

Centre: FAT 3

131 Nơ Trang Long, Quận Bình Thạnh, TP.HCM

Design Document

ATM SYSTEM

Faculty: Lê Mộng Thúy

Batch No: F3-13-1312-T0

Group No: 2

Students:

Full Name	Roll No
Nguyễn Cảnh Khánh Trình (Leader)	Student780645
Lương Tấn Chức	Student777751
Trần Duy Anh	Student784400
Trần Minh Phát	Student812170

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REVIEW 1

1. Problem Definition

1.1 Reasons for choosing project:

ATM or automatic teller machine, nowadays has become a important part of financial transactions.

In the past, when ATM was not existed, a lot of financial transactions used to be done manually with many complicated steps and waste a large amount of papers. Therefore, it increased the cost: employees cost, maintaining cost... Besides, because of that cumbersome system, there were some mistakes in data. Those mistakes usually costs a lot of money to be fixed.

To avoiding wasting money and time, banks and financial companys have come to the final resolve. It is the birth of ATM.

The appearance of this comfortable machine needs a accessible and effective management system. According to this basis, our group choose the topic “ATM System”, with a desire to bring a safe, convenient system to user.

1.2 Customer Requirement Specification:

- For Manager:
 - + Allow Admin to add, edit, delete, activate, lock Client.
 - + Confirm deposit operation by the user.
 - + Change user password.
 - + View information, transaction history of users.
 - + Add, edit, delete ATMs.
 - + View report transactions (deposit, withdrawal, transfer) of a day.
 - + View daily, monthly or annually statistics.
- For Client:
 - + Withdrawal.
 - + Deposit.
 - + Transfer.
 - + View balances, transaction history of 5 latest times.
 - + Change Password.

2. System Requirements:

2.1 Hardware Requirements:

- + Processor 1.5Ghz Celeron or higher.
- + 256MB RAM or higher.

2.2 Software Requirements:

- + Java Virtual Machine
- + Notepad/Java editor
- + j2sdk1.7 (or later).
- + SQL Server 2012 (or newer).

3. System functions

3.1 For Manager:

- Login.
- Customer Management.
- View statistics, transaction history.
- ATM manager.

3.2 For Client:

- Log in, change password.
- Transactions: Cash withdrawal, deposit, transfer, statement printing.

4. Inputs provided by the application

4.1 Client Account:

- Account Number: Only includes digits, 9 digits and is not duplicated.
- FullName: Only includes characters and spaces.
- Date of birth: Age is greater than 18.
- Identity card number: Only includes digits, 9 digits.
- Address: Not blank.
- Phone Number: From 9 to 11 digits.

- Email: Valid and unique.
- Gender: Male or Female.

4.2 ATM Card:

- ATM Card ID: From 5 to 7 digits.
- Pin: 4 digits.
- Time Limit: Greater than the current date.

4.3 ATM:

- Name: Only includes characters and spaces.
- Location: Only includes characters, digits and spaces

4.4 Manager:

- UserName: Only includes characters and digits.
- Password: Not blank.
- Role: Role is selected in the combo box.

4.5 Withdrawal:

- The money: Only includes digits.

4.6 Deposit:

- The money: Only includes digits.

4.7 Transfer:

- The money: Only includes digits.
- Account Number: Only includes digits, 9 digits.

4.8 Change Password:

- Current password: 4 digits.
- New password: 4 digits.
- Confirm Password: 4 digits.

5. Process involved in the application

- Login validation.
- Data input validation.

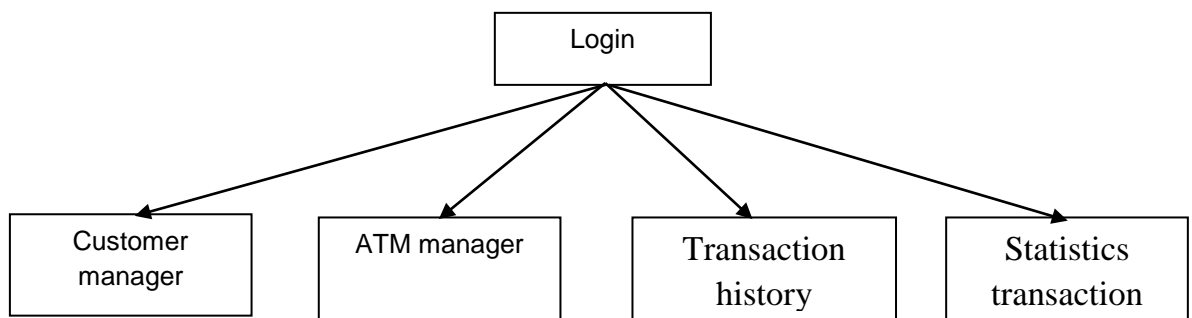
- Request Processing Cycle
- The response to the request creator.
- Close request.

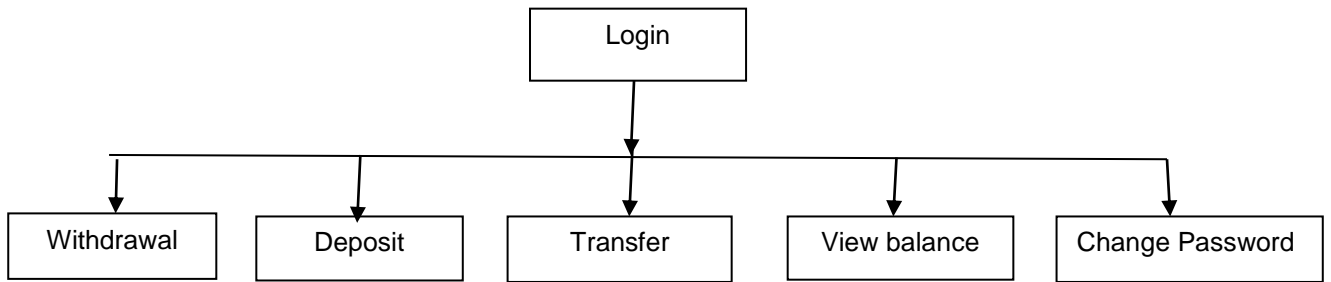
6. Outputs provided by the application

- Customer detail.
- ATM detail.
- Transaction history of users.
- Statistics transaction of user.

7. Diagram function.

7.1 The functions of the administrator:



7.2 User functions:

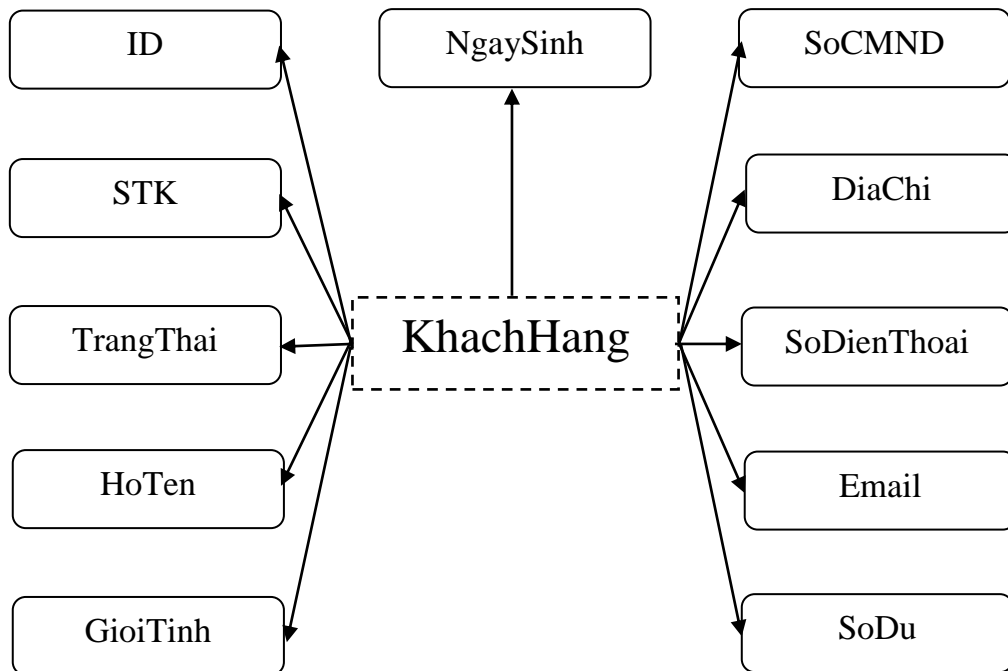
8. Task Sheet

Members		Task	Date		Status
No	Full Name		Start Date	Date Finish	
1.	Nguyễn Cảnh Khánh Trình	Together	06-08-2014	10-08-2014	Completed
2.	Trần Duy Anh	Together			Completed
3.	Lương Tấn Chức	Together			Completed
4.	Trần Minh Phát	Together			Completed
Leader			Faculty		
Nguyễn Cảnh Khánh Trình			Lê Mộng Thúy		

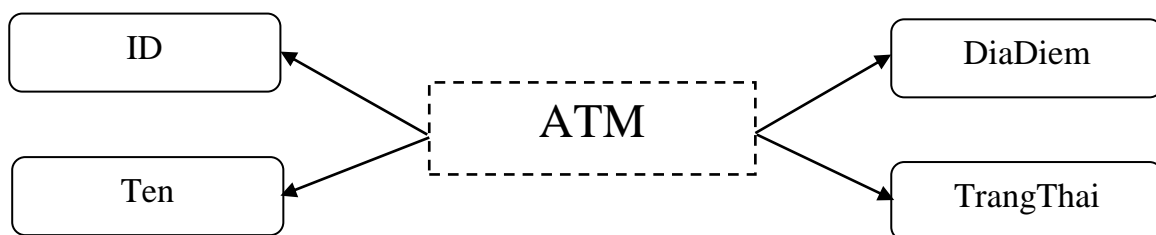
REVIEW 2

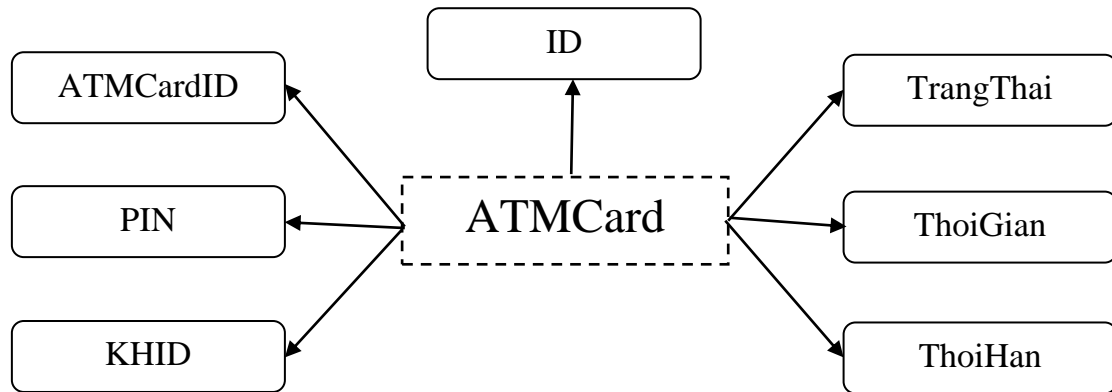
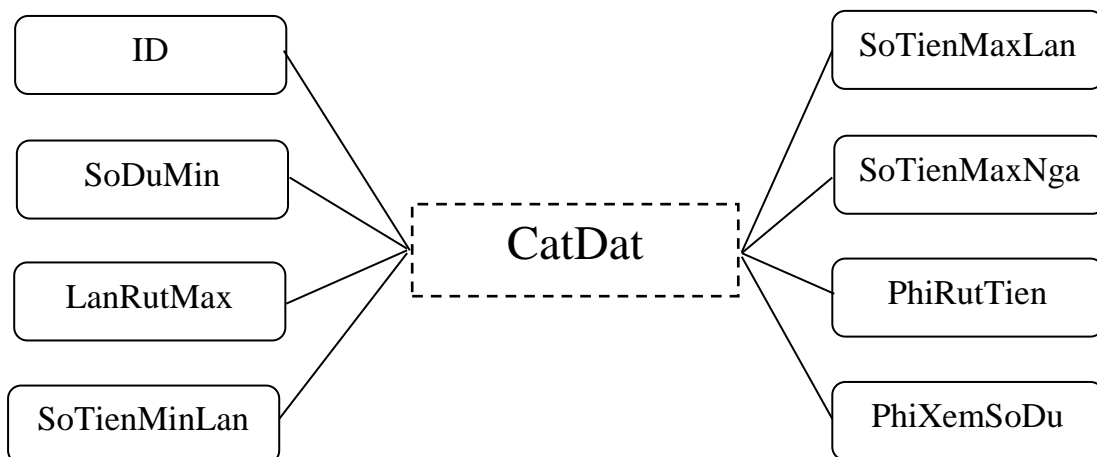
1. Entity description

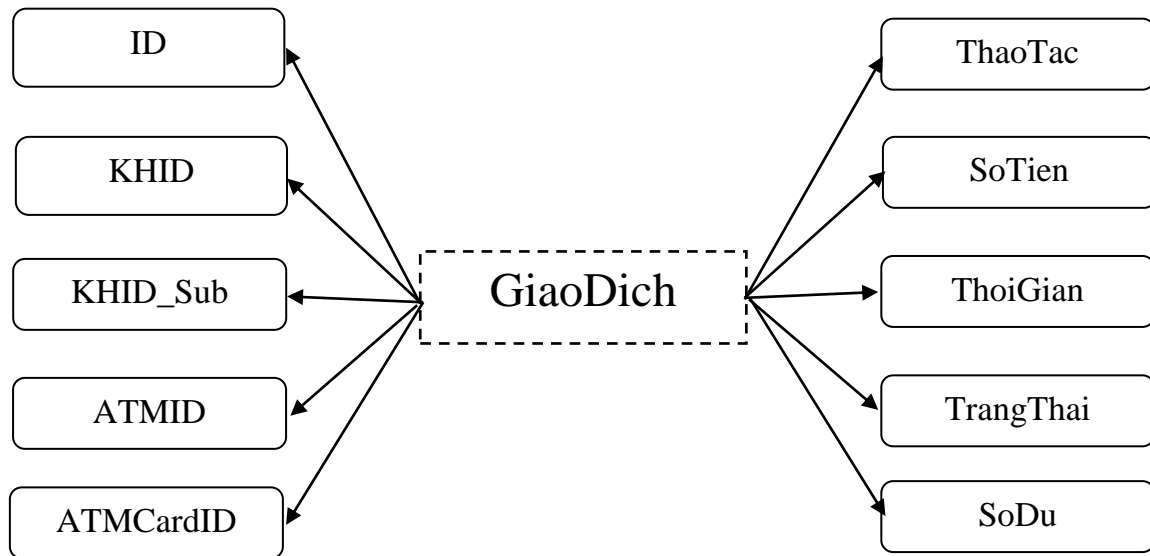
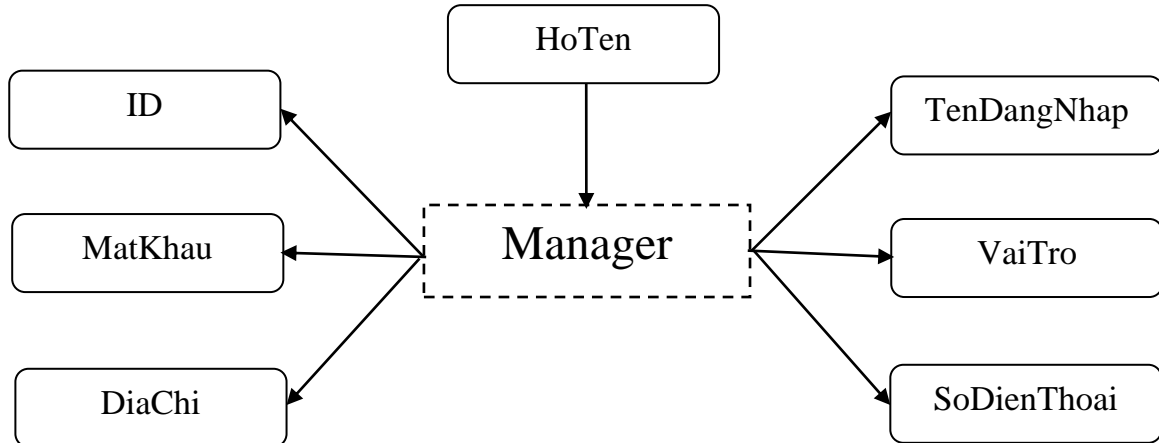
1.1 *KhachHang* entity:



1.2 *ATM* entity:



1.3 ATMCARD entity:*1.4 CaiDat entity:*

1.5 GiaoDich entity:*1.6 Manager entity:*

2. Database Design / Structure.

2.1 Table *KhachHang*:

Table <i>KhachHang</i>			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	ID	Int	Customer ID
Not Null, Unique	STK	Varchar(9)	Account number
Not Null	HoTen	Nvarchar(200)	Full name
Not Null	DiaChi	Nvarchar(200)	Address
Not Null	Email	Varchar(100)	Email
Not Null	SoDienThoai	Varchar(11)	Mobile number
Not Null	GioiTinh	Bit	Gender (Male or Female)
Not Null	TrangThai	Bit	Status (Active or lock)
Not Null	SoDu	BigInt	Balance
Not Null	NgaySinh	DateTime	Date of birth
Not Null	SoCMND	Varchar(9)	Number of identity card

2.2 Table ATM:

Table ATM			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	<u>ID</u>	Int	ATM ID.
Not Null	Ten	NVarchar(100)	Name
Not Null	DiaDiem	NVarchar(200)	Location
Not Null	TrangThai	Bit	Status (Active or Lock)

2.3 Table CaiDat:

Table CaiDat			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	<u>ID</u>	Int	Install ID.
Not Null	SoDuMin	BigInt	Minimum balance in each account.
Not Null	LanRutMax	Int	The maximum number of withdrawals of the day.
Not Null	SoTienMinLan	BigInt	Minimum amount of a withdrawal
Not Null	SoTienMaxLan	BigInt	Maximum amount of a withdrawal
Not Null	SoTienMaxNgay	BigInt	The maximum amount can be withdrawn in one day.
Not Null	PhiRutTien	BigInt	Fees withdrawals.

Not Null	PhiXemSoDu	BigInt	Fees view Balance.
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2.4 Table ATMCARD:

Table ATMCARD			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	<u>ID</u>	Int	ATM Card ID.
Not Null, Unique	ATMCardID	Int	ATM Card ID.
Not Null	PIN	Int	Password for login ATM
Not Null, Foreign Key KhachHang(ID)	KHID	Int	Customer ID
Not Null	ThoiGian	DateTime	Creation time
Not Null	ThoiHan	DateTime	End time
Not Null	TrangThai	Bit	Status (Lock or Active)

2.5 Table Manager:

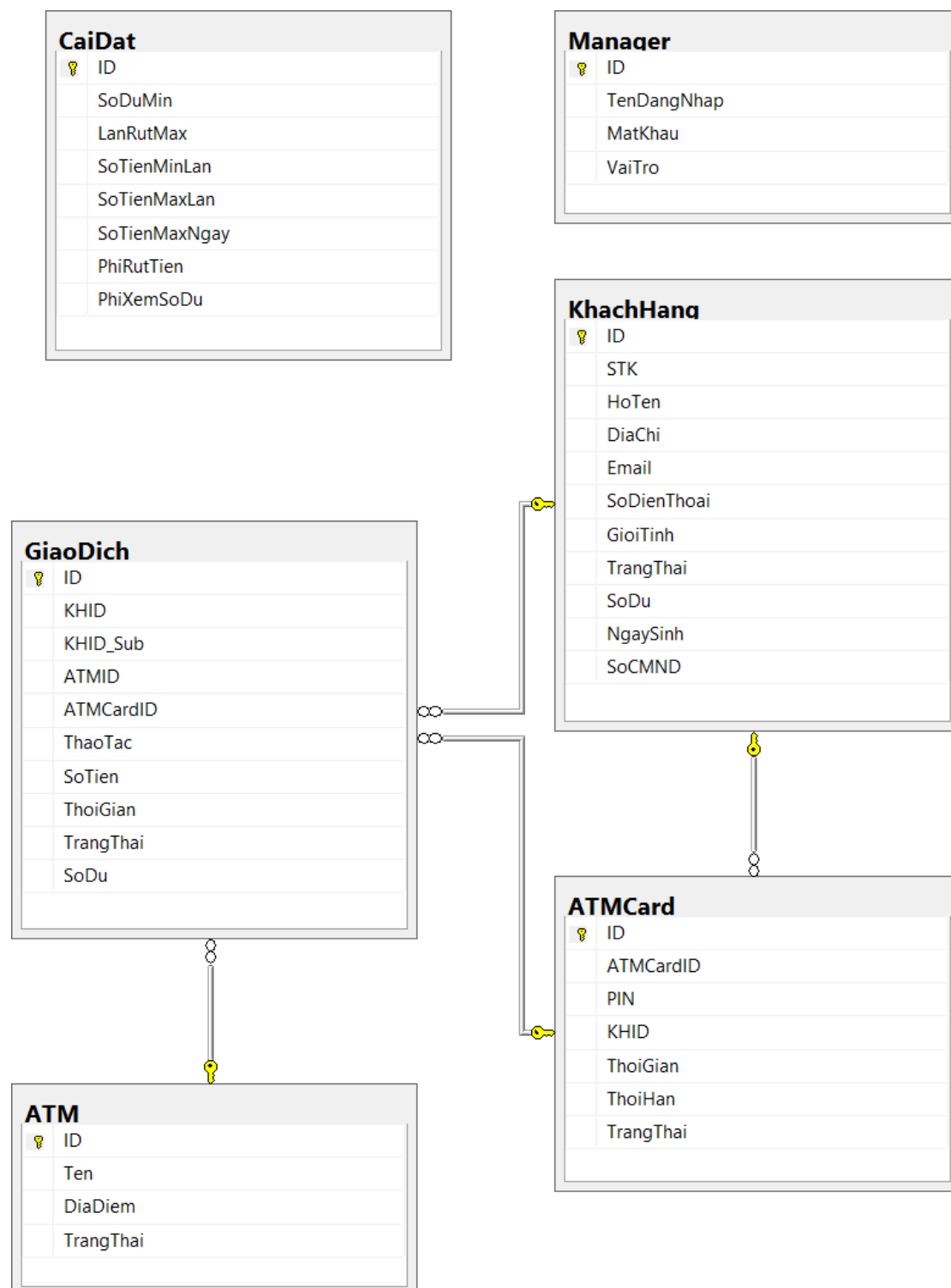
Table ATMCARD			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	<u>ID</u>	Int	Manager ID
Not Null, Unique	TenDangNhap	Varchar(30)	Username login manager.
Not Null	MatKhau	Varchar(50)	Password login manager
Not Null	VaiTro	Int	Role manager

Not Null	HoTen	Nvarchar(100)	Full Name.
Not Null	SoDienThoai	Varchar(11)	Phone number.
Not Null	Email	Varchar(50)	Email.
Not Null	DiaChi	Varchar(50)	Address.

2.6 Table GiaoDich:

Table GiaoDich			
Constraints	Column Name	Data Type	Description
Primary Key, Identity	ID	Int	Transaction ID.
Not Null, Foreign Key KhachHang(ID)	KHID	Int	Customer ID
Foreign Key KhachHang(ID)	KHID_Sub	Int	Customer ID
Not Null, Foreign Key ATM(ID)	ATMID	Int	ATM ID
Not Null, Foreign Key ATMCARD(ID)	ATMCARDID	Int	ATMCARD ID
Not Null	ThaoTac	Int	Type of transaction
Not Null	SoTien	BigInt	Transaction amount
Not Null	ThoiGian	Datetime	Transaction time
	TrangThai	Bit	Status of transaction
	SoDu	BigInt	Balance

3 Entity Relationship (ER) Diagrams



4. Task Sheet

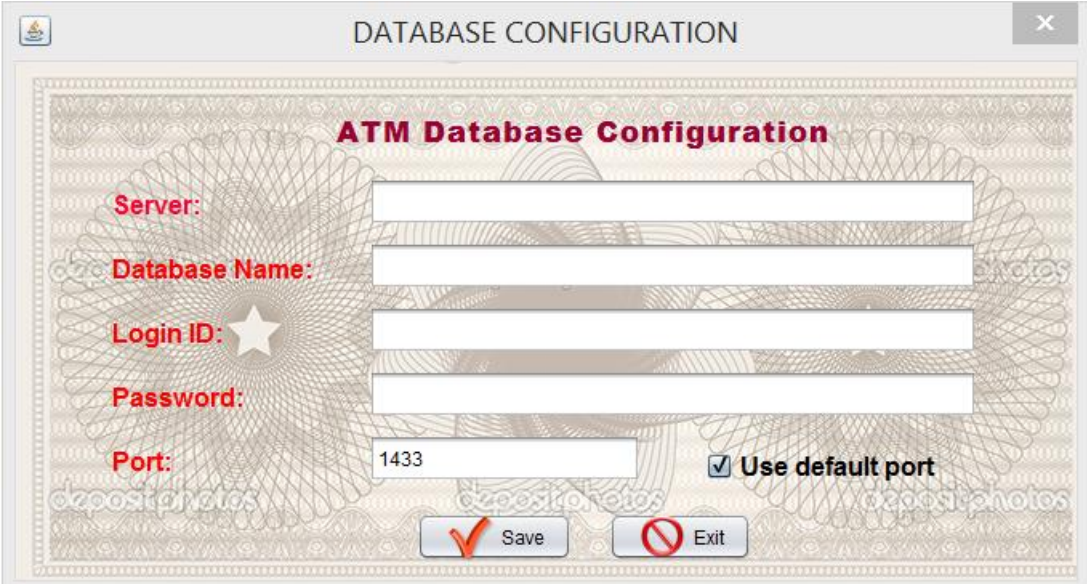
Members		Task	Date		Status
No	Full Name		Start Date	Date Finish	
1.	Nguyễn Cảnh Khánh Trình	Together	06-08-2014	10-08-2014	Completed
2.	Trần Duy Anh	Together			Completed
3.	Lương Tấn Chức	Together			Completed
4.	Trần Minh Phát	Together			Completed
Leader			Faculty		
Nguyễn Cảnh Khánh Trình			Lê Mộng Thúy		

REVIEW 3

1. Form

1.1 Form Config:

a. Form:



DATABASE CONFIGURATION

ATM Database Configuration

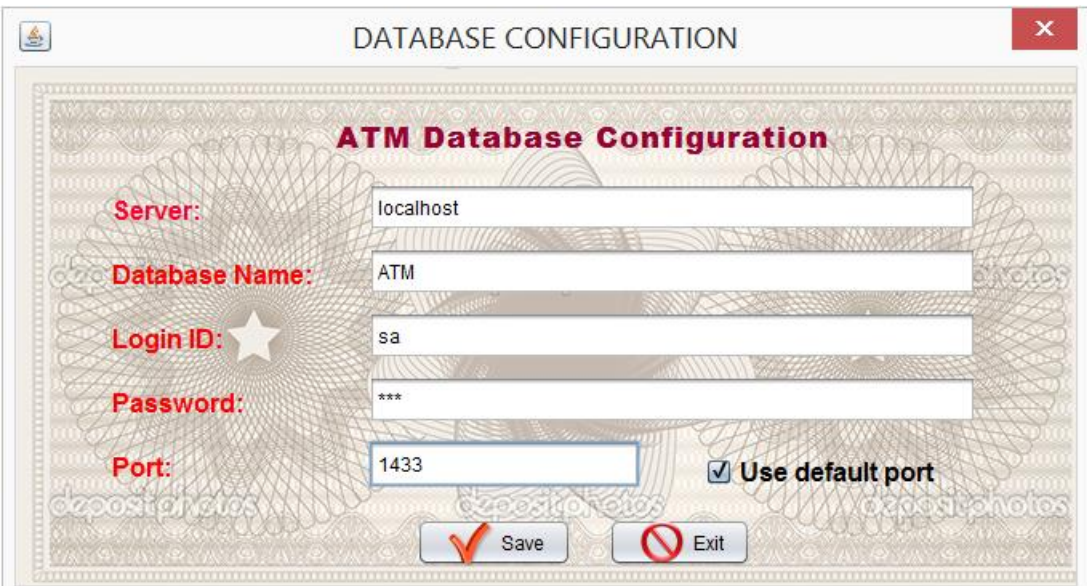
Server:

Database Name:

Login ID:

Password:

Port: ☒ Use default port



DATABASE CONFIGURATION

ATM Database Configuration

Server:

Database Name:

Login ID:

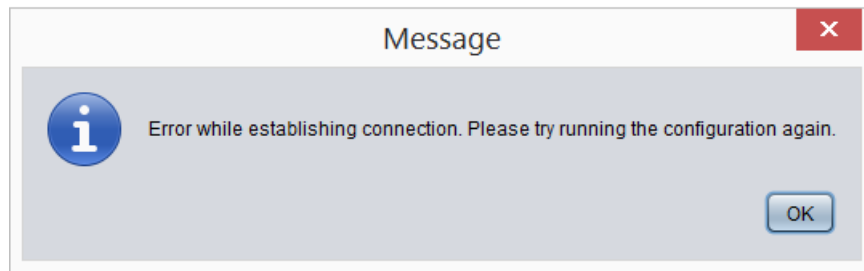
Password:

Port: ☒ Use default port

b. Description:

- When the application runs its first time, the program may ask for database configurations, user can enter the required details for the application to connect to the database. Save button will save the configurations to the configuration file.

- When application can not connect to database. Error message will be show:



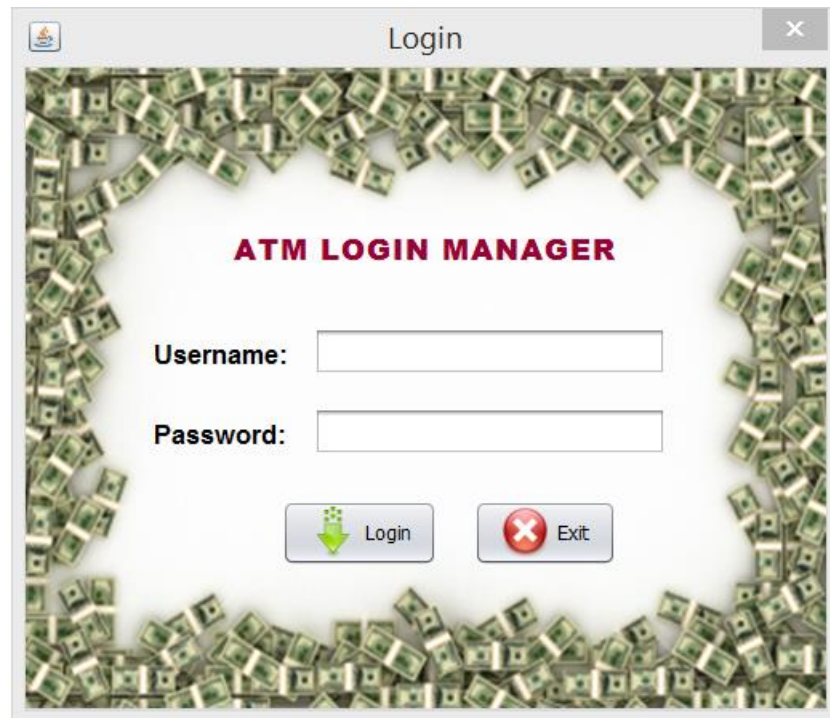
- If successful, save data to a file and run the program.
- If the Exit button is clicked, the program will close.

c. Validation:

- Server field is not blank.
- Database Name field is not blank.
- Login ID field is not blank.
- Password field is not blank.
- Port field is not blank.

1.2 Login Form:

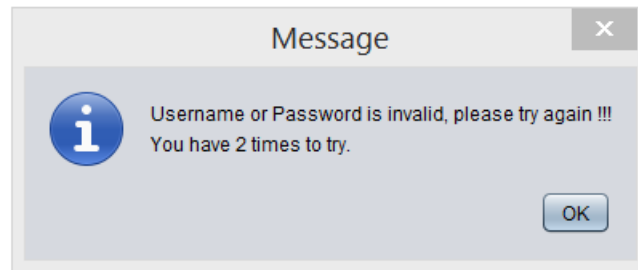
- a. Form:



b. Description:

- If the configurations are made correctly, from the second time when the application is executed, the login dialog will show up allow user to login to the system.
- If the Exit button is clicked, the program will close.

- If you click on the Login button, the program will check the validity of data.
- When the manager enter an invalid username or invalid password. Error message will be showed. There are 3 times to try:



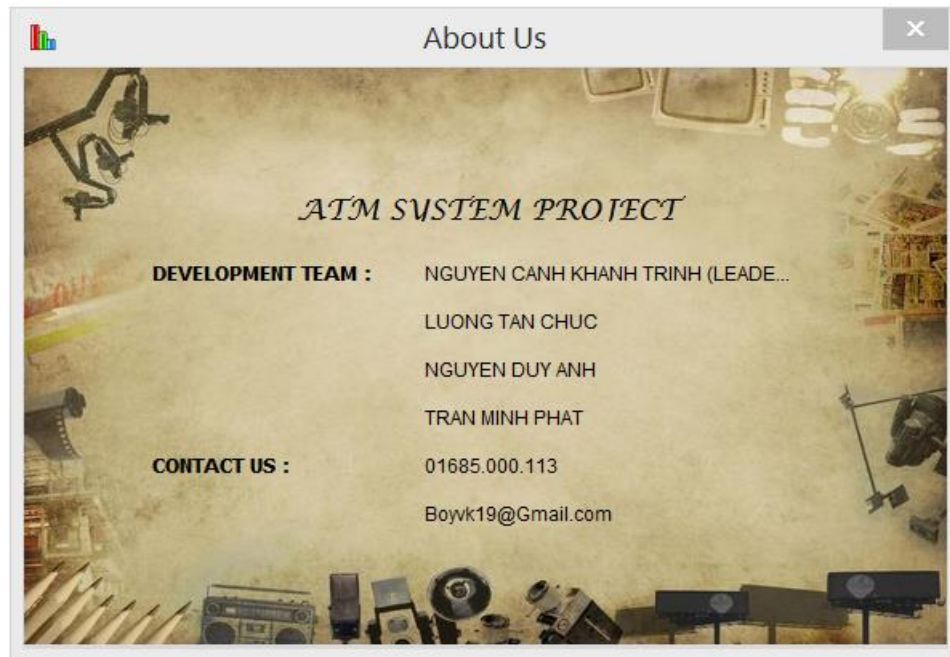
- If password is entered incorrectly three times, the program will close.
- If password is entered successfully, the program manager will appear.

c. Validations:

- Username:
 - + Can't be left blank.
 - + Only letters and digits.
 - + 3 – 15 characters.
 - + Can't just have spaces.
 - + Must be non-space character.
- Password:
 - + Can't be left blank.
 - + 3 – 15 characters.
 - + Can't just have spaces.

1.3 About US dialog:

- a. Dialog:



b. Description:

-Users can show the About US dialog by choosing menu System – About Us or by pressing Ctrl+A.

In this About US, you can view information about us and contact information.

1.4 Change pass Dialog:

a. Dialog:

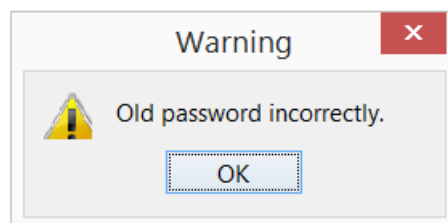




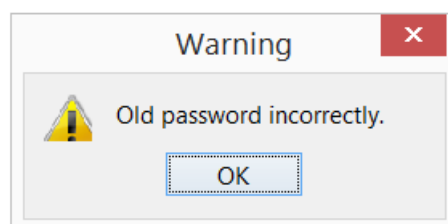
A screenshot of a 'Change Password' dialog box. The title bar says 'Change Password' with a close button (X) on the right. Inside the dialog, there is a large padlock icon on the left and the text 'CHANGE PASSWORD' in blue. Below this, there is a section titled 'Change Password' containing three input fields: 'Old Password :', 'New Password :', and 'Confirm Password:'. Each field contains a series of dots representing masked characters. At the bottom of the dialog, there are two buttons: 'Change Password' (with a wrench and screwdriver icon) and 'Cancel' (with a red X icon).

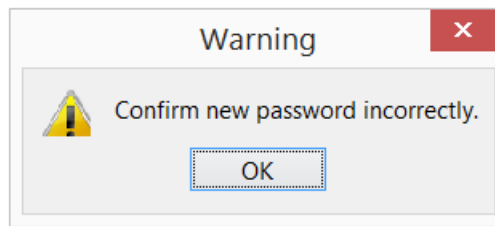
b. Description:

- In the Change Password tab, Admin can change their current password.
- When you click on “Change Password” button, the form will check if the validity of dataValidations is ok:
 - + If the old password does not match, there will appear the message:

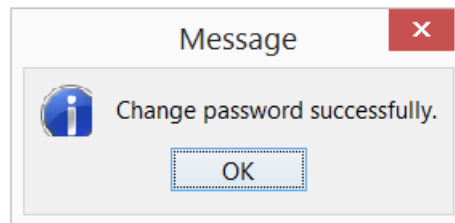


- + If the new password is not the same as the confirmation, there will appear the message:





+ If correctly, there will appear the message:

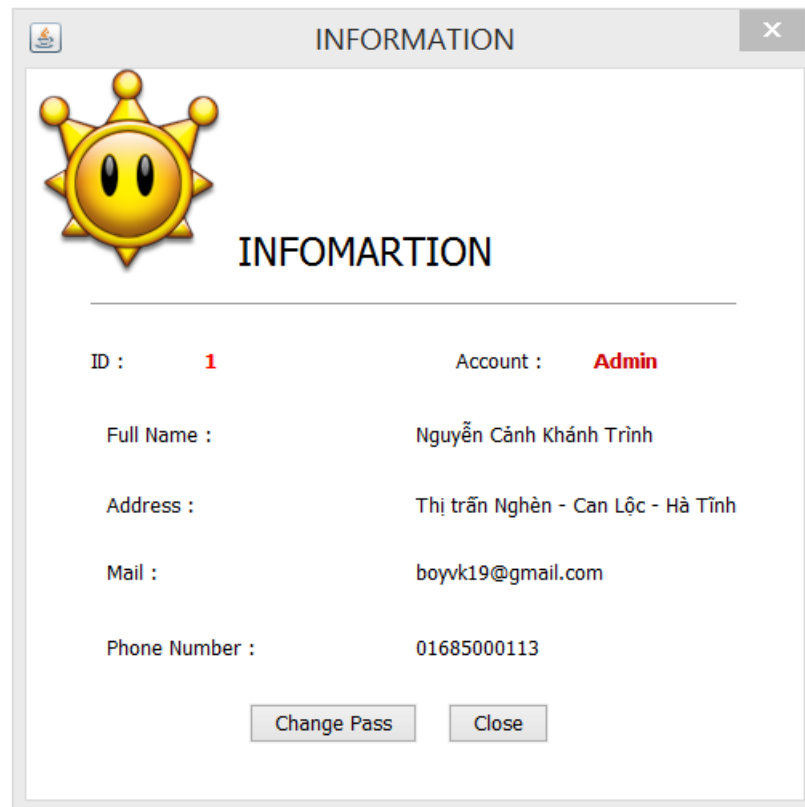


c. Validations:

- Old password:
 - + 3 – 15 characters.
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be the same as the password.
- New password:
 - + 3 – 15 characters.
 - + Can't be left blank.
 - + Can't just have spaces.
- Confirm password:
 - + 3 – 15 characters.
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be the same as the confirm password.

1.5 Admin profile dialog:

a. Dialog:



INFORMATION

INFOMARTION

ID : 1 Account : Admin

Full Name : Nguyễn Cảnh Khánh Trình

Address : Thị trấn Nghèn - Can Lộc - Hà Tĩnh

Mail : boyvk19@gmail.com

Phone Number : 01685000113

Change Pass Close

b. Description:

- Admin can view their personal information by clicking on the Profile section on the application windows.
- Button “Change Password” -> Move to “Change Password” dialog.
- When Close button is clicked, the dialog closes.

1.6 Customer View:

a. Form:

Customer

List

ID	Account Number	Full Name	Gender	Balance	Status
1	546897125	Nguyễn Cảnh Khánh Trinh	Male	12.000.000	✓
2	213544684	Nguyễn Hồng Phong	Male	10.000.000	✓
3	214896578	Trần Vu Quốc Toàn	Female	85.112.455	
4	214897665	Nguyễn Thanh Giang	Male	21.003.654	✓
5	541658451	Nguyễn Hồng Phong	Female	12.000.000	✓
6	985479214	Nguyễn Thanh Giang	Male	10.003.654	✓
7	351579424	Trần Vu Quốc Toàn	Female	12.000.000	
8	9445145574	Nguyễn Cảnh Khánh Trinh	Male	85.112.455	✓

Add
 Reset
 Update
 Delete
 Print
 Close

Information

Account Number :

Full Name :

Address :

Email :

Status :

Phone Number :

Identity card :

Gender : ☒ Male ☐ Female

DOB :

Balance :

b. Description:

- In “Customer tab” admin can view client list.
- When you click on any line, customer information will be displayed in the information area.
- All fields are locked and can not be changed.
- Button “Add”: add a new customer.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button “Update”: update customer information.
- Button “Delete”: delete customer.
- Button “Print”: print list client.

1.7 Add a new customer:

a. Form:

Customer

List

ID	Account Number	Full Name	Gender	Balance	Status
1	546897125	Nguyễn Cảnh Khánh Trình	Male	12.000.000	<input checked="" type="checkbox"/>
2	213544684	Nguyễn Hồng Phong	Male	10.000.000	<input checked="" type="checkbox"/>
3	214896578	Trần Vu Quốc Toàn	Female	85.112.455	<input type="checkbox"/>
4	214897665	Nguyễn Thanh Giang	Male	21.003.654	<input checked="" type="checkbox"/>
5	541658451	Nguyễn Hồng Phong	Female	12.000.000	<input checked="" type="checkbox"/>
6	985479214	Nguyễn Thanh Giang	Male	10.003.654	<input checked="" type="checkbox"/>
7	351579424	Trần Vu Quốc Toàn	Female	12.000.000	<input type="checkbox"/>
8	9445145574	Nguyễn Cảnh Khánh Trình	Male	85.112.455	<input checked="" type="checkbox"/>

Save
 Reset
 Update
 Delete
 Print
 Cancel

Information

Account Number :

Full Name :

Address :

Email :

Status :

Phone Number :

Identity card :

Gender : ☒ Male ☐ Female

DOB :

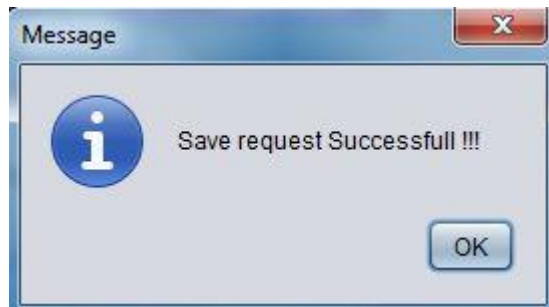
Balance :

b. Description:

- Administrators can add new clients by clicking on the “Customer” tab and click “Add”.
- When click “Add” button, all the fields will be enabled. Button “Update”, “Delete”, “Print” will be disabled. Button “Add” change to “Save”, button “Close” change to “Cancel”.
- Button “Save”: add new clients.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button: “Cancel”: Cancel action.
- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click "Yes":



c. Validation:

- Account Number:
 - + Can't be left blank.
 - + Must be digital characters.
 - + Can't just have spaces.
 - + Must be non-space characters.
 - + 9 digits.
- Full Name:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be alphabetic characters or spaces.
- Address:
 - + Can't be left blank.
 - + Can't just have spaces.
- Email:

- + Can't be left blank.
- + Can't just have spaces.
- + Must have @ + address.
- Phone Number:
 - + Can't be left blank.
 - + Must be digital characters.
 - + Can't just have spaces.
 - + Must be non-space characters.
 - + 9 - 11 digits.
- Identity Card:
 - + Can't be left blank.
 - + Must be digital characters.
 - + Can't just have spaces.
 - + 9 digits.
- Gender:
 - + Select male or female.
- DOB:
 - + Select in Calendar tab.
- Status:
 - + Select active or lock.
- Balance:
 - + Default 50.000.

1.8 Edit customer information:

- a. Form:

Customer

List

ID	Account Number	Full Name	Gender	Balance	Status
1	546897125	Nguyễn Cảnh Khánh Trinh	Male	12.000.000	✓
2	213544684	Nguyễn Hồng Phong	Male	10.000.000	✓
3	214896578	Trần Vu Quốc Toàn	Female	85.112.455	
4	214897665	Nguyễn Thanh Giang	Male	21.003.654	✓
5	541658451	Nguyễn Hồng Phong	Female	12.000.000	✓
6	985479214	Nguyễn Thanh Giang	Male	10.003.654	✓
7	351579424	Trần Vu Quốc Toàn	Female	12.000.000	
8	9445145574	Nguyễn Cảnh Khánh Trinh	Male	85.112.455	✓

+ Add
Reset
Save
Delete
Print
Close

Information

Account Number :

Full Name :

Address :

Email :

Status :

Phone Number :

Identity card :

Gender : ☒ Male ☐ Female

DOB :

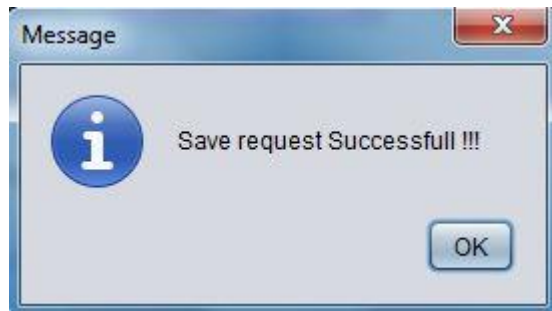
Balance :

b. Description:

- Administrators can edit customer information by clicking on the “Customer” tab and click “Update”.
- When click “Update” button, all the fields will be enabled. Button “Add”, “Delete”, “Print” will be disabled. Button “Update” change to “Save”.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button “Save”: update customer information.
- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click “Yes”:



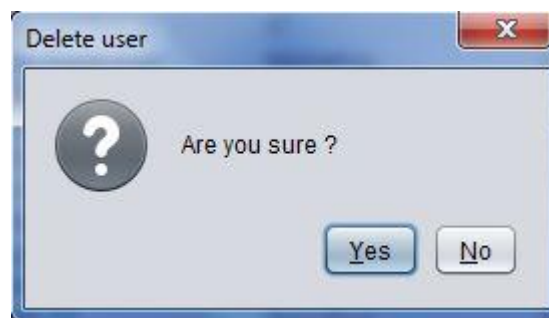
c. Validation:

- Account Number:
 - + Can't be left blank.
 - + Must be digital characters.
 - + Can't just have spaces.
 - + Must be non-space characters.
 - + 9 digits.
- Full Name:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be alphabetic characters or spaces.
- Address:
 - + Can't be left blank.
 - + Can't just have spaces.
- Email:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must have @ + address.
- Phone Number:
 - + Can't be left blank.

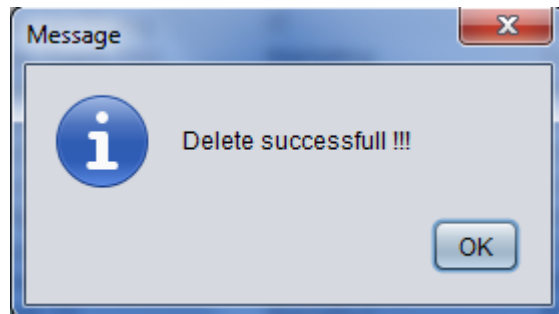
- + Must be digital characters.
- + Can't just have spaces.
- + Must be non-space characters.
- + 9 - 11 digits.
- Identity Card:
 - + Can't be left blank.
 - + Must be digital characters.
 - + Can't just have spaces.
 - + 9 digits.
- Gender:
 - + Select male or female.
- DOB:
 - + Select in Calendar tab.
- Status:
 - + Select active or lock.

1.9 Delete customer:

- a. Form:



Click "Yes":



1.10 *Atm view:*

a. Form:

ATM

List

ID	Name	Location	Status
1	ATM 01	Gò Vấp	Activate
2	ATM 02	Bình Thạnh	Activate
3	ATM 03	Quận 1	Lock
4	ATM 04	Quận 2	Activate
5	ATM 05	Quận 3	Activate
6	ATM 06	Quận 4	Activate
7	ATM 07	Quận 5	Lock
8	ATM 08	Cu Chi	Activate
9	ATM 09	Cà Mau	Lock

Add
 Reset
 Update
 Delete
 Print
 Close

Infomartion

Name :

Location :

Status : ☒ Activate ☐ Lock

b. Descriptions:

- In “ATM tab” admin can view Atm list.
- When you click on any line, atm information will be displayed in the information area.
- All fields are locked and can not be changed.
- Button “Add”: add a new atm.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.

- Button “Update”: update atm infomartion.
- Button “Delete”: delete atm.
- Button “Print”: print list atm.

1.11 Add new ATM:

a. Form:

ATM

List

ID	Name	Location	Status
1	ATM 01	Gò Vấp	Activate
2	ATM 02	Bình Thạnh	Activate
3	ATM 03	Quận 1	Lock
4	ATM 04	Quận 2	Activate
5	ATM 05	Quận 3	Activate
6	ATM 06	Quận 4	Activate
7	ATM 07	Quận 5	Lock
8	ATM 08	Cu Chi	Activate
9	ATM 09	Cà Mau	Lock

Save
 Reset
 Update
 Delete
 Print
 Cancel

Infomartion

Name :

Location :

Status :
 ☒ Activate
☐ Lock

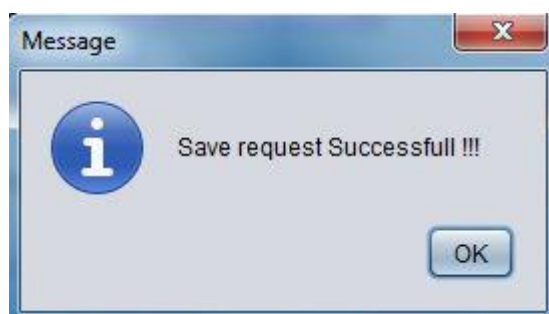
b. Description:

- Administrators can add new atm by clicking on the “ATM” tab and click “Add”.
- When click “Add” button, all the fields will be enabled. Button “Update”, “Delete”, “Print” will be disabled. Button “Add” change to “Save”, button “Close” change to “Cancel”.
- Button “Save”: add new atm.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button: “Cancel”: Cancel action.

- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click “Yes”:



c. Validations:

- Name:
 - + Can't be left blank.
 - + Can't just have spaces.
- Location:
 - + Can't be left blank.
 - + Can't just have spaces.
- Status:
 - + Select activate or lock.

1.12 *Edit Atm:*

- a. Form:

ATM

List

ID	Name	Location	Status
1	ATM 01	Gò Vấp	Activate
2	ATM 02	Bình Thạnh	Activate
3	ATM 03	Quận 1	Lock
4	ATM 04	Quận 2	Activate
5	ATM 05	Quận 3	Activate
6	ATM 06	Quận 4	Activate
7	ATM 07	Quận 5	Lock
8	ATM 08	Cu Chi	Activate
9	ATM 09	Ca Mau	Lock

+ Add
Reset
Save
Delete
Print
Close

Infomartion

Name :

Location :

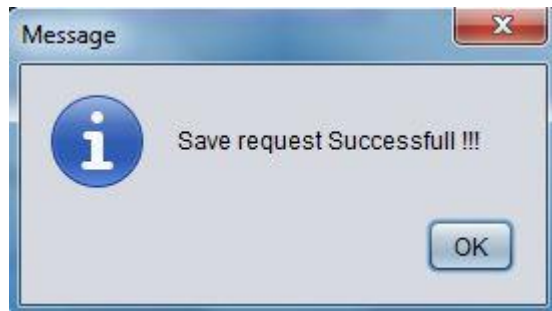
Status : ☒ Activate ☐ Lock

b. Description:

- Administrators can edit atm information by clicking on the “ATM” tab and click “Update”.
- When click “Update” button, all the fields will be enabled. Button “Add”, “Delete”, “Print” will be disabled. Button “Update” change to “Save”.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button “Save”: update atm infomartion.
- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click “Yes”:

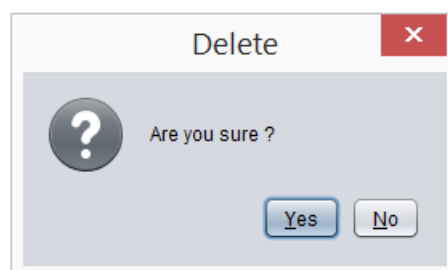


c. Validations:

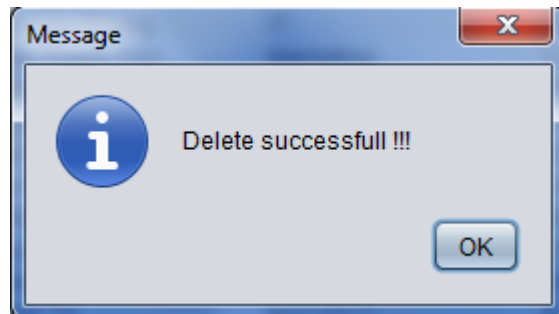
- Name:
 - + Can't be left blank.
 - + Can't just have spaces.
- Location:
 - + Can't be left blank.
 - + Can't just have spaces.
- Status:
 - + Select activate or lock.

1.13 Delete Atm:

a. Form:



Click “Yes”:



1.14 *Deposit operations view:*

a. Form:

Deposit

List

ID	Client	Amount	ATM	ATM Card	Date
1	Tran Vu Quoc Toan	2.000.000	ATM 01	110548	22/08/2014 20:48 PM
2	Nguyen Hong Phong	1.000.000	ATM 03	213548	22/08/2014 20:48 PM
3	Nguyen Canh Khanh Trinh	3.000.000	ATM 06	453124	22/08/2014 20:48 PM
4	Nguyen Thanh Giang	6.000.000	ATM 02	369845	22/08/2014 20:48 PM
5	Bui Quoc Lap	8.000.000	ATM 05	321045	22/08/2014 20:48 PM
6	Pham Tien Thanh	500.000	ATM 12	012345	22/08/2014 20:48 PM
7	Nguyen Huu Tuan	200.000	ATM 21	201345	22/08/2014 20:48 PM

+ Accept
↺ Reset
✖ Delete
🖨 Print
🔒 Close

Information

Client :

ATM :

Amount :

ATM Card :

Date :

b. Description:

- In “Deposit tab” admin can view list deposit operations.
- When you click on any line, deposit information will be displayed in the information area.
- All fields are locked and can not be changed.
- Button “Accept”: accept deposit operations.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.

- Button “Delete”: delete deposit operations.
- Button “Print”: print list deposit operations.

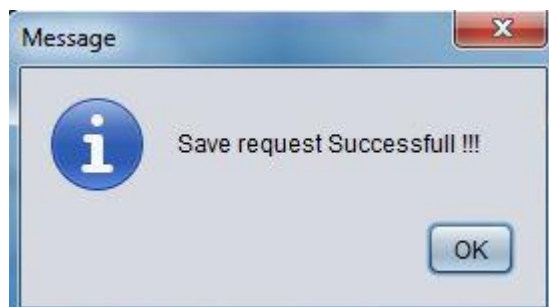
1.15 *Accept deposit operations:*

a. Form:

- The administrator can verify the deposit operation of Customer by click “Deposit” tab, select the deposit operation and click “Accept”.
- Click “Accept” button: Confirm dialog will be show.

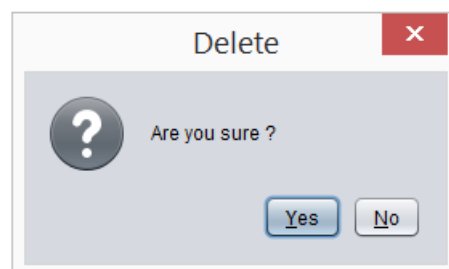


- Click “Yes”:

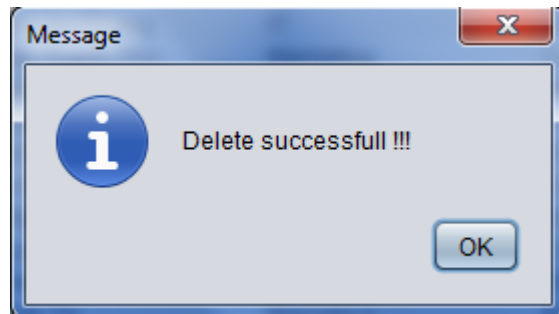


1.16 *Delete deposit operations:*

b. Form:



Click “Yes”:



1.17 ATM Card View:

a. Form:

ATM CARD

List

ID	Client	Date	Expiry date	Status
212457	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
345754	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
124785	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
357648	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
589423	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
874528	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt

Add
 Reset
 Update
 Delete
 Print
 Close

Infomartion

Client :

Date :

ID :

Expiry Date :

Status : ☒ Activity ☐ Lock

b. Description:

- In “ATM Card tab” admin can view Atm Card list.
- When you click on any line, atm information will be displayed in the information area.
- All fields are locked and can not be changed.
- Button “Add”: add a new atm card.

- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button “Update”: update atm card infomartion.
- Button “Delete”: delete atm card.
- Button “Print”: print list atm card.

1.18 Add new ATM Card:

a. Form:

ATM CARD

List

ID	Client	Date	Expiry date	Status
212457	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
345754	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
124785	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
357648	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
589423	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
874528	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt

Save
 Reset
 Update
 Delete
 Print
 Cancel

Infomartion

Client :

Date :

ID :

Expiry Date :

Status : ☒ Activity ☐ Lock

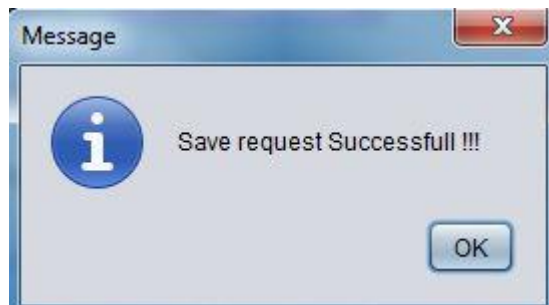
b. Description:

- Administrators can add new atm card by clicking on the “ATM card” tab and click “Add”.
- When click “Add” button, all the fields will be enabled. Button “Update”, “Delete”, “Print” will be disabled. Button “Add” change to “Save”, button “Close” change to “Cancel”.
- Button “Save”: add new atm card.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.

- Button: “Cancel”: Cancel action.
- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click “Yes”:



c. Validations:

- Client:
 - + Select in the client list.
- ID:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be digital characters.
 - + 5 – 7 digits.
 - + Unique.
- Date:
 - + Can't be left blank.
 - + Can't just have spaces.

- + Date >= current date.
- Expiry Date:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Date > current date.
- Status:
 - + Can't be left blank.
 - + Select activity or lock.

1.19 Edit Atm Card:

a. Form:

ATM CARD

List

ID	Client	Date	Expiry date	Status
212457	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
345754	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
124785	Nguyen Canh Khanh Trinh	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
357648	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt
589423	Nguyen Thanh Giang	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Tạm khóa
874528	Tran Vu Quoc Toan	22/08/2014 23:46 PM	22/08/2017 23:46 PM	Kích hoạt

+ Add
Reset
Save
Delete
Print
Cancel

Information

Client :

Date :

ID :

Expiry Date :

Status : ☒ Activity ☐ Lock

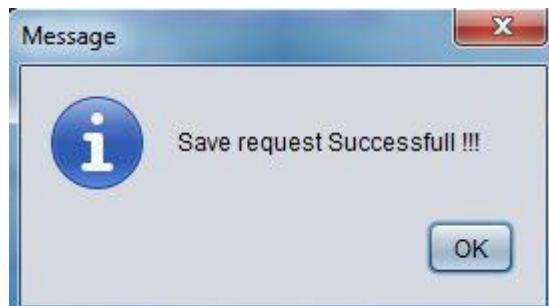
b. Description:

- Administrators can edit atm card information by clicking on the “ATM Card” tab and click “Update”.

- When click “Update” button, all the fields will be enabled. Button “Add”, “Delete”, “Print” will be disabled. Button “Update” change to “Save”.
- Button “Reset”: will clear all the text areas, text field and set the radio button, combo box to the value at beginning.
- Button “Save”: update atm card infomartion.
- If all the fields are valid, Click “Save” button: Confirm dialog will be show.



- Click “Yes”:



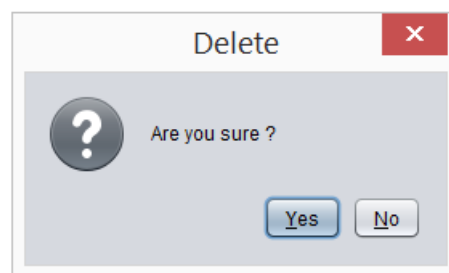
c. Validations:

- Client:
 - + Select in the client list.
- ID:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be digital characters.

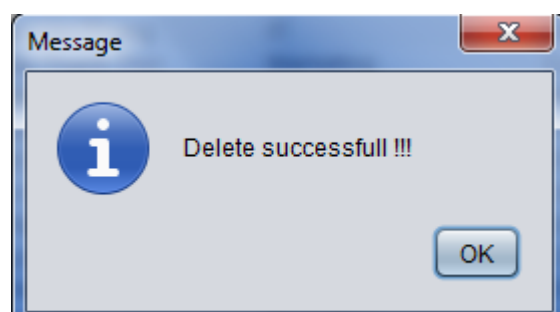
- + 5 – 7 digits.
- + Unique.
- Date:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Date \geq current date.
- Expiry Date:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Date $>$ current date.
- Status:
 - + Can't be left blank.
 - + Select activity or lock.

1.20 Delete Atm card:

- a. Form:



Click "Yes":



1.21 View history:

a. Form:

HISTORY

List

ID	Client	Client ACT	ATM	ATM Card	Amount	Action	Date
1	Nguyen Canh Kh...		ATM 01	215648	2.000.000	Deposit	23/08/2014 00:3...
2	Nguyen Canh Kh...	Tran Vu Quoc To...	ATM 01	215648	1.000.000	Transfer	23/08/2014 00:3...
3	Nguyen Canh Kh...		ATM 01	215648	500.000	Withdrawal	23/08/2014 00:3...
4	Nguyen Canh Kh...		ATM 05	215648	300.000	Deposit	23/08/2014 00:3...
5	Nguyen Canh Kh...		ATM 04	215648	700.000	Withdrawal	23/08/2014 00:3...
6	Nguyen Canh Kh...		ATM 03	215648	1.000.000	Deposit	23/08/2014 00:3...
7	Nguyen Canh Kh...		ATM 02	215648	3.000.000	Withdrawal	23/08/2014 00:3...

View : Day

1.22 Login for user:

a. Form:

ATM SYSTEM MANAGER

Login Form

CARD ID :

PIN :

b. Description:

- When ATM is accessed, users are required to log.

c. Validations:

- Card ID:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be digital characters.
 - + 5 – 7 digits.
- Pin:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be digital characters.
 - + 4 digits.

1.23 *Withdraw:*

- a. Form:

GIAO DỊCH RÚT TIỀN

13579

1 2 3 4

5 6 7 8

9 0 Submit Clear

b. Mô tả:

- Allow users to withdraw money from their accounts.

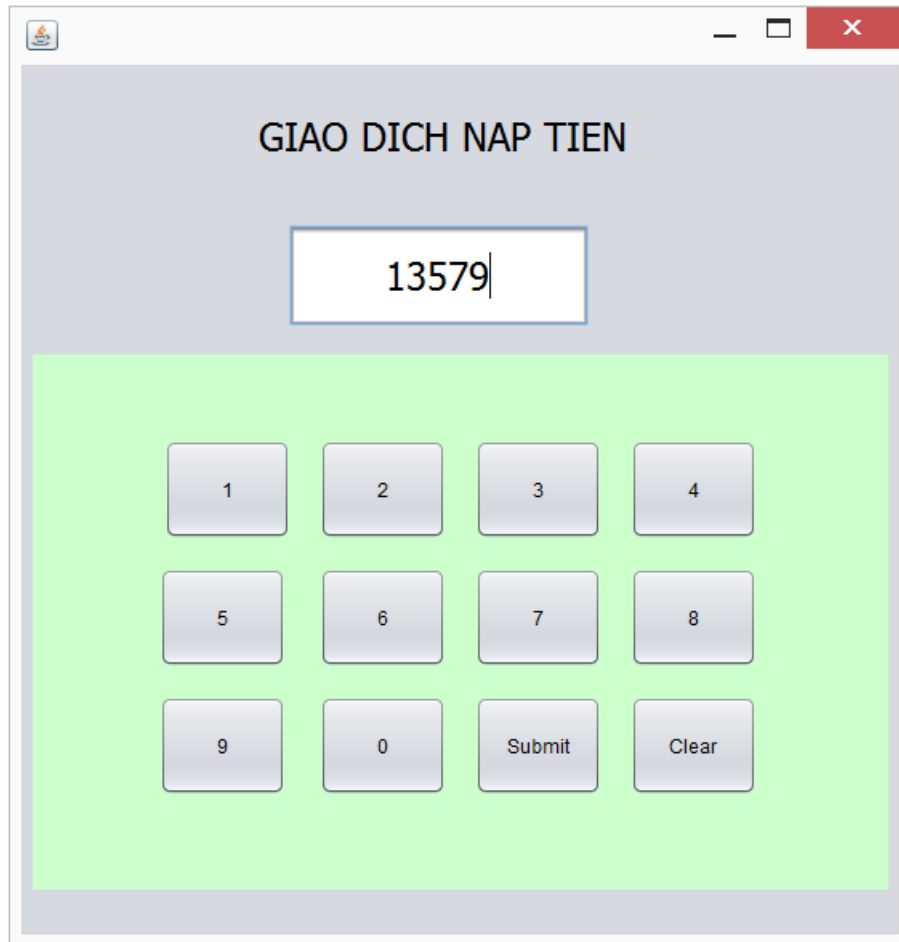
c. Validations:

- Money:

- + Can't be left blank.
- + Can't just have spaces.
- + Must be digital characters.

1.24 *Deposit:*

a. Form:



GIAO DỊCH NẠP TIỀN

13579

1 2 3 4

5 6 7 8

9 0 Submit Clear

b. Description:

- Allow users to add money to their account.

c. Validations:

- Money:

+ Can't be left blank.

+ Can't just have spaces.

+ Must be digital characters.

1.25 **Transfer:**

a. Form:

GIAO DICH CHUYEN KHOAN

1 2 3 4

5 6 7 8

9 0 Submit Clear

b. Description:

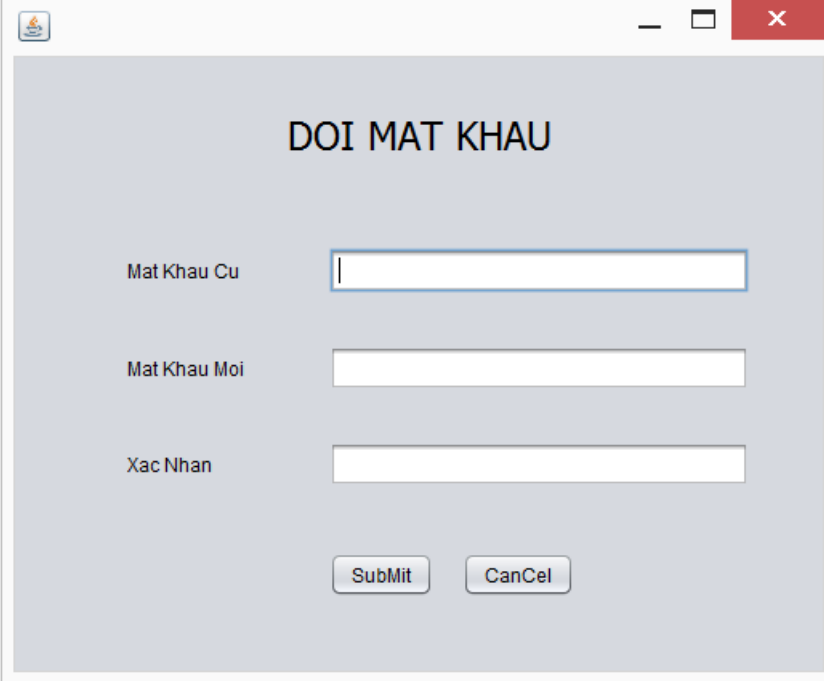
- This allows users to send money to other users.

c. Validations:

- Money:
 - + Can't be left blank.
 - + Can't just have spaces.
 - + Must be digital characters.

1.26 *Change Password:*

a. Form:



DOI MAT KHAU

Mat Khau Cu

Mat Khau Moi

Xac Nhan

SubMit CanCel

b. Description:

- Allow users to change their Pin.

c. Validations:

- Pin:

- + Can't be left blank.
- + Can't just have spaces.
- + Must be digital characters.
- + 4 Digits.

2. Member Task:

Member	Task	Status
Nguyễn Cảnh Khánh Trình	<ul style="list-style-type: none"> - Config database. - Manager: View, add, edit, delete, active, lock, change pass, view transactions history Client. - Client: Login, view balance. 	Complete
Lương Tấn Chức	<ul style="list-style-type: none"> - Manager: Change pass, view, add, edit, delete ATM. - Client: Change pass. 	Complete
Trần Minh Phát	<ul style="list-style-type: none"> - Manager: Transactions history, statistics, settings system. - Client: Deposit. 	Complete
Trần Duy Anh	<ul style="list-style-type: none"> - Manager: View, add, edit, delete ATM Card, Deposit. - Client: Withdraw, tranfer. 	Complete
Leader		Teacher
Nguyễn Cảnh Khánh Trình		Lê Mộng Thúy