Mawlana Bhashani Science and Technology University

Department of Computer Science & Engineering, MBSTU

Project Name: ATM Banking System

Team Name: Brain

Course Title: Software Development Project-II and Industrial Tour
Course Code: CSE3116

<u>**Submitted by**</u>

Name	:	Kaium Miah
ID	:	CE – 15047
Session	:	2014-2015
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<u>**Supervised by**</u>

Lubna Yasmin
Assistant Professor
Dept. of CSE
MBSTU

Project Title: ATM Banking System.

Group Name: Brain.

Team Profile:
Member 01
Kaium Miah
ID: CE – 15047

Individual Contributions:

Student Information	Requirements Specification	Software Design	Coding	Debugging & Testing	Report Preparation
Kaium Miah CE - 15047	✔	✔	✔	✔	✔

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Project Description

An automated teller machine (ATM) is an electronic banking outlet that allows customers to complete basic transactions without the aid of a branch representative or teller. Anyone with a credit card or debit card can access cash at most ATMs.

In this project, user has the overall capability of using features. User can access all kind of features of the ATM.

Here, users can enter into the system using the pin number provided by the company. After that there will be the options by which they will use the system. They can see the account balance details, withdraw or deposit the cash.

This process will continue for all the users.

Thus, we will create our project "ATM Banking System".

Analysis & Domain Modeling

Analysis:

- ➢ Entry: Every user has to enter the pin first.
- ➢ Balance: Initial value will be 1000 by default.
- ➢ Withdraw: User can withdraw cash by using this option. Here the amount has to be multiple of 500.
- ➢ Deposit: User can deposit any amount. There are no limitations for deposit.
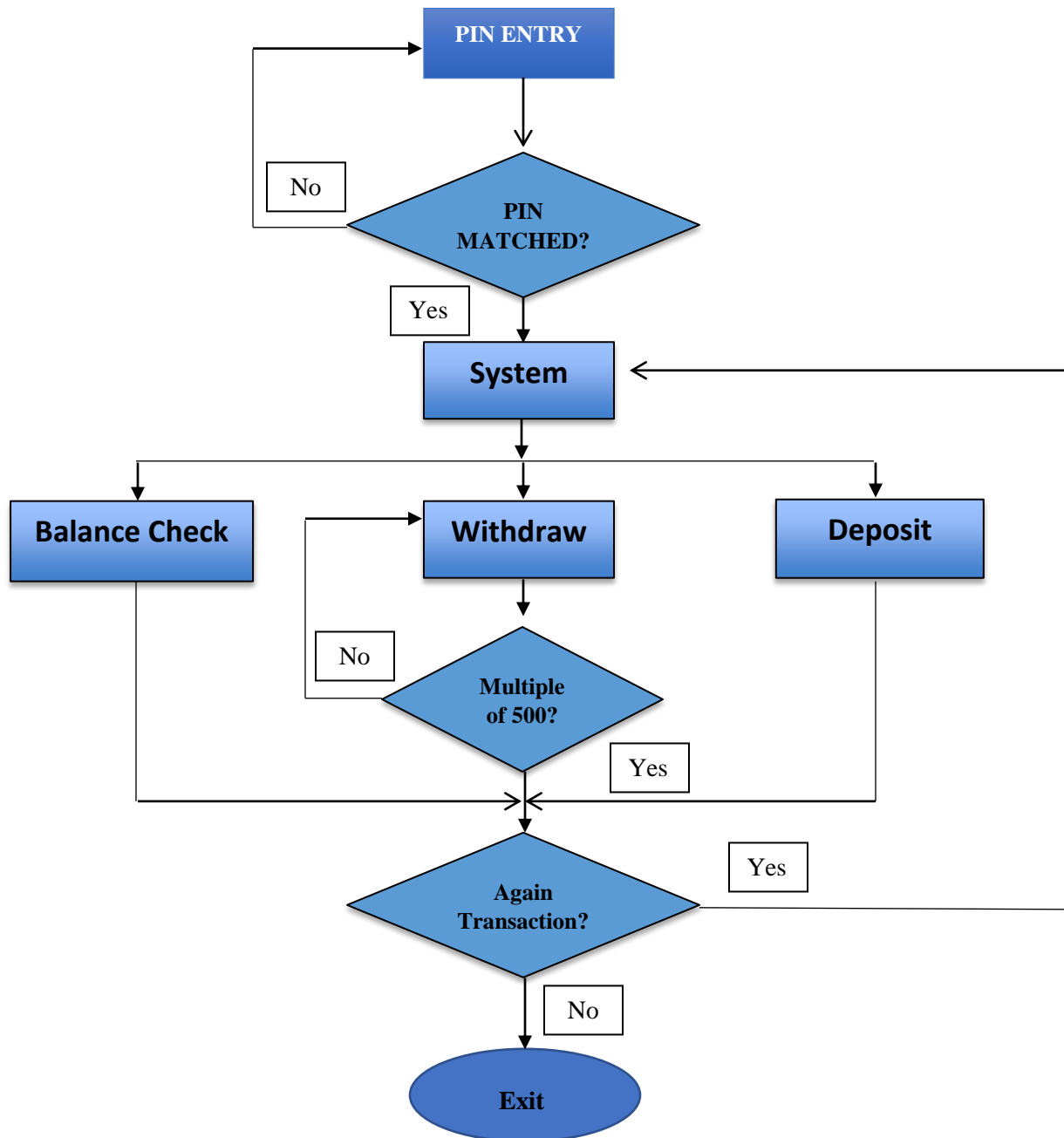- ➢ Exit: Leave from the ATM system.

Domain Modeling:

Fig: Data Flow Diagram

Interface Specifications

Pin:
Every time user has to give the pin to use the system. It is a must and it is provided by the company.

Withdraw:
Withdraw means; users can take their money form the account. But there is a condition that it should be multiple of 500. If not, withdraw money will be demolished.

Deposit:
Here user can input the amount of money he/she want to store. The amount will be added with the previous amount

Exit:
It's a specification where the system will be terminated.

Data Structures

Loop:
In this project, we have used loop (do-while). Here, we make a condition to run the system.
A loop in C consists of two parts, a body of a loop and a control statement. The control statement is a combination of some conditions that direct the body of the loop to execute until the specified condition becomes false. The purpose of the C loop is to repeat the same code a number of times.

Switch-Case:
A **switch** statement allows a variable to be tested for equality against a list of values. Each value is called a case, and the variable being switched on is checked for each **switch case**.

The following rules apply to a **switch** statement −

- The **expression** used in a **switch** statement must have an integral or enumerated type, or be of a class type in which the class has a single conversion function to an integral or enumerated type.

- You can have any number of case statements within a switch. Each case is followed by the value to be compared to and a colon.

- The **constant-expression** for a case must be the same data type as the variable in the switch, and it must be a constant or a literal.

- When the variable being switched on is equal to a case, the statements following that case will execute until a **break** statement is reached.

- When a **break** statement is reached, the switch terminates, and the flow of control jumps to the next line following the switch statement.

- Not every case needs to contain a **break**. If no **break** appears, the flow of control will *fall through* to subsequent cases until a break is reached.

- A **switch** statement can have an optional **default** case, which must appear at the end of the switch. The default case can be used for performing a task when none of the cases is true. No **break** is needed in the default case.

fflush(stdin):
The function fflush(stdin) is used to flush the output buffer of the stream. It returns zero, if successful otherwise, returns EOF and feof error indicator is set.

User Interface Design

Here, I try my best to create an easy user interface (UI) for the users in this project.
Starting from the pin and at last exit from the system is totally user friendly. I have created a console UI. User can easily go from one line to another just inputting the choices.

Thus, I have built my overall console user interface design and implementation of this project.

Design of Tests

Unit Testing:
In this part, I will test my every individual part of the project. "Is my every specification is working correctly?" I will test in this part.

➢ **Pin**:
I will input the pin for starting the system.
1. I will give wrong pin. Then, I will check, "is my system can identify this error?" If system can identify that error, then that is ok.
2. I will provide the correct pin. Then, I will check, "is it login to our system?" If login to the system, then it is ok.

➢ **Withdraw:**
If user wants to withdraw money, then he/she has to input the amount.
1. I have to check, "is my system showing the rules correctly or not?"
2. I have to check the balance also.

➢ **Deposit:**
If user wants to deposit money, then he/she has to input the amount.
1. I have to check, "is my system showing the rules correctly or not?"
2. I have to check the balance also.

Plan of Work

Project Period – 2021

Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Topic Specification	***								
Software Design	***	***	***						
Methodology Development			***	***					
Debugging and Testing			***	***	***	***	***	***	
Writing and Editing Report							***	***	***
Project Submission									***

References

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