

Systems Development: Object Oriented Analysis and Design

(H172 35)

Sequence Diagram Formative

*ATM Withdrawal*

Model a scenario of the Withdraw Money use case of a bank ATM system – A customer can use their bank card at an ATM machine to withdraw money. The system employs a standard procedure of validating the card and account holder’s PIN. The system will also have to verify that it has sufficient money to satisfy the request before sending the transaction to the bank.

The main objects:

Customer

ATM system

Cash dispenser

Card controller

Bank

Account

Step 1

Describe the main flow of events in this scenario. The first 2 events are listed below:

* Customer arrives at the ATM machine and inserts a bank card
* The card is verified by the card controller

Step 2

Translate the events into corresponding system events (input and response messages). The first event is translated below:

|  |  |
| --- | --- |
| Input | Response |
| User arrives at ATM and inserts bank card |  |
|  | The card is verified by the Card Controller |
|  | The issuing bank is contacted to verify its validity |
|  | The ATM system issues pin request to user |

Step 3

Construct a sequence diagram based on the information you have created during steps 1 and 2.