Consider the following ATM system

**Actors: Customer, Bank**

**Use cases : Transaction, Session, Invalid PIN, Withdraw, Deposit, Inquiry**

***Session Use Case***

A session is started when a customer inserts an ATM card into the Machine.

The Machine checks the card, then the customer is asked to enter his/her PIN, the PIN is validated and can then perform one or more transactions, by choosing from a menu of possible types of transactions.

When the transaction is performed the card is ejected.

***Transaction Use Case***

A transaction is started when the customer chooses a transaction type from a menu of options. The customer will be asked to give some details (e.g. amount). The transaction will then be sent to the bank. If the bank approves the transaction, the transaction will be completed, and then a receipt will be printed if the customer wants to.

***Invalid PIN Use Case***

An invalid PIN is started when the bank reports that the customer's PIN is incorrect. The customer is asked to renter his PIN again. After three wrong entries the card will be kept in the machine.

***Withdrawal Use Case***

The system asks the customer to choose a money amount from a menu of possible amounts. The system verifies that it has sufficient money on hand to satisfy the request before sending the transaction to the bank. If the transaction is approved by the bank, the appropriate amount of cash is dispensed by the machine.

***Deposit Use Case***

The system asks the customer to type in a money amount. The request is sent to the bank to verify that the ATM can accept a deposit from this customer. If the transaction is approved, the machine accepts an envelope from the customer containing cash. A message is sent to the bank, to confirm that the bank can credit the customer's account.

***Inquiry Use Case***

Once the system receives an inquire request, it sends a message for the bank get the approval. The system displays the current balance of the user.