

**American International University- Bangladesh**

**CSC 1205: Object Oriented Programming 1 (JAVA)**

**CO4 Evaluation**

**Project Concluding Report**

**Spring 19-20**

**Group ID: X**

**Project Title: ATM BOOTH SYSTEM**

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**Introduction:**

*Why you are doing this project? (No more than 60 words)*

**ATM (Automated Teller Machine) is an electronic banking outlet that allows the customer to process account transaction. This project is based on developing an ATM using “Java Programming Language”. For that I used GUI in this development so that it will become more users friendly to interact.**

**Problem Analysis:**

*What kind of problem is being solved with this project? Who will use this application?*

*(No more than 60 words)*

**A valid account holder can use atm to carry out a number of transactions. If any random user (not account holder) tries to enter the account, that person won’t be able to do so as he must enter valid pin number. A valid account holder can keep track of his account balance without going to bank. He can check his balance and withdraw money.**

**UI Design Analysis:**

*How will the users interact with this application? How can it be improved?*

*(No more than 60 words)*

**The user can interact with the application only if they have valid pin number. In first gui the user must enter valid pin in passwordfield option, then he must press the login button. If the pin is valid then he can see his current balance on another gui. If not, then it will show a message. On 2nd gui the user can see his current balance and withdraw money. After withdrawing it will show a message and his new balance will also be shown.**

**Logical Analysis:**

*How much logic has been applied in this application? Are the applied logics working properly? Is there any logical limitations?*

*When user enters valid pin number, he can get access to his account. From txt file he must enter the right pin number. The txt file has pin number and account. If someone is entering for the 1st time, I set the isLoginSuccess to false. The file will be read until it finds null point. From the file the password will be taken. If the password matches, then isLoginSuccess will be set true and new frame will be shown. Otherwise it will show a message. On the withdraw page labels text will be converted to double(amount) and textfield’s label will also be converted to double(withdraw). If withdraw<=amount ,then withdraw process will be successful and new balance will be set to new balanace.Otherwise it will show a message that user has not enough money.*

**OOP Concept Analysis:**

*What are the OOP1 principles used in this project? How have been they applied? Explain the OOP concepts used in this application (No more than 3 sentences per concept)?*

*(No more than 160 words)*

*I used inheritance in this project. For homepage gui, I am having* ‘extends javax.swing.JFrame’ where I declared label, button, passwordfield for user interaction.

*Besides homepage, inheritance was also used in withdraw gui..*

*In homepage GUI, I used amount variable(String) to get the balance which was also used in withdraw page by getter methods.*

*When user enters their pin, the input read from the file for verification purposes. Reading file was used here for verification and balance checking.*

*Exception handling was used in this project. I used try-catch blocks here. Reading file was used in try blocks. If any exception occurs within try block, that exception is handled by the exception handler associated with it. To associate exception handler, I put catch block after it.*

**Impact of this Project:**

*What impact this project will have on the society and economy? How will people be benefitted from your project?*

(Maximum 80 words)

This project(ATM) provide 24 hours service. It provides service without any error.

The **ATM** allows people to spend no more than 5 minutes at the booth when needing to withdraw cash. Account can be accessed by user using atm from any part of the country. It has relieved customers as they can avail banking service by atm without going to bank. They are not required to stand in long queues and fill up forms for withdrawing money.

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**Limitations and Possible Future Improvements:**

(Maximum 80 words)

Although I tried to develop this program more user friendly, it has some limitations too. Only the registered user can execute this program. All the info is inserted into text file. For further implementation of this application, it needs to get connected with database. Here I am using only text file. In future I can add more functions like depositing money ,change pin etc.

***[Note: Make sure that your report is maximum 3 pages (including cover page).]***