CTU training solutions

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Faculty of Information Technology		
I declare that I am familiar with, and will abide to the Examination rules of CTU _____ **Signature**	**SUBJECT NAME: ADVANCED JAVA** **SUBJECT CODE: JD522**	
	Summative **Duration**: **Date**: - **Total Marks**: 100 **Total pages**: 4	**Examiner**: Mr. Isaac L **Moderator:** Mr. Alfred
	Student number	
	Surname:	**Initials**:	/	%

For this assessment students need to upload all evidence in one pdf document containing Screenshots of each step taken in accordance to the questions. Also the program should be zipped and uploaded.

Scenario

Put your knowledge of object oriented programming and GUI design to the test in this assessment task. You are required to create a program that simulates an ATM with below requirements:

Create a class called Account that contains:

- An int data field named **id** that stores the accounts unique identification number.
- A double data field named **balance** that stores the current balance of the account.
- A Date data field named **dateCreated** that stores the date on which the account was created.
- A constructor that creates an account with the specified **id** and **initial balance**.
- Methods that return the values of all data fields.
- Methods that set the values of the **id** and **balance** data fields.
- A method named withdraw that withdraws a specified amount from the Account.
- A method named deposit that deposits a specified amount into the account.
- A method named **printStatement** that print the user statement.

Create a GUI to simulate how an ATM works in real life. You GUI should be designed as per below requirements.
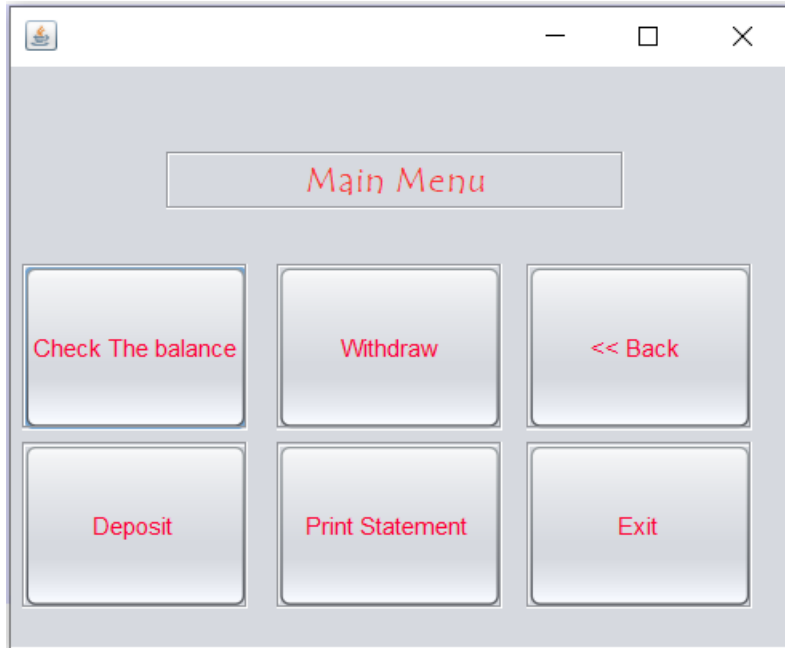
Window 1

Should have a welcome message, a textbox to receive AN EXISTING ID of the user and a button to access the data base. All users ID should be saved in a data base (Don't use access). Once the Id is verified then the program will give the user access to the main menu window.

Your database should have the following columns.

#	ID	USERNAME	INITIALBALANCE	CURRENTBALANCE
1	2	Isaac	1000	450
2	1	Ricco	7500	4000
3	5	Alfred	4500	2500

Window 2

Should have a heading stating "Main Menu" and six options as shown below.

Option 1:

Check Balance: This will allow the user to view the current balance. Use **JOptionPane** to display the balance from the data base.

Option 2:

Withdraw: This will provide another window (Do not use JOptionPane) with a textbox to enter the amount of money the user wants to withdraw. The ATM will not allow the user to withdraw an amount greater than the current balance.

Option 3

Deposit: This will provide another window (Do not use JOptionPane) to allow the user to deposit no amount greater than 10.000 should be deposited on the ATM. In a case the user wants to deposit an amount greater than 10.000 a message box should be displayed Stating "No amount greater than 10.000 will be deposited. Please contact the bank".

Option 4

Print: this option should print the current balance, the name of the user, and the current date.

Option 5

Exit: This option should terminate the program.

Option 6

Back: This option will take back the user to the welcome window

Completed Declaration of Authenticity

I _____ hereby

(FULL NAME)

declare that the contents of this assignment _____ is entirely my own work except for the following documents: (List the documents and page numbers of work in this portfolio that were generated in a group)

Activity	Date

Signature: _____ Date: _____