

LAB 8

AIM: To draw collaboration diagram of ATM

THEORY:

A **Collaboration Diagram** (also known as **Communication Diagram**) is a type of **interaction diagram** in UML (Unified Modeling Language) that illustrates how objects interact with each other to fulfill a particular functionality. It emphasizes the **structural organization** of objects and the **messages exchanged** between them.

Key Features of a Collaboration Diagram

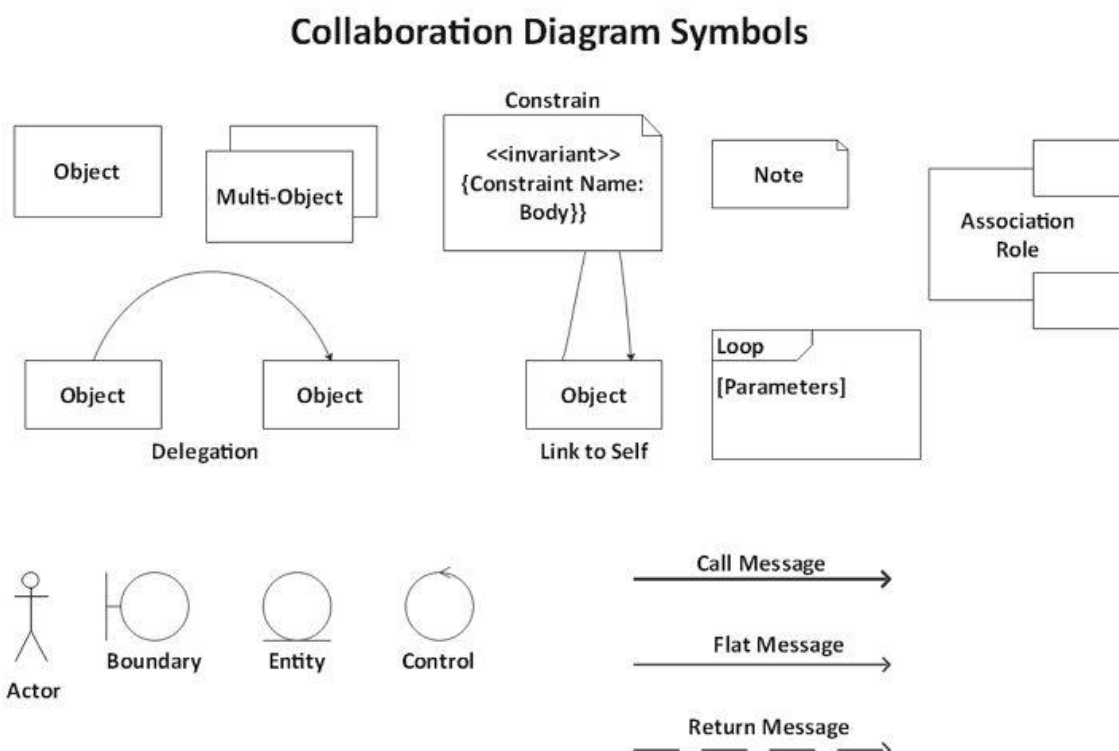
1. **Objects & Actors:** Represented as boxes, showing entities participating in the interaction.
2. **Links/Associations:** Lines connecting objects, indicating relationships.
3. **Messages (Method Calls):** Numbered arrows showing the sequence of interactions.
4. **Sequence Order:** Messages are labeled numerically (1, 2, 3...) to define the order of execution.

Purpose of a Collaboration Diagram

- Helps **visualize object interactions** in a system.
- Emphasizes **how objects are linked** and their communication rather than focusing on **time-based sequence** (as in a Sequence Diagram).
- Useful for **designing object-oriented systems** and refining use case scenarios.

Example Use Case

In an online shopping system, a customer object interacts with the shopping cart, which in turn communicates with the payment system. The collaboration diagram visually represents these interactions.



a) Collaboration diagram of ATM

