23mx21 – Software Engineering

USE CASE STORY – Customer Authentication – ATM

1. Name of the Use case	Customer Authentication – ATM
2. Actors	Customer, Bank, DB Admin, Bank Admin
3. Description	This use case describes how to authenticate the Customer.
4. Preconditions	1. Customer must have a valid Debit/Credit Card 2. Active network connection from ATM to Bank System.
5. Triggers	When a customer needs to do any transaction in ATM
6. Flow of Events 6.1 Basic flow of events	**1. Insert ATM Card** The Customer's ATM Card is validated – using his/her credentials available in the bank server. **2. Enter PIN** The ATM displays to enter the PIN. The customer enters the PIN. System validates the entered PIN using his/her details available in the bank server. **3. Display Menu** The ATM displays the menu and allows the customer to proceed with a transaction.
6.2 Alternate flow of events	**1. Invalid ATM Card** If the inserted card is not an ATM Card/ expired ATM card. System will display a

message to insert the correct ATM Card and return the wrong card.

2. **Wrongly Inserted Card**

   Customer inserted the ATM card in the machine wrongly. System will display a message to insert the same correctly.

3. **Inserted Card found in the list of stolen cards.**

   If the inserted card is found in the list of stolen cards maintained by the Bank. Then, your card will be confiscated by the ATM. A message will be displayed to the customer to meet the concerned Bank Manager.

4. **Wrongly entered PIN**

   Customer entered a wrong PIN, the machine will display a message as wrong PIN – enter the correct PIN. Customer has to enter the PIN again.

5. **Consecutive 3 wrong PINs**

   If a customer entered the PIN wrongly 3 consecutive times, your card will be confiscated by the ATM Machine / your account will be blocked. A message will be displayed to the customer with a request to meet the concerned Bank Manager.

7. Success Criteria	The use case concludes when the ATM displays the menu to the customer for a transaction.
8. Post Conditions	**1. Menu Displayed** If everything is fine, menu will be displayed to the customer **2. Returned the wrong card** If the inserted card is not a valid card or if the card is inserted wrongly. **3. Card confiscated /Account Blocked** If the customer entered 3 consecutive wrong PINs or if the inserted Card is found in the stolen list.
9. Use Case Extensions	Withdrawal Deposit Reports generation etc.