

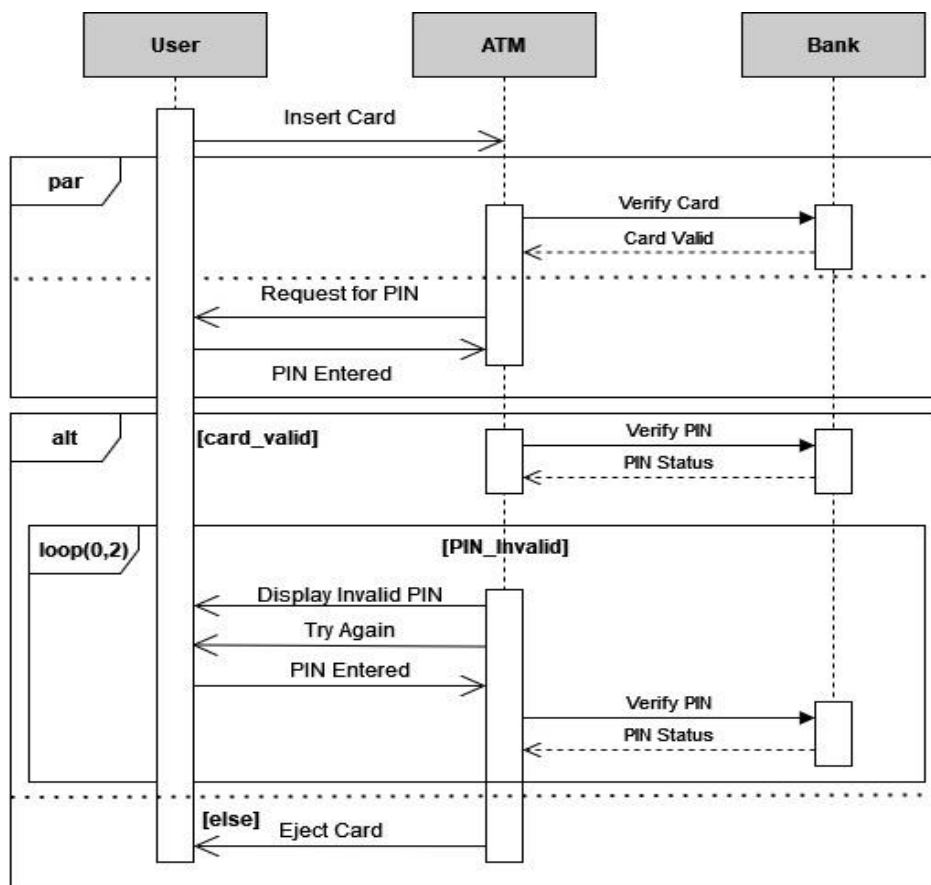
# ATM Machine

## *Introduction:*

The Automated Teller Machine (ATM) is a widely used electronic banking system that allows customers to perform various financial transactions, such as cash withdrawals, balance inquiries, fund transfers, and more, without the need for human intervention. ATMs are available 24/7, providing convenient access to banking services.

## *UML Sequence Diagram:*

A UML sequence diagram is a visual representation of the interactions between objects or components in a system over time. Below is a simplified UML sequence diagram for a withdrawal process at an ATM:



### ***Description:***

- **User:** Initiates the transaction by inserting their ATM card and entering a withdrawal amount.
- **ATM:** Receives the user's request and communicates with the bank's server.
- **Bank Server:** Verifies the user's card, checks the account balance, and processes the withdrawal.
- **ATM:** Dispenses cash to the user.
- **User:** Collects the cash and the transaction is complete.

### ***Operating Process of UML Sequence Diagram:***

1. The user inserts their ATM card and enters the withdrawal amount.
2. The ATM system sends a "Withdraw" request to the bank server.
3. The bank server validates the user's card, checks the account balance, and authorizes the withdrawal.
4. The bank server sends a response to the ATM, confirming the transaction.
5. The ATM dispenses the requested amount of cash.
6. The user collects the cash, and the transaction is complete.

### ***Concluding Remarks:***

The proposed ATM system provides users with a convenient and secure way to access their bank accounts and perform various financial transactions. The UML sequence diagram above illustrates the interactions between the user, ATM, and the bank server during a typical withdrawal process. This is just one of many possible interactions within an ATM system, which can include additional features such as balance inquiries, fund transfers, and more.

### **References:**

1. [Unified Modeling Language \(UML\)](#)
2. [UML Sequence Diagrams](#)