Lab-Test (27/10/2017)

ATM System

Subject: Software Engineering

Umamah Ayyaz Ansari (153174) BSCS- V

Analyze the diagram above and do the following tasks:

a) Explain about relationships in the above use case

Association:

- 1. Association exist between Operator and System-startup.
- 2. Association exist between Operator and System-shutdown.
- 3. Association exist between Customer and session.
- 4. Association exist between Banker and Transaction.

Includes:

1. Session uses/includes Transaction.

Extends:

1. Invalid Pin is an extension of Transaction.

Inheritance:

- 1. Withdrawal has inheritance from Transaction.
- 2. Transfer has inheritance from Transaction
- 3. Deposit has inheritance from Transaction
- 4. Inquiry has inheritance from Transaction

b) Does this use case model require any modifications?

NO

c) Write descriptive use case for withdrawal use case

Actors:

Primary Actor: Customer.

Scecondary Actor: Operator and Banker.

Use Case:

Use case Title: Withdraw money from ATM.

Pre-condition:

- 1. User must have electricity and internet connection.
- 2. Cash Available in ATM
- 3. Customer must have ATM card and valid pin.

Trigger: To use ATM for cash withdrawal

Scenario:

- 1. Customer inserts the ATM card into the machine.
- 2. Customer enters valid pin.
- 3. ATM authenticates the Account
- 4. ATM displays the Account access options.
- 5. Customer selects "Withdrawal"
- 6. ATM asks customer to enter the amount to required Withdrawal.
- 7. Customer enters the amount.
- 8. ATM asks for the Receipt roll out.
- 9. Customer enters YES for receipt.
- 10. ATM machine roll out the cash and receipt.
- 11. Customer takes cash out of the ATM machine.
- 12. ATM rolls out the ATM card.
- 13. Customer takes out the ATM Card
- 14. ATM asks for Transaction again.
- 15. Customer enters "NO"
- 16. ATM shows Advertisements.

Post Conditions:

- 1. The user has received their cash and the internal logs have been updated.
- 2. The logs have been updated accordingly.

Exceptions:

1. Loss of internet connections or electricity during the Withdrawal

Frequency of Use: can be used 24/7.

Channel to the Actors: ATM.

Channel to the secondary actors: DATA servers and PC based system.

d) Draw activity diagram of the Withdrawal use case. On VISIO, to be uploaded
On VISIO, to be uploaded