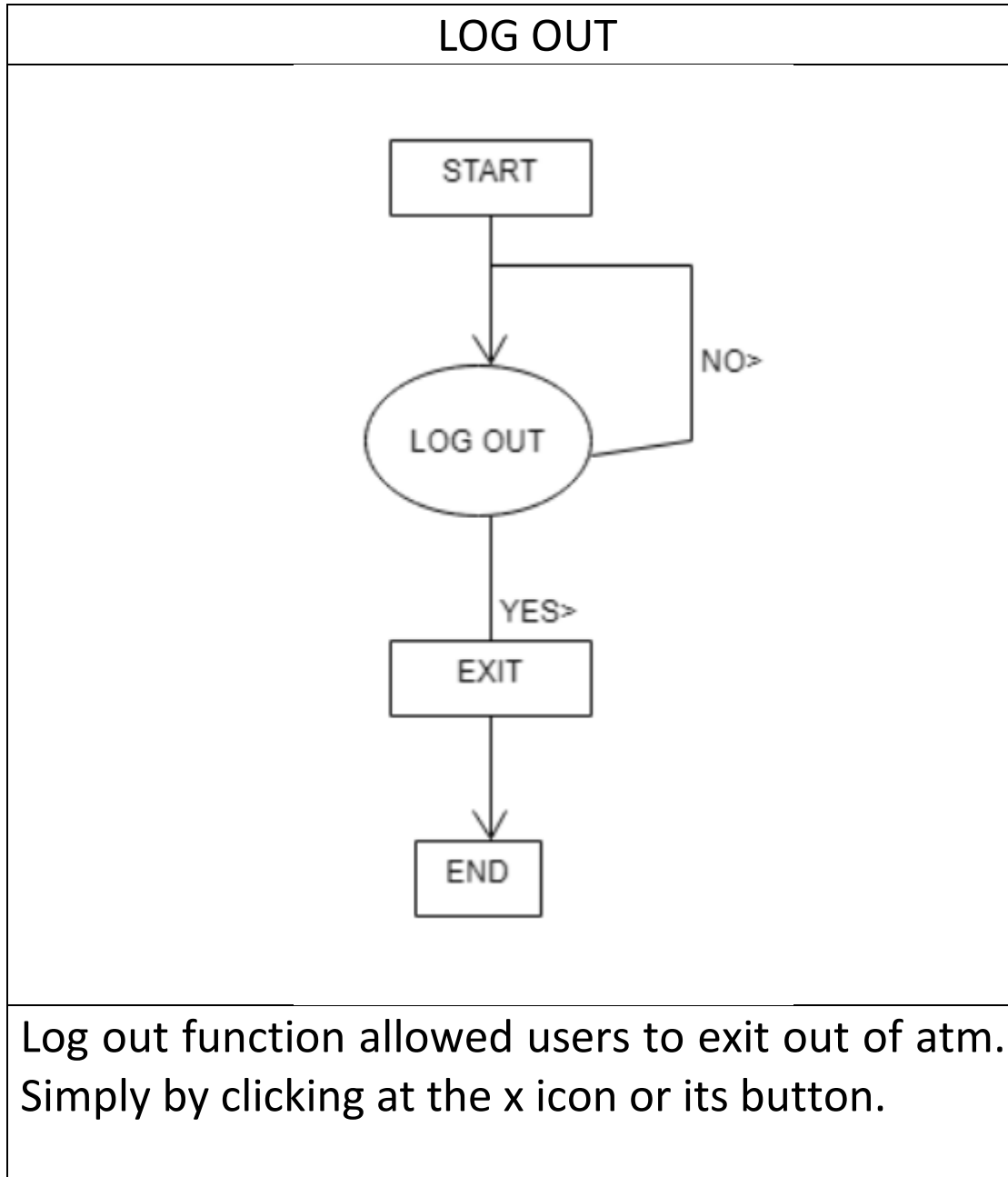
Balance enquiry will print out account information at the very specific checking time and date.

The account's information will examine through database.

## SAVING FUNCTION



Saving function allowed users to activate their saving contract only if holding a saving accounts. The user's input and information will examine through database. After, all information will be written in the saving table in the database



## DATABASE










































Explanation	Screenshot																																																																																
<p>Table accountdetail: contains clients and their account information</p> <p>Account number (primary key): 4 digits, type int</p> <p>Card number: 4 digits, type int</p> <p>Password: 4 digits, type int</p> <p>Account type: checking or saving, Type varchar</p> <p>Client name: type varchar</p> <p>Account balance: type float</p> <p><i>New client's creation can be done by insertion in this table!</i></p>	<div><div><div>Table Name: <input type="text" value="accountdetail"/> Schema: <b>atmdb</b></div><div>Collation: <input type="text" value="latin1 - default collation"/> Engine: <b>MyISAM</b></div><div>Comments: <div></div></div></div><table><thead><tr><th>Column Name</th><th>Datatype</th><th>PK</th><th>NN</th><th>UQ</th><th>B</th><th>UN</th><th>ZF</th><th>AI</th><th>G</th><th>Default/Expression</th></tr></thead><tbody><tr><td> account_no</td><td>INT(11)</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td></td></tr><tr><td> card_no</td><td>INT(11)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td></td></tr><tr><td> password_no</td><td>INT(11)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>'1234'</td></tr><tr><td> account_type</td><td>VARCHAR(45)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>'checking'</td></tr><tr><td> name</td><td>VARCHAR(45)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td></td></tr><tr><td> balance</td><td>FLOAT</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td>'0'</td></tr></tbody></table></div>	Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	Default/Expression	 account_no	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		 card_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		 password_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'1234'	 account_type	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'checking'	 name	VARCHAR(45)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		 balance	FLOAT	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'0'			
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<p>Table transaction: contains every successful deposit, withdraw transaction.</p> <p>Id (primary key): identifier number, Type int, auto incremental.</p> <p>Card number:</p> <p>Account number:</p> <p>Deposit amount: deposit money, type float</p> <p>Withdraw amount: withdraw money, type float</p> <p>Balance: account balance after its transaction</p> <p>Transaction date: keep track of date</p> <p><i>All information of this table will be automatic written as soon as successful transaction</i></p>	<div><div><div>Table Name: <input type="text" value="transaction"/></div><div>Collation: <input type="text" value="latin1 - default collation"/></div><div>Comments: <div></div></div></div><table><thead><tr><th>Column Name</th><th>Datatype</th><th>PK</th><th>NN</th><th>UQ</th><th>B</th><th>UN</th><th>ZF</th><th>AI</th><th>G</th></tr></thead><tbody><tr><td> id</td><td>INT(11)</td><td><input checked="" type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> card_no</td><td>INT(11)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> account_no</td><td>INT(11)</td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> deposit_amount</td><td>FLOAT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> withdraw_amount</td><td>FLOAT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> a_balance</td><td>FLOAT</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr><tr><td> trans_date</td><td>DATE</td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input type="checkbox"/></td></tr></tbody></table></div>	Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G	 id	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	 card_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 account_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 deposit_amount	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 withdraw_amount	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 a_balance	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 trans_date	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Table saving: contains every successful saving transaction

Id (primary key): identifier number, Type int, auto incremental.

Card number:

Account number:

saving amount: saving money, type float

Interest amount: interest money, type float

Balance: account balance for particular saving transaction

Transaction date: started date

End date: ended date

*All information of this table will be automatic written as soon as successful transaction*



Table Name: saving

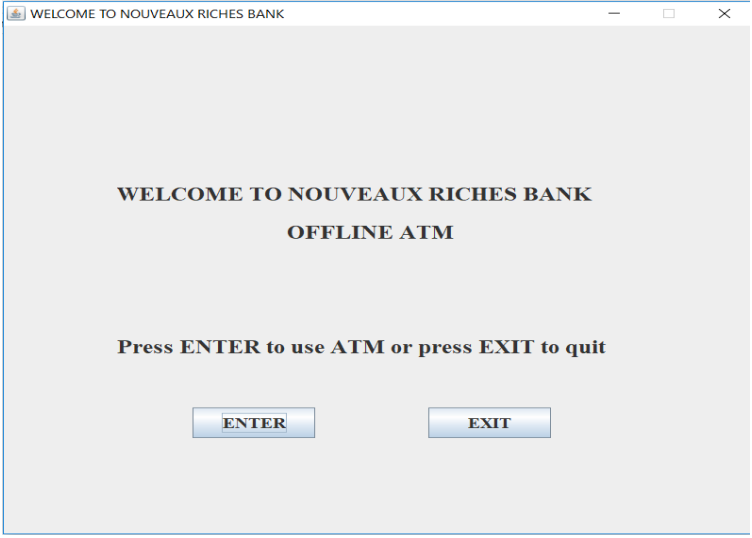
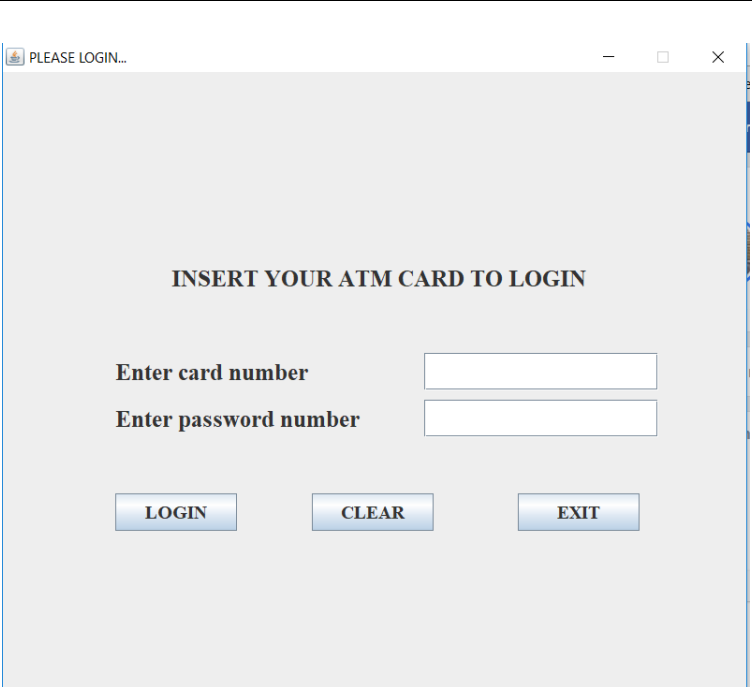
Collation: latin1 - default collation

Comments:

Column Name	Datatype	PK	NN	UQ	B	UN	ZF	AI	G
id	INT(11)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
card_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
account_no	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
saving_amount	INT(11)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
interest_amt	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a_balance	FLOAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
trans_date	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
end_date	DATE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## GUI (Graphic Users Interface)

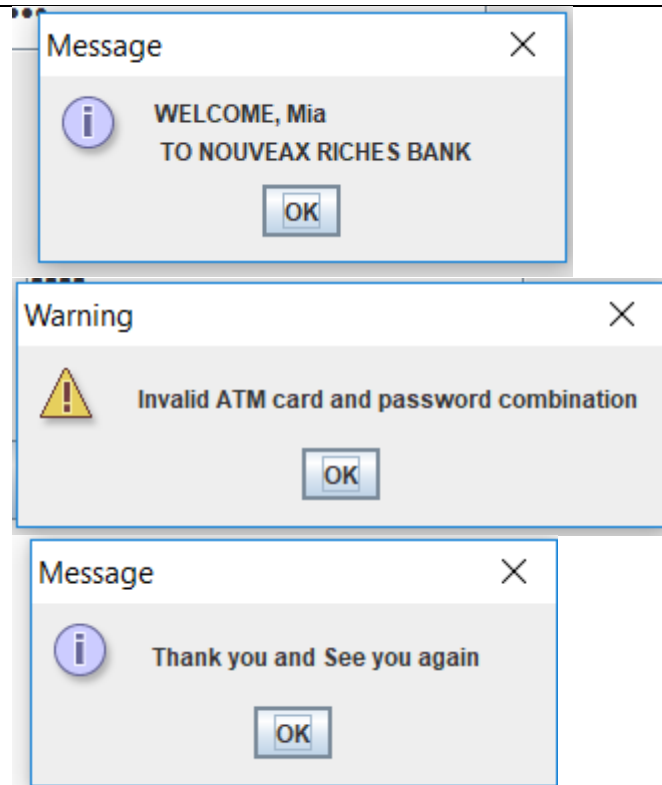
Our interface focus on maximizing usability, simple design for the better user experience. Apply this goal, each functions are built in their own GUI, be that, to make the user's interaction as simple and efficient as possible.

<p><b>WELCOME</b></p> <p>Title will be found at the left-top of the interface. The other side has icon "x" and "-" to direct close and minimize the interface.</p> <p>ENTER: enter button starts your experience, entering your next step LOGIN EXIT: exit button will end your experience</p> <p>It's not possible to resize the interface for consistent design and your better experience</p>	
<p><b>LOGIN</b></p> <p>Please input your card into the text field with instruction "Enter card number" and "Enter password number" in the below box.</p> <p>Card number and password number should be 4 digits' combination. For security reason, your input will be shown in 4 black points in the box.</p> <p>Click LOGIN to valid your input. Our program will compare your inputs with database to valid your login. You could only login with a correct combination of card and password number. If they are incorrect, default warning screen will pop up and request your correct combination</p>	

When your inputs are correct, welcome message with your name should pop up.

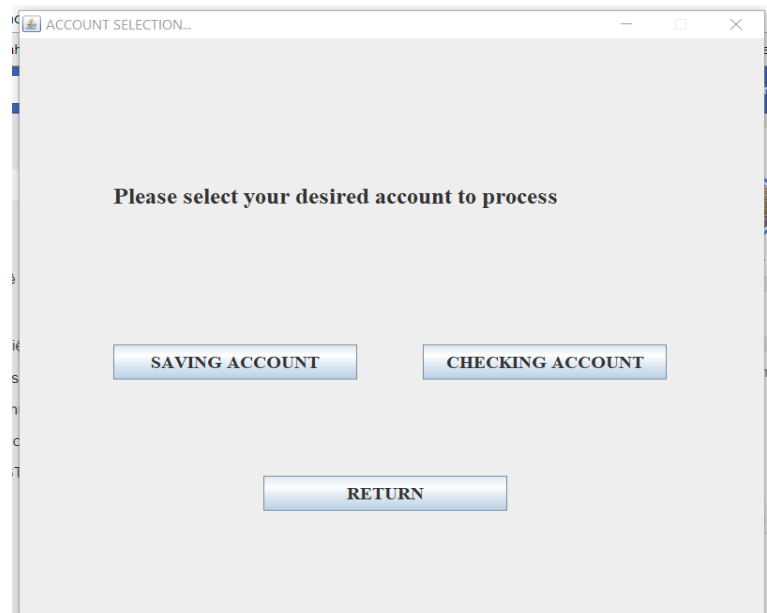
Click CLEAR to erase two box and re type in your information

Click EXIT to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.



## ACCOUNT SELECTION

Please choose either SAVING ACCOUNT or CHECKING ACCOUNT based on your holding card/account. Each card/account's number stands for either saving or checking account, therefore program will not allow you to choose both at this point.

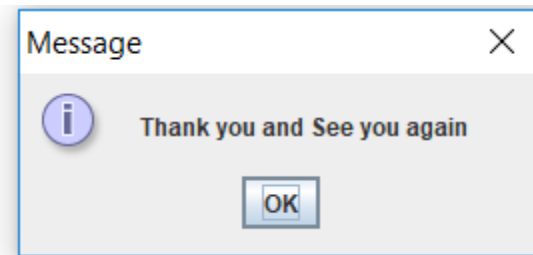
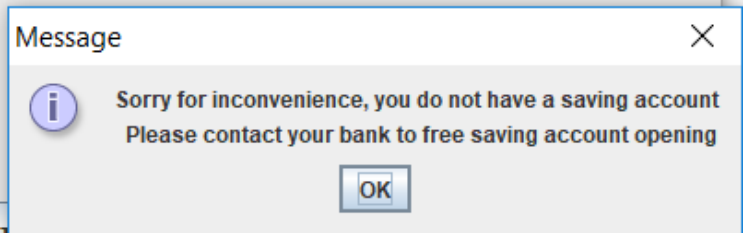




In case of mistaken chose, message should pop up to remind your situation and give advice to create another saving/checking account as your wish.

Click RETURN to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.

Otherwise, a correct account selection links to TRANSACTION MENU to continuous your experience.



## TRANSACTION MENU

At this step, transaction menu allows clients to choose any one of our services such as:

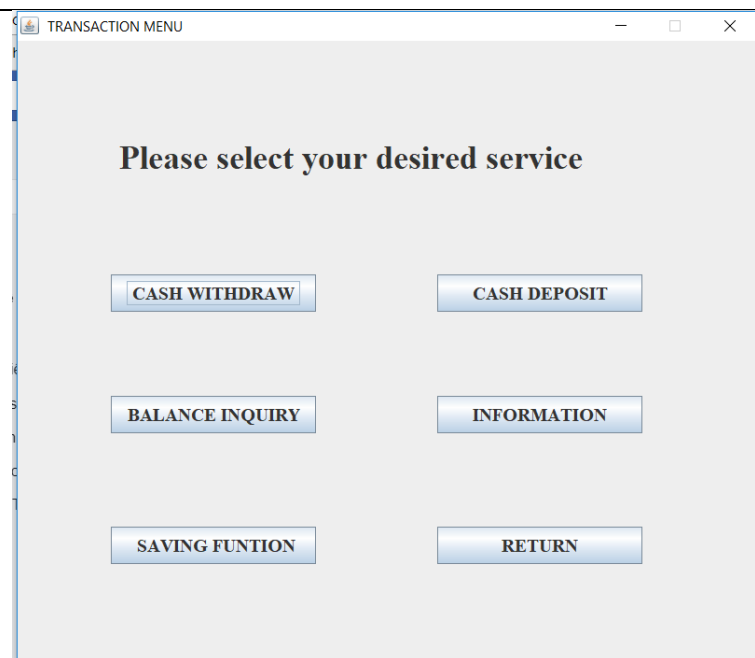
**CASH WITHDRAW:** withdraw money from client's saving or checking account

**CASH DEPOSIT:** deposit money to client's saving or checking account

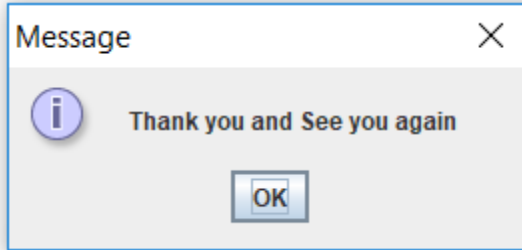
**BALANCE INQUIRY:** balance inquiry at this exact moment

**INFORMATION:** explain all function and our contacts for further supports

**SAVING FUNCTION:** make saving, be noted that it is only available for saving account holders



RETURN: to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.



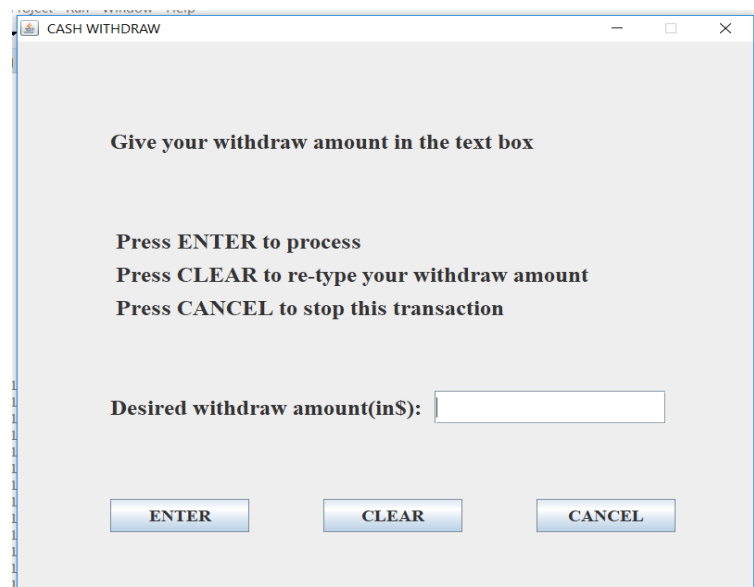
## CASH WITHDRAW

Function withdraw money from your holding account. Withdraw method is available for both saving and withdraw account. Please type in yours withdraw amount in the box

ENTER: valid your activity

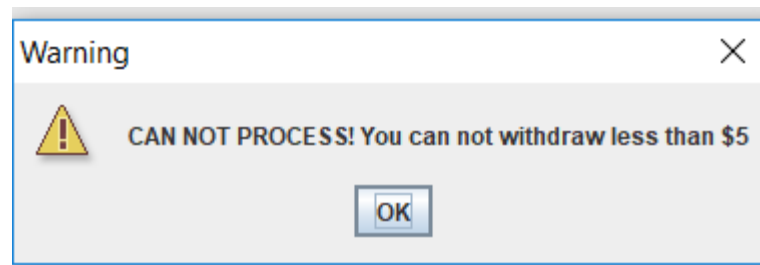
CLEAR: clear your input

CANCEL: exit withdraw function and return to WELCOME MENU

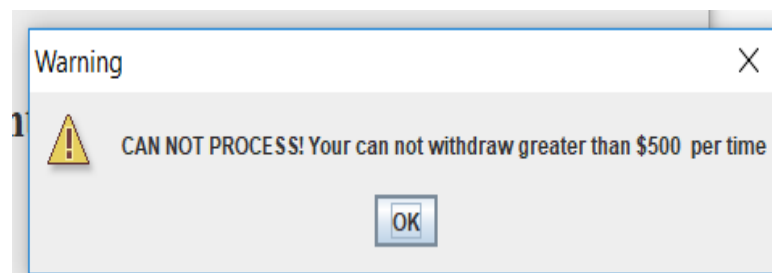


Withdraw rules:

Withdraw amount is not less than \$5, which is a smallest note  
In this case, program will throw a warning and requires your inputs



Withdraw amount is not greater than \$500, which is a largest note  
In this case, program will throw a warning and requires your inputs



Withdraw amount is not greater than \$1000/ per day, because of security reasons

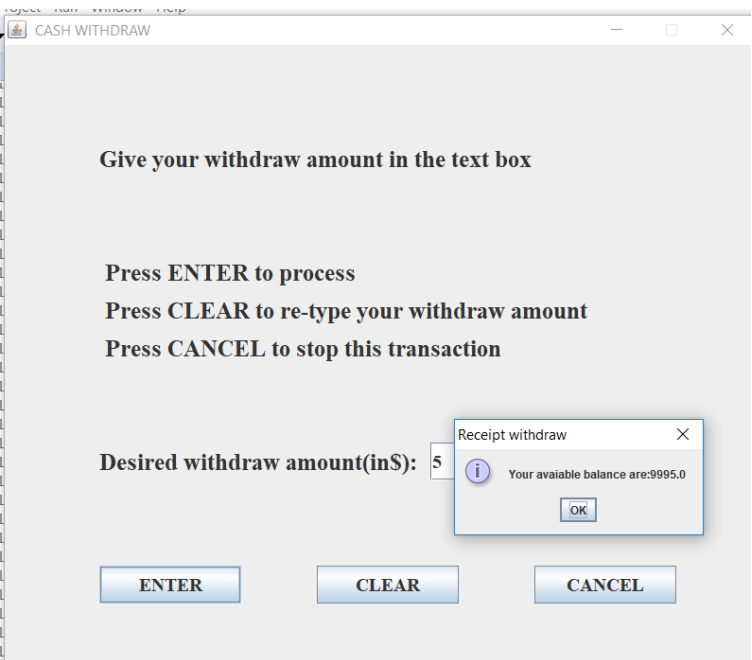
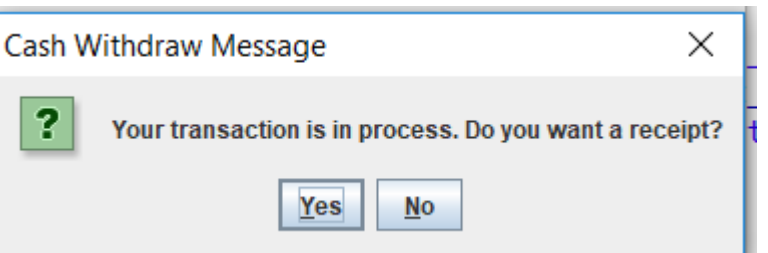
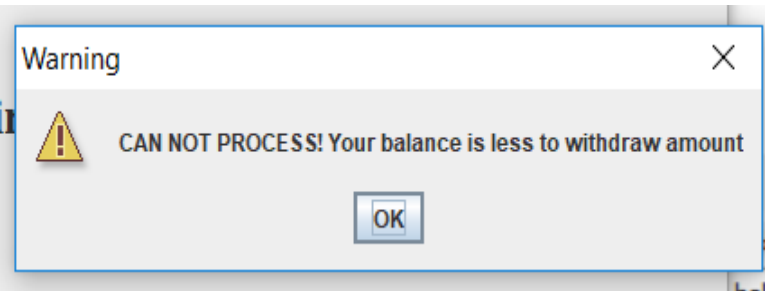
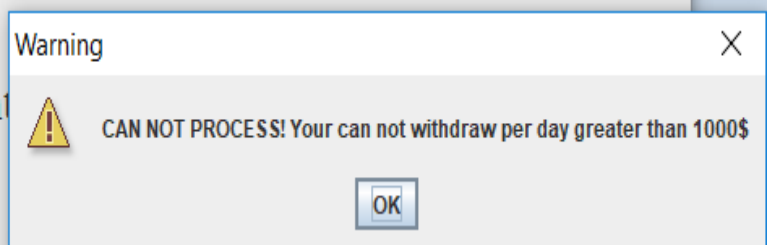
In this case, program will throw a warning. Please visit our recent branch for direct withdraw or come back to our ATM on the next days

Withdraw could not process if your current balance is smaller than \$20. Our bank required to keep minimum balance of \$20

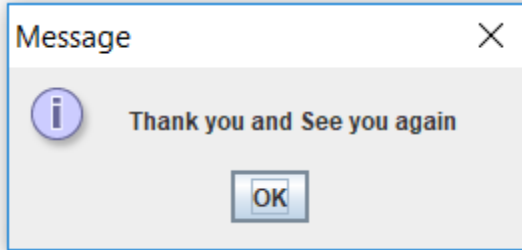
Since yours withdraw function has been processed. You will get a print receipt message.

Yes: print a receipt and you will see your total balance after your period withdraw

No: By default, program will lead you to your bank enquiry menu to view your information



RETURN: to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.



### CASH DEPOSIT

It is very much similar to withdraw function. It helps you to deposit money to your holding account. Deposit method is available for both saving and withdraw account. Please type in yours deposit amount in the box.

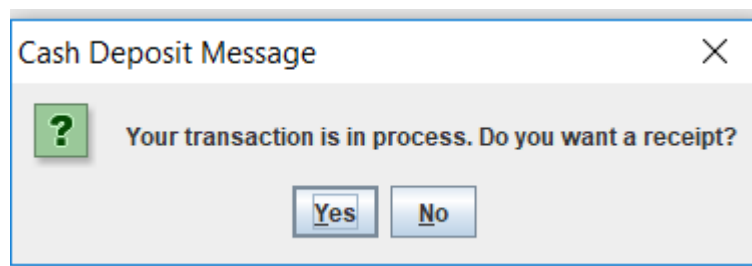
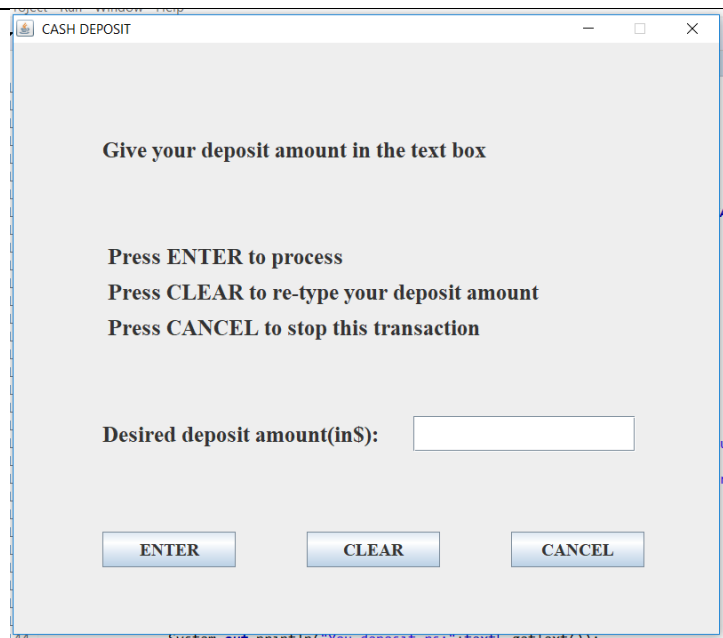
ENTER: valid your activity

CLEAR: clear your input

CANCEL: exit deposit function and return to WELCOME MENU

Deposit function does not contain any rule of amount of money. You can deposit as much cash as your wish

Since yours withdraw function has been processed. You will get a print receipt message.



Yes: print a receipt and you will see your total balance after your period withdraw

No: By default, program will lead you to your bank enquiry menu to view your information

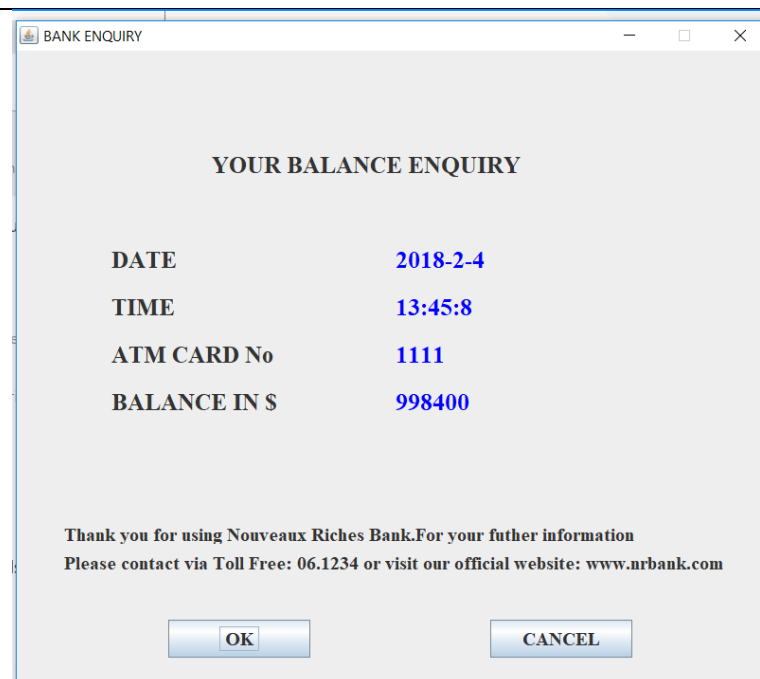
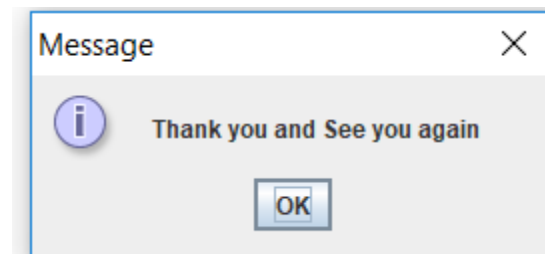
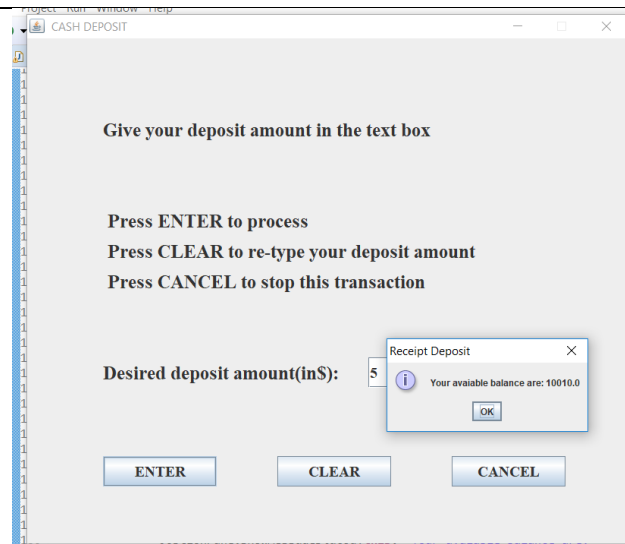
RETURN: to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.

#### BANK ENQUIRY:

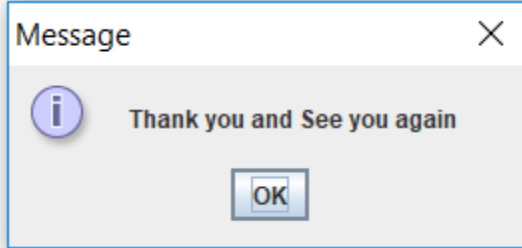
Function balance enquiry shows your account information such as: current balance of either checking or saving account, your card number, date and time of this enquiry

If you have any further request, please contact our free toll service.

OK: returns back to TRANSACTION MENU to continuous your other activities



CANCEL: to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.

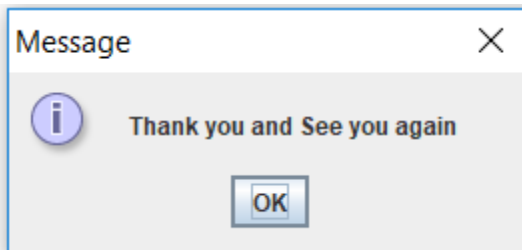
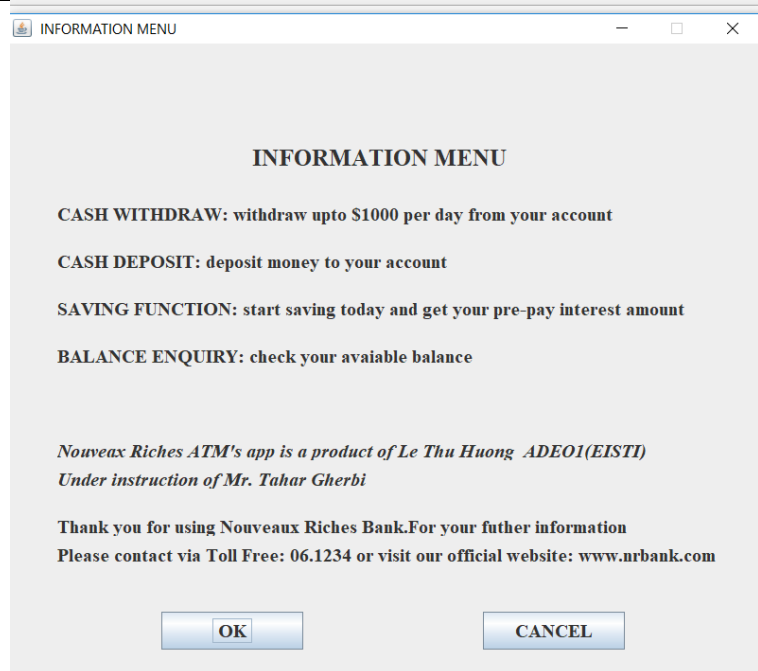


#### INFORMATION MENU:

Information menu brings a brief description of all our functions. It also introduces our toll free, website and address for your conveniences

OK: Return to TRANSACTION MENU

CANCEL: to end your experience. At this point, thank you message will pop up as our thankful and see you again in the next time.



## SAVING MENU

Saving menu: execute saving functions to active your saving contract intermediately. It provides 3 saving periods:

3 month saving with interest rate of 1.5% in total (3 months' period)

6 months saving with interest of 3.33% in total (6 months' period)

12 months saving with interest of 6.66% in total (one-year period)

Please input your saving amount in the box (accept integer only)

Please choose your saving period by clicking on 3MONTHS/ 6MONTHS/ 12MONTHS 's option

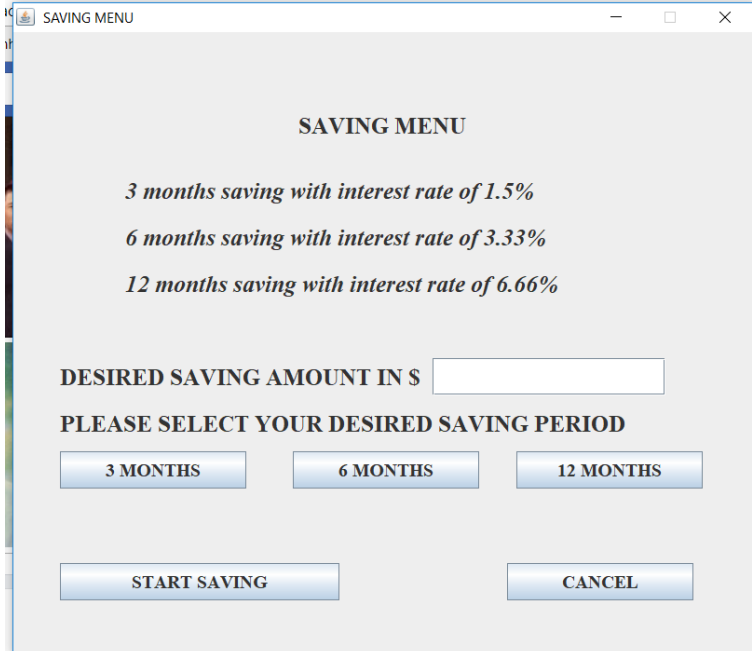
Click START SAVING to valid your selection

Click CANCEL to exit saving menu

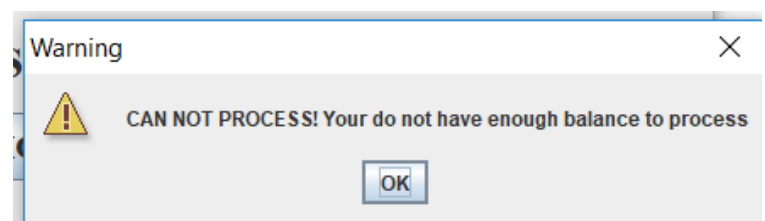
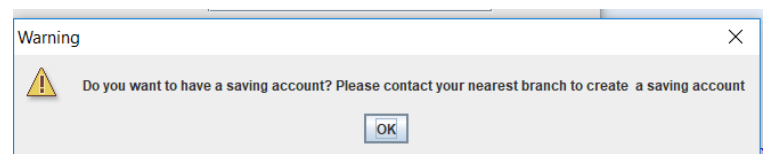
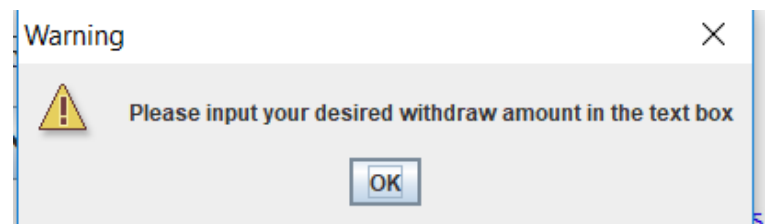
In case of no input, warning message of your saving amount input

In case of no saving account holding, warning message will pop up

In case of your input is greater than your available balance. Warning message will pop up and you are not allowed to activate a saving without existing balance



The screenshot shows a window titled "SAVING MENU". Inside, it lists three saving options: "3 months saving with interest rate of 1.5%", "6 months saving with interest rate of 3.33%", and "12 months saving with interest rate of 6.66%". Below this is a text input field labeled "DESIRED SAVING AMOUNT IN \$". Underneath the input field is the instruction "PLEASE SELECT YOUR DESIRED SAVING PERIOD". There are three buttons labeled "3 MONTHS", "6 MONTHS", and "12 MONTHS". At the bottom, there are two buttons: "START SAVING" and "CANCEL".



After successfully saving activities, you can receipt your saving receipt

YES: get a receipt

NO: go to bank enquiry to see your balance

3 months saving receipt sample

You had create saving (input amount) with interest (total interest)

Your saving account balance is (total balance) on the day ... (3 months later)

6 months saving receipt sample

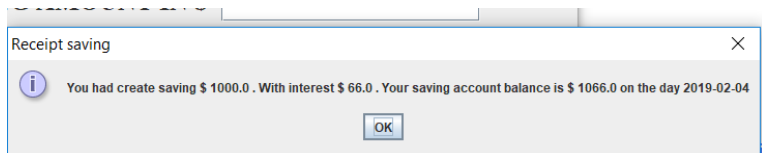
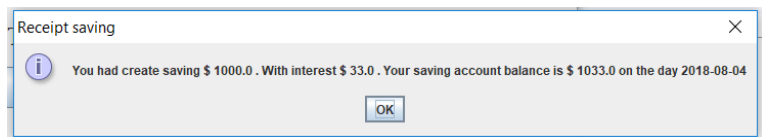
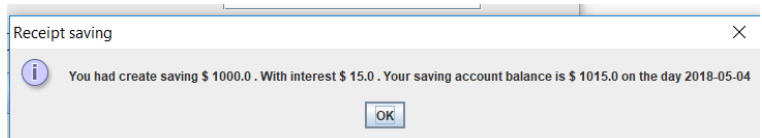
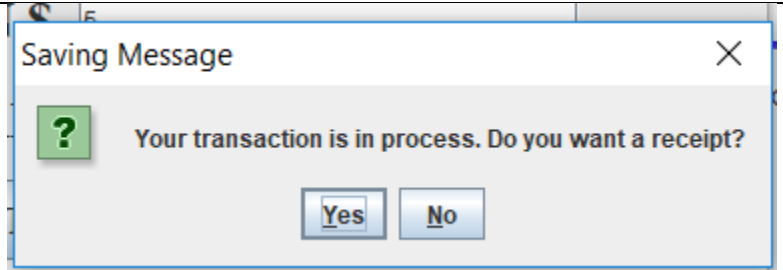
You had create saving (input amount) with interest (total interest)

Your saving account balance is (total balance) on the day ... (6 months later)

12 months saving receipt sample

You had create saving (input amount) with interest (total interest)

Your saving account balance is (total balance) on the day ... (12 months later)





## CONSLUSION

This project was considered as a study to approach knowledge and an examination to test my capability in developing enterprise project in the future. Thus, the application may not actually obtain the standard formation for a real-life machine. Therefore, I am expecting to receive more advices that help to improve the code, and provide a helpful and mechanisms of atm's application.

Thank you!

Regards,

LE Thu Huong