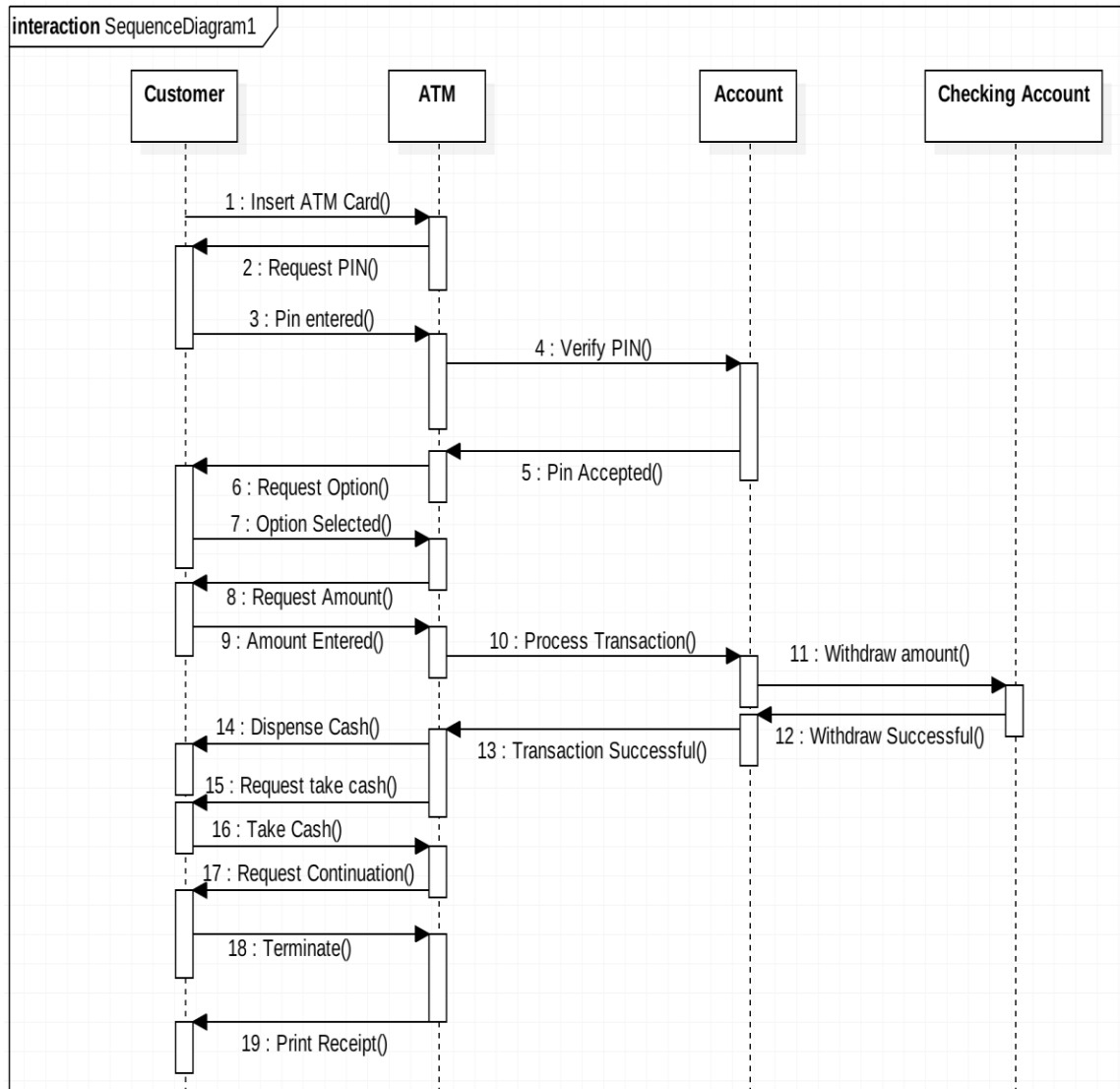


Sequence Diagram: Sequence diagrams typically show the flow of functionality through a use case, and consist of the following components:

1. Actors , involved in the functionality
2. Objects , that a system needs to provide the functionality
3. Messages , which represent communication between objects

Here, is an example of Sequence diagram for withdrawing amount from ATM.



Participants/Components:

- 1. Customer:** The person interacting with the ATM.
- 2. ATM:** The physical or software-based ATM system.
- 3. Account:** Represents the general bank account from which the Customer can perform various transactions.
- 4. Checking Account:** A specific type of account that the Customer may use to perform transactions.

Interactions:

1. Customer Inserts Card:

- The Customer initiates the interaction by inserting their bank card into the ATM.
- The ATM reads the card's information and identifies the type of account (Checking or other) based on the card data.

2. Customer Enters PIN:

- The ATM prompts the Customer to enter their Personal Identification Number (PIN).
- The Customer enters the PIN, which is then sent to the ATM.

3. PIN Verification:

- The ATM communicates with the Bank Server to verify the entered PIN and the account type (Checking or other).
- The Bank Server validates the PIN and confirms the account type.

4. Customer Selects Transaction:

- Upon successful PIN verification, the ATM presents a list of transaction options to the Customer (e.g., Withdraw, Deposit, Balance Inquiry).
- The Customer selects a specific transaction.

5. Transaction Processing:

- Depending on the selected transaction (e.g., Withdraw), the ATM initiates the appropriate process.

- If necessary, the ATM communicates with the Bank Server to perform the transaction on the appropriate account (either "Account" or "Checking Account").

6. Cash Dispensing (if applicable):

- In the case of a withdrawal, the ATM dispenses the requested cash amount to the Customer.

- This step is specific to cash-related transactions.

7. Receipt Generation:

- After the successful completion of a transaction, the ATM generates a transaction receipt.

- The receipt may include details like the transaction amount, account balance, and a timestamp.

8. Completion and Card Retrieval:

- The Customer has the option to perform additional transactions or complete their session.

- If the session is completed, the ATM ejects the Customer's card, and any dispensed cash is given to the Customer.

- The Customer takes the receipt as well.

9. Session Termination:

- The ATM logs the Customer out to ensure account security.

- The ATM is ready for the next Customer.

This Sequence Diagram now includes "Account" and "Checking Account" as specific actors to illustrate the interactions between the Customer and these account types within the ATM system. It helps to clarify how different accounts are handled during transactions at the ATM.