

TECHNICAL GUIDE

FOR ATM SYSTEM

T.M.T.K.Thennakoon

AS2020925

Introduction:

This system is a simulation of an ATM. First, user has to enter account number, instead of ATM card. Then he has to enter his pre received pin number as actual ATM. User can only login to the system if the pre received pin was correct. User has only given three times to enter correct account number or pin. If he failed to enter his account number or pin within 3 attempts, then he has to contact the bank using our given hotline for security purpose.

Purpose;

There are some purposes of ATM System,

- Check your account balance.
- Deposit cash.
- Withdraw cash.
- Transfer cash.
- Get the details of your last 5 transactions.

I defined different functions for these purposes.

Used Functions;

- PinCheck
- GetUser
- AccountBalance
- DepositCash
- WithdrawCash
- TransferCash
- ReadDataFile
- UpdateFile
- TransactionRecord
- PrintTransaction
- PrintBill
- PageBreak

Used Files;

I used these files for keep essential data for the system.

- AccountDetails.txt - Keep account data.

Account No.	Security Pin	ID No.	Account Balance
1001	1	992954825	1000
1002	2	987954346	2000
1003	3	992954842	100
1004	4	972389442	11000
.....

- DailyRecords.txt - Keep every transactions that made from login by login.

Account No.	Number of times that Ac. balance checked	Deposited Amount	Withdrew Amount	Transferred Amount	Transferred Ac. Number
1001	2	300	0	500	1002
1003	0	0	3000	1000	1001
1002	2	0	400	0	0
.....

Note : If you want to update or add account, you can edit these files.

And you have to change these constants,

intRow and intCol

And also array row & column count must change

Used Data Arrays;

I used arrays to keep the data that read from the files.

- intAccounts. }
- intTransRecords. }
- StringAccount → String

Note : String array was defined as same as integer array index.

	Ac. Owner
1001	Mr.Tharidu
1002	Miss.Krishani
1003	Mr.Perera
1004	Mrs.Fernando

Bill Template;

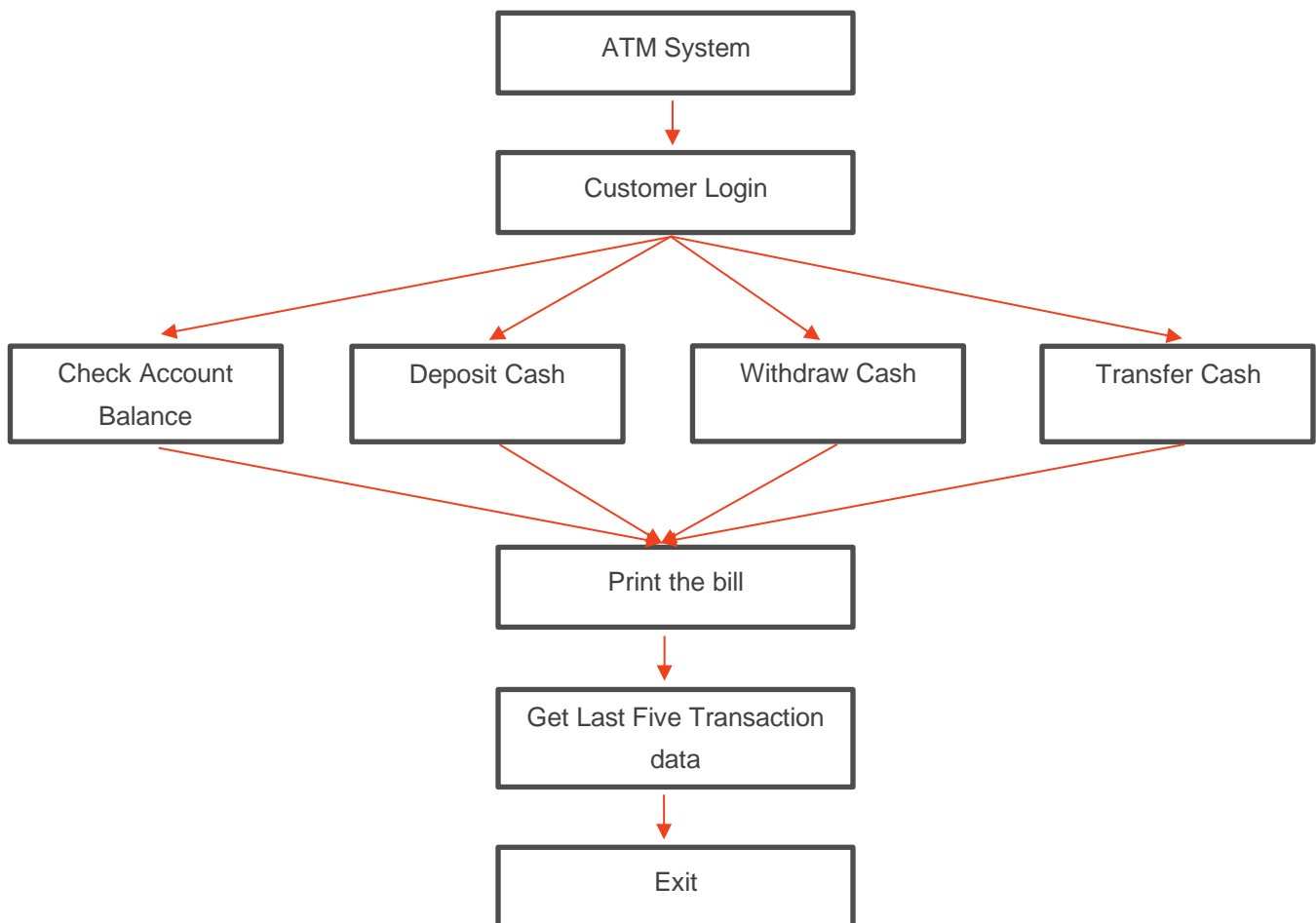
```
=====
                        ATM TRANSACTION-TKT BANK
=====
ACCOUNT NUMBER
1001
ACCOUNT OWNER      : Mr.Tharidu

DEPOSITION AMOUNT: Rs:5000
WITHDRAWN AMOUNT : Rs:200
TRANSFERED AMOUNT: Rs:5000
TRANSFERED AC.NO : 1003
ACCOUNT BALANCE  : Rs.500
=====
                        THANK YOU!!
```

Functions:

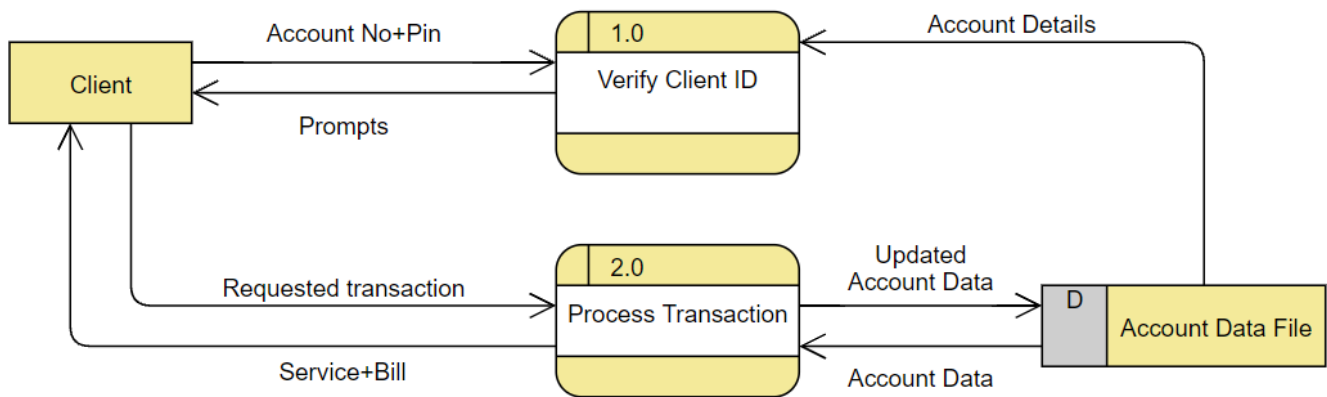
Function	Purpose	Return type	Returns	Parameters
PinCheck	Check the pin according to account no.	int	intMatch	intPin, intAccNo
GetUser	Get user's row index on "intAccounts" array.	Int	intUserIndex	intAccNo
AccountBalance	Show account balance and account details.	void	-	intAccNoindex
DepositCash	Get deposition amount and updating account balance.	void	-	intAccNoindex
WithdrawCash	Get withdrawal amount and updating account balance.	void	-	intAccNoindex
TransferCash	Get transferee's account number, amount and updating both account balances.	void	-	intAccNoindex
ReadDataFile	Read account data from "AccountDetails.txt" file and enter them to "intAccounts" array.	void	-	-
UpdateFile	Write the updated data from "intAccounts" array to the file.	void	-	-
TransactionRecord	Get final data of every transactions from the "intAccounts" array and append them to "Dailyrecords.txt" file	void	-	intAcBalRecord, intAccNoindex
PrintTransaction	Read data from "Dailyrecords.txt" file and pass them to "intTransRecords" array and print them.	void	-	intAccNo
PrintBill	Print a bill according to the transactions.	void	-	intAccNoindex
PageBreak	Break pages form each other.	void	-	-

System Overview:



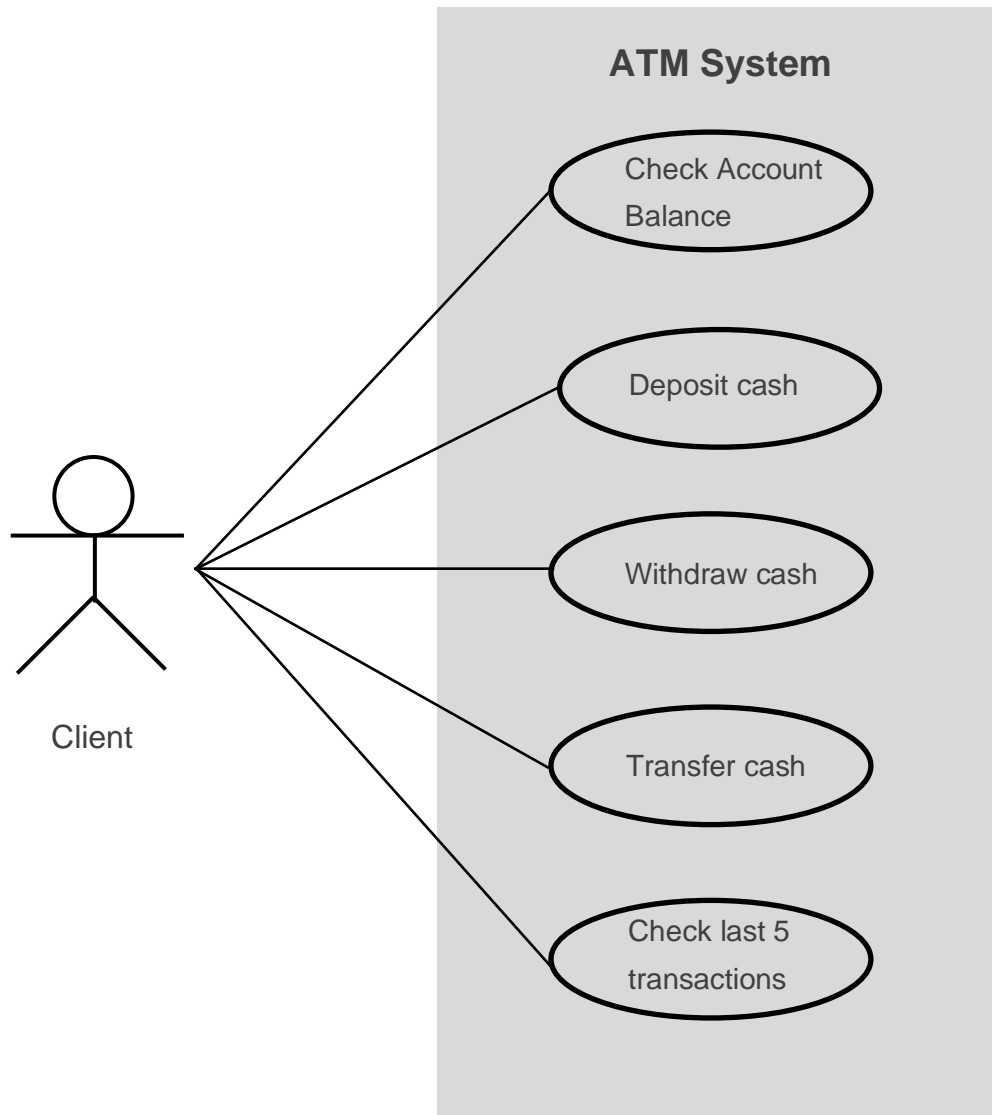
Diagrams:

1. Data Flow Diagram

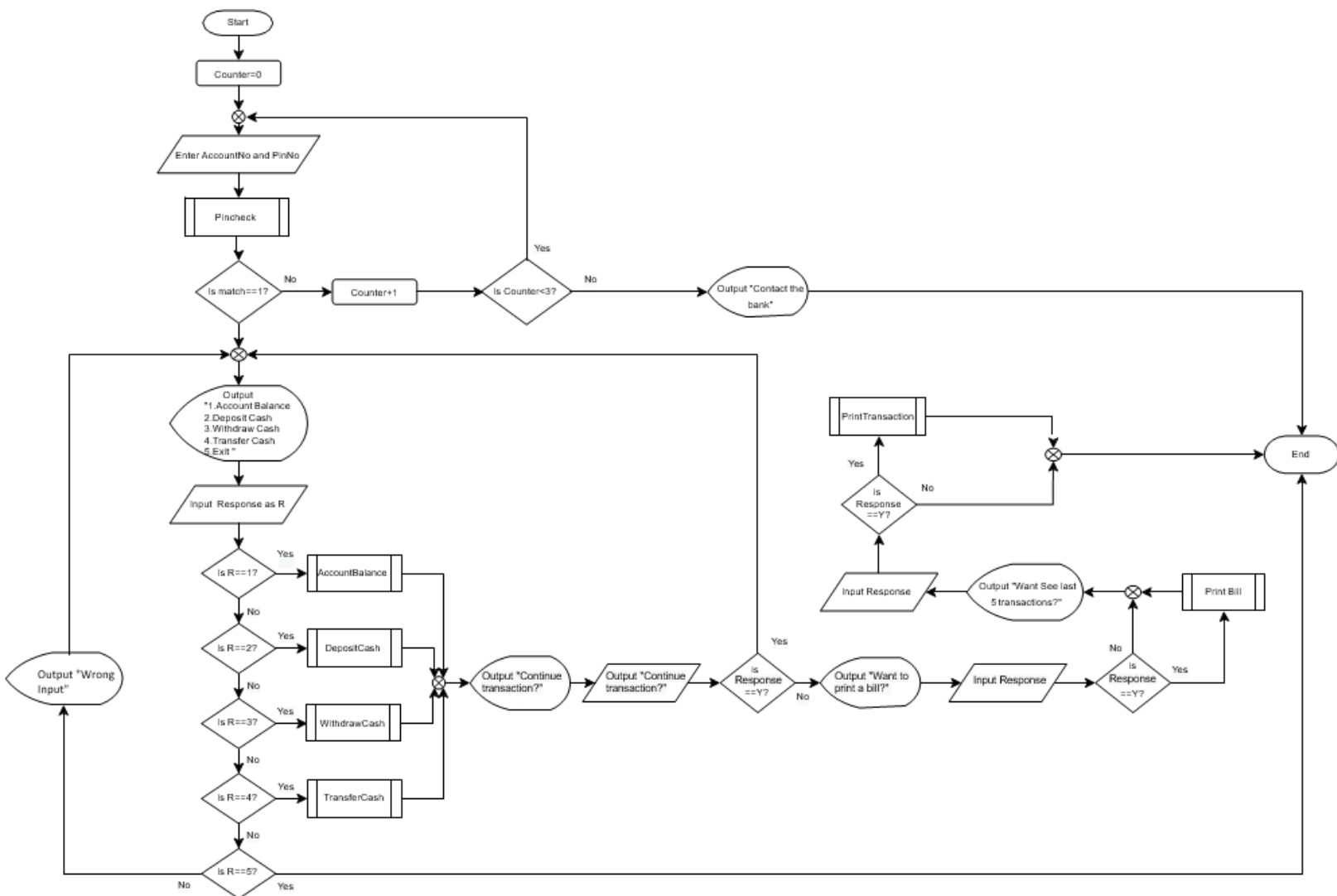


DFD level2

2. Use Case Diagram



3. Flow Chart



Test Cases:

TC01:

Title: Login Page-Authenticate the user.

Description: An account holder should be able to successfully login to the system.

Precondition: The user must already have a bank account pin number.

Test Steps:

1. Enter account number.
2. Press "Enter".
3. Enter pin number of that account number.
4. Press "Enter".

Expected Result: User logs into the system and see transaction selection page.

Actual Result: As expected.

TC02:

Title: Transaction Selection Page – Move user to a transaction.

Description: A user can move to any transaction.

Precondition: The user must enter between 1to5 number.

Test Steps:

1. Enter transaction index to "Enter Your Response"
2. Press "Enter".

Expected Result: User moves to the transaction window that he/she requested.

Actual Result: As expected.

TC03:

Title: Account Balance Page

Description: A user can check her/his account details.

Precondition: The user must enter no1 on transaction page.

Expected Result: User can see he/she account data.

Actual Result: As expected.

TC04:

Title: Deposit Cash Page

Description: A user can deposit money.

Precondition: The user must enter no2 on transaction page.

Test Steps:

1. Enter deposition cash amount.
2. Press "Enter".

Expected Result: User deposits cash, and her/his new account balance can be seen.

Actual Result: As expected.

TC05:

Title: Withdraw Cash Page

Description: A user can withdraw money.

Precondition: The user must enter no3 on transaction page.

And must be (account balance > 101) and (account balance – Withdraw amount > 100).

Test Steps:

1. Enter withdraw cash amount.
2. Press "Enter".

Expected Result: User withdraws cash, and her/his new account balance can be seen.

Actual Result: As expected.

TC06:

Title: Transfer Cash Page

Description: A user can transfer cash to another account.

Precondition: The user must enter no4 on transaction page.

And must be (account balance > 101) and (account balance – Transfer amount > 100).

Test Steps:

1. Enter cash receiver's account number.
2. Press "Enter".
3. Enter cash amount.
4. Press "Enter".

Expected Result: User Transfers cash to entered account, and users new account balance can be seen.

Actual Result: As expected.

TC07:

Title: Exit

Description: A user can exit from transaction page.

Precondition: The user must enter no5 on transaction page.

Expected Result: User exits from transaction page and goes to bill print section.

Actual Result: As expected.

TC08:

Title: Printing the bill.

Description: Printing the bill is user's choice.

Precondition: User must have entered "Enter Your Response :5" or
" Do you Wish to Continue transaction?[Y]/[N] : N "

Test Steps:

1. Enter "Y" to "Do you Want to Print a Bill?".
2. Press "Enter".

Expected Result: User gets a bill of his transactions.

Actual Result: As expected.

TC09:

Title: Displays last five transaction data.

Description: Displaying last five transaction is user's choice.

Precondition: User must have entered "Enter Your Response :5" or
" Do you Wish to Continue transaction?[Y]/[N] : N "

Test Steps:

1. Enter "Y" to "Do you want to see your last 5 transactions?".
2. Press "Enter".

Expected Result: User gets his last transaction data.

Actual Result: As expected.

Contact Us:

Developer : T.M.T.K.Thennakoon

Email : as2020925@sci.sjp.ac.lk