Software Engineering

Lab Test

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**BSCS-5th**

**AIR University Multan Campus**

**SOFTWARE ENGIENEERING – BSCS –V Fall 2017**

**AU MULTAN CAMPUS**

(SE LAB - TEST)

Time: 45 Minutes marks: 30



**Analyze the diagram above and do the following tasks:**

a) Explain about relationships in the above use case

b) Does this use case model require any modifications?

c) Write descriptive use case for withdrawal use case

d) Draw activity diagram of the Withdraw use case.

**Solution:**

1. **Relationship in the Use Case**

* **<< Include >>**

Use case **Session** includes **Transaction** and the

1. Withdrawal
2. Deposit
3. Transfer
4. Inquiry

* **<< Extend>>**

**Transaction** is extended to **Invalid PIN** which allows the customer to enter the PIN three times in case of invalid entry.

1. **Does this use case model require any modifications?**

No, this use case model does not require any modifications as such. It is quiet perfect

1. **Descriptive Use Cases**

|  |  |
| --- | --- |
| **Primary Actor** | Customer |
| **Secondary Actor** | Bank, Operator |
| **Goal** | Withdraw the amount by using ATM card |
| **Trigger** | Customer insert ATM Card |
| **Pre-conditions** | 1. Customer has an account 2. Customer has an ATM card 3. Customer has an amount in his account |
| **Post-conditions** | 1. ATM machine is not working |
| **Scenario** | 1. The customer inserts ATM card in ATM machine 2. The system asks for ATM PIN 3. Customer enters ATM PIN 4. System verify the PIN 5. System allows to build a session if PIN is correct, otherwise ask again for PIN 6. If PIN is wrong on third time, Session terminates. 7. Customer selects “Withdraw Amount’ option. 8. System asks for the amount to be withdrawn. 9. Customer enters the amount. 10. System verify the requested amount from the customer’s account. 11. If the requested amount is present, System deducts the requested amount & gives it to the Customer, otherwise asks again for amount with an error message. 12. Customer takes amount & the n ATM card from the machine. 13. Session terminates |
| **Exception** | 1. Customer doesn’t have an ATM card. 2. Customer doesn’t have the requested amount. 3. Customer cancels the session. 4. Customer enters the Invalid PIN three times. |