## Use Case Narration

Use case Name: Withdraw Cash

Actors: Customer, ATM System

Goal: To withdraw a specific amount of money

Preconditions: Customer has valid ATM Card and sufficient balance.

Post conditions:

* The request amount is dispensed and balance is updated
* Customer’s account balance is updated in the Bank System.
* A receipt is printed (if requested).
* The ATM session ends and the card is ejected.

**Main Flow:**

1. Customer inserts the ATM card.
2. ATM reads the card and prompts for the PIN.
3. Customer enters PIN.
4. ATM sends card and PIN details to the Bank System for verification.
5. Bank System authenticates the customer.
6. Customer selects the **Withdraw Cash** option.
7. Customer enters withdrawal amount.
8. ATM validates the amount and requests transaction approval from the Bank System.
9. Bank System deducts the amount and confirms success.
10. ATM dispenses cash, prints a receipt (optional), and ejects the card.

**Alternative Flows:**

**A1 – Invalid or Unrecognized Card:**

* If the card cannot be read or is not recognized, the ATM displays “Invalid Card” and returns the card.
* The session is terminated.

**A2 – Incorrect PIN:**

* If the PIN is entered incorrectly, the ATM displays “Invalid PIN.”
* After **three failed attempts**, the ATM retains the card and ends the session.

**A3 – Insufficient Balance:**

* If the requested amount exceeds the account balance, the ATM displays “Insufficient Balance” and prompts for a smaller amount.

**A4 – Insufficient Cash in ATM:**

* If the ATM lacks enough cash, it displays “Unable to Dispense Amount” and logs the issue for maintenance.

**A5 – Cancel Transaction:**

* Customer cancels the process at any point before confirmation.
* ATM cancels the operation, ejects the card, and ends the session.