

Software Requirements Specification

For

<Bank management system>

Version 1.0 approved

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Introduction

The following provides an overview the software requirement specification (SRS) for the bank management system (ATM)

Purpose

TO develop software required for support computerized bank network

Product Scope

The ATM identifies a customer by a cash card and password. It collected information about a simple account transaction; customer can balance enquiry and transfer to another account in the same bank and pull the money from account

Overall Description of the system

The description all properties of the system and used for customer and engineers and manager this is the first version of the SRS .

A bank has several automated teller machines (ATM).which are connected via a wide area network to a central server. Each ATM machine has a card reader; by using the ATM machine a customer can withdrawal cash from either checking or savings account.

A transaction is when a customer insert a(ATM)card in to the card reader, the bank(ATM) the start date and the expiration date if the ATM card is expiration the ATM bank not passed.

If the ATM is pass ,the customer insert PIN(personal identification number) machine the PIN checking the number and determine if correct or not

If not the customer allow three attempts fails.

If the PIN is validated, the customer is prompted for a withdrawal ,query ,transfer transaction before withdrawal the system determine that if the amount of money is enough to complete the process ,

If (yse) complemented and if not the system send message the mount not enough to complete the process.

ATM operator may start up and close down the ATM to open and close account and create, update and delete customer account,

1- User requirements (2 type of user)

- a- user 1 (person who works on the system)
- b- User 2 (the customer who uses the system)

Functional Requirements (user1)

- TO register a new customer
- Input
 - The required data (name , address , id ,age job) of each customer
 - Create an ATM card for each customer
 - Pin of account each ATM card

- Save the all information in database store (my sql)

Functional Requirement (user2)

function	description
withdrawal	The customer withdrawal an amount of cash through ATM card. When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests PIN to enter if it is correct he will send a request to the bank and allow the customer to withdrawal the amount and if the process does not meet the conditions appear message the moment not enough.
transfer	The customer transfers an amount of cash from a account . When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests Pin to enter and if it is correct, he will send a request to the bank and allow the customer to transfer the amount to anther count in a same bank and if the process does not meet the conditions.
Balance inquiry	The customer inquiries about the balance. When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests Pin to enter and if it is correct he will send a request to the bank and print the result.

Non-functional requirement (user& system, software developer)

2.2.1 Safety requirements

- Backup ,recovery & business continuity banks should ensure adequate back up of data as may be required by their operations, bank should also have well documented and test business continuity plans that address all assisted of the banks business
- Both data and software should be backed up periodically

2.2.2 Security Requirement

- account ID and password (PIN) Protection
- Auto time out screen Blanking
- sign-off-on Attempts
- Encryption

2.2.3 Software Quality attributes

a. Reliability

Measure if product is reliable enough to sustain in any condition should give consist correct results. Product reliability is measured in term of working of project under different working environment and different conditions

b. Maintainability

Different versions of the product should be easy to maintain, for development it is easy add code to existing system .maintenance should be cost effective and easy.

C. Portability

This can be measured in term of costing issues related to porting technical issues related to porting, behavioral issues related to porting.

Domain requirement

The ATM device that sounds alarm when there is a fire (functional of user but domain the requirement the system)

Software requirements (user)

This product is developed using open source technology like php

Frontend: GTK+2.8.20 GCC 4.0.0,PHP 5.2.0,GLAD 2.10.1

Backend: MY SQL:

Platform used: Linux, windows xp, windows 10 windows vista

Web Browser: Microsoft internet explorer, Mozilla , Google chrome,

Hardware requirements

- Standard pc
- Internet connection with good enough speed
- ATM
- Pentium better processor
- 256 MB or more RAM
- At least 500 MB hard disk space

Software specifications

- The bank have many automated teller machines(ATM)s ,and the new software system shall provide functionality on all ATM
- The system shall enable the customer of bank who have valid ATM card to perform three type of transaction (1 withdrawal of funds 2-query of account balance 3-transfer of funds from one bank account to another account in the same bank.)
- An ATM card shall be considered valid if it meet the following condition:
 - a. The card was issued by an authorized bank.
 - b. The card is used after the start date the date when the card was issued
 - c. The card is used before the expiration date
 - d. The customer provide correct personal number (PIN) used with the system

- The system shall allow the customer to enter the correct (PIN) in no more three attempts .the failure to provide correct PIN in three attempts shall result in the confiscations of the ATM card.
- The system shall ask for the transaction type after satisfactory validation of customer PIN .the customer shall be given three options: withdrawal or query or transfer transaction.
- If the customer selects withdrawal transaction the system prompt the customer to enter account number and amount to be dispensed.
- If a withdrawal transaction is approved the requested amount of cash shall be dispensed, receipt shall be printed containing information about the transaction and the card shall be
- Ejected .the information printed be transaction number, transaction type, amount withdrawn and account balance.
- If customer selects query transaction the system shall prompt the customer to enter account number.
- If a query transaction is approved the system shall print a receipt and eject the card and printed information (transaction number ,transaction type ,account balance)
- If customer selects transfer transaction the system shall prompt the customers enter account number and mount to be transferred.
- The system shall check if there are enough funds available in the form account which is being requested for transfer to the account.
- If the transfer transaction approved a receipt shall be printed and card shall be ejected
- The system shall cancel any transaction if has not been completed if customer press cancel button
- If high temp the room more 70 the system send sound alarm from atm machine

PDL of ATM SPECIFICATION(*READ BY DEVELOPMEANT OF THE SYSTEM*)

```
# include<iostream.h>
Int x; int y;
Int account;
Char withdraw, transfer, query of balance;
Cout<<" enter pin;
Cin >>pin;
If account>= x;
Cout<< "transfer";
Else
Cout<<" the mount not enough";
If account>= x;
Cout<<" withdraw";
Else
Cout<<" fail the transaction",
If user chose transaction query of balance;
Cout<<' information about the operation:
Coout<<"endl;
If atemp the room > 70
The atm sound alarm;
Else
Cout<<'non";
```

Form-based for of ATM SPECIFICATION

Function withdrawal

Description: The customer withdrawal an amount of cash through ATM card. When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests PIN to enter if it is correct he will send a request to the bank and allow the customer to withdrawal the amount and if the process does not meet the conditions appear message the moment not enough.

Input	ATM card , PIN
Source	withdrawal function input by the user
output	The money ,print receipt for the process
Destination	User → ATM reader →bank data base store
Condition	Usable card, Sufficient amount of cash. correct PIN
Side-effects	None

Function transfer

Description The customer transfers an amount of cash from a account . When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests Pin to enter and if it is correct, he will send a request to the bank and allow the customer to transfer the amount to anther count in a same bank and if the process does not meet the conditions.

Input	ATM card , PIN
Source	transfer function input by the user
output	The money is transfer ,print receipt for the process
Destinations	User → ATM machine reader →bank data base store
Condition	Usable card, Sufficient amount of cash. correct PIN
Side-effects	None

Function Balance inquiry

Description: The customer inquiries about the balance. When the card is inserted, the ATM device reads the card and determines if the card is valid first. Then he requests Pin to enter and if it is correct he will send a request to the bank and print the result.

Input ATM card , PIN

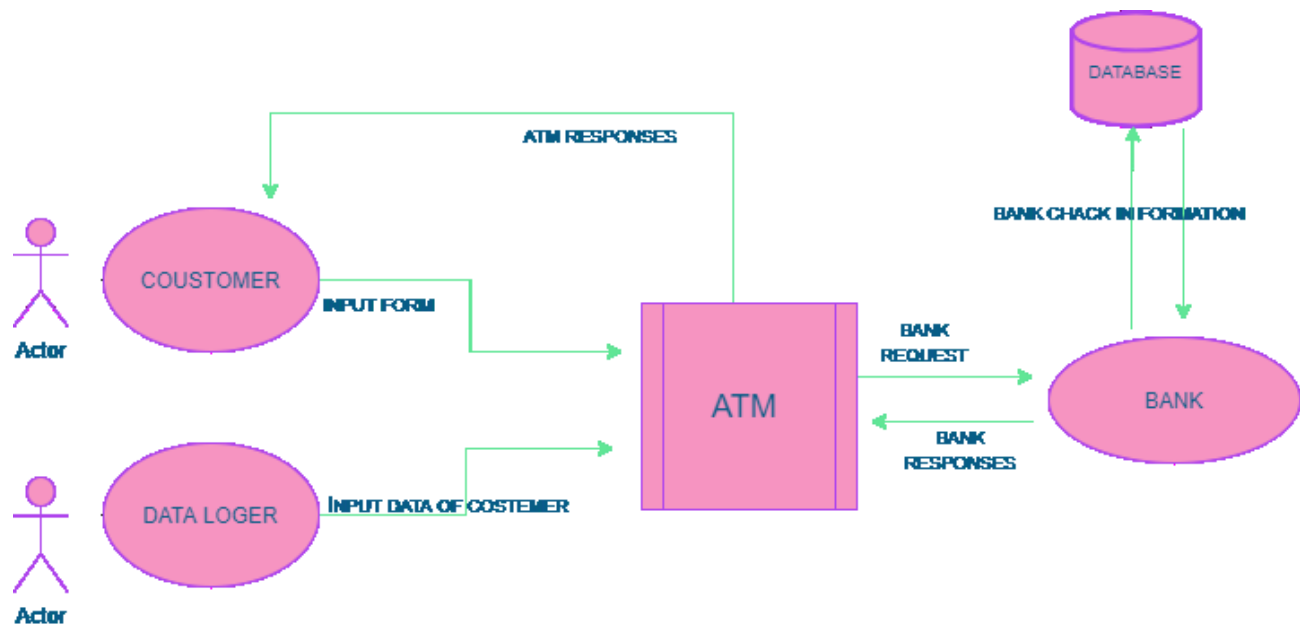
Source **Balance inquiry** function input by the user

output ,print receipt for the process

Destinations User → ATM reader → bank data base store

Condition Usable card, Sufficient amount of cash. correct PIN

Side-effects None



**ATM CONTEXT
DIAGRAM**