Laboratory Report

Experiment No - 08

Batch -

Date of Experiment: _____ Date of Submission: _____

Title:

Develop Sequence and Collaboration diagram for the project

_____

Evaluation:

1) Attendance [2] ----------

2) Lab Performance [2] ----------

3) Oral [1] ----------

Overall Marks [5] ----------

Subject In-Charge

Experiment No: -08

TITLE: Develop Sequence and Collaboration diagram for the project

PREREQUISITE:

1. Concepts of Object Oriented Programming & Methodology.

2. Knowledge of developing applications with front end & back end connectivity

HARDWARE CONFIGURATION / KIT:

Sr. No	Minimum Hardware Configuration	
1	Processor	800MHz Intel Pentium III or above versions
2	RAM	512 MB
3	HDD	1.5 GB of free disk space

SOFTWARE CONFIGURATION:

Sr. No	Minimum Software Configuration	
1	Operating System	Microsoft Windows Vista/7 or above versions
2	Editor	
3	Software	

THEORY: -

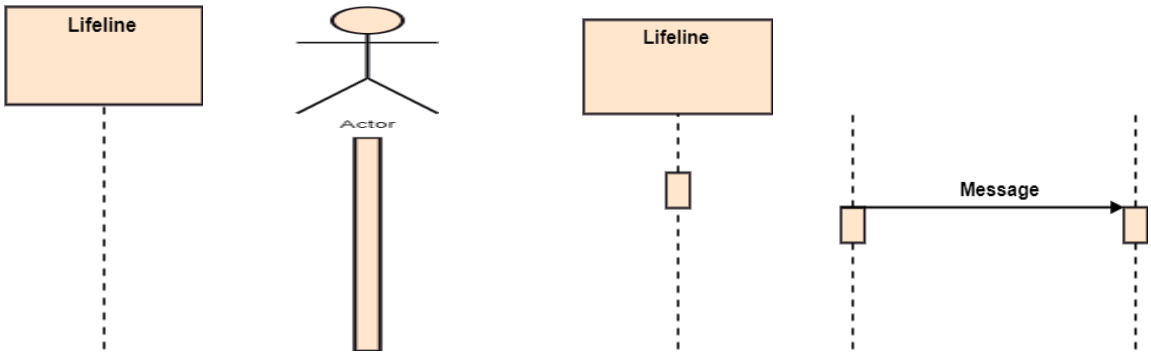
- **Sequence Diagram**

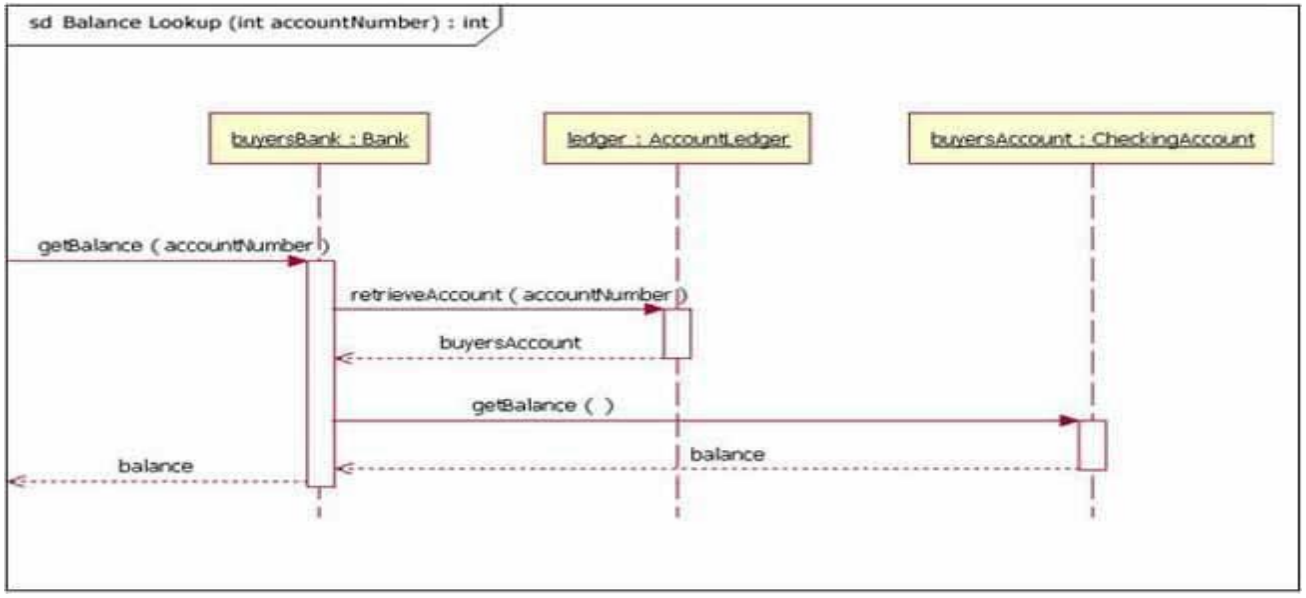
  The main purpose of a sequence diagram is to define event sequences that result in some desired outcome. The focus is less on messages themselves and more on the order in which messages occur; nevertheless, most sequence diagrams will communicate what messages are sent between a system's objects as well as the order in which they occur. The diagram conveys this information along the horizontal and vertical dimensions: the vertical dimension shows, top down, the time sequence of messages/calls as they occur, and the horizontal dimension shows, left to right, the object instances that the messages are sent to.

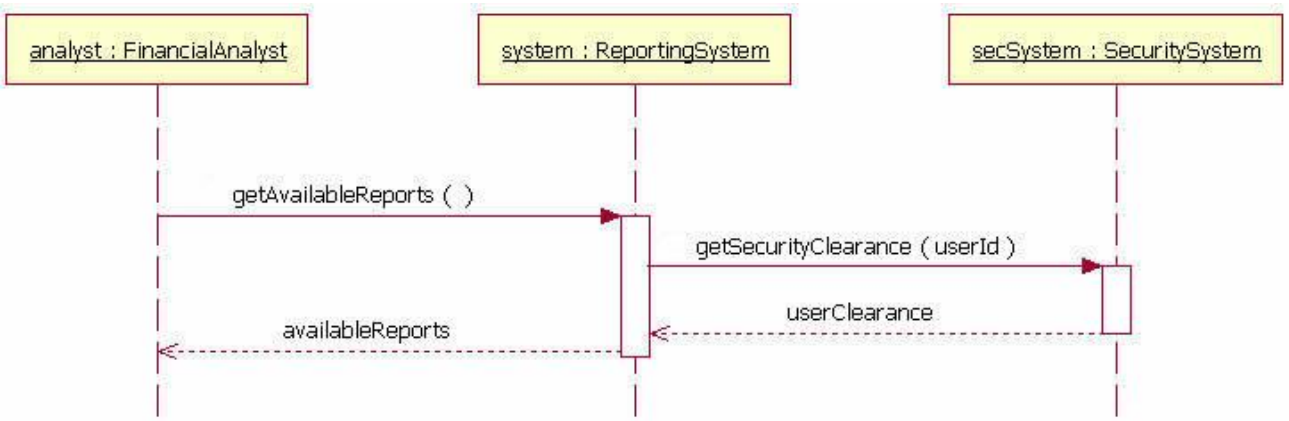
  Purpose of a Sequence Diagram

  To model high-level interaction among active objects within a system.
  To model interaction among objects inside a collaboration realizing a use case.
  It either models generic interactions or some certain instances of interaction

Notations

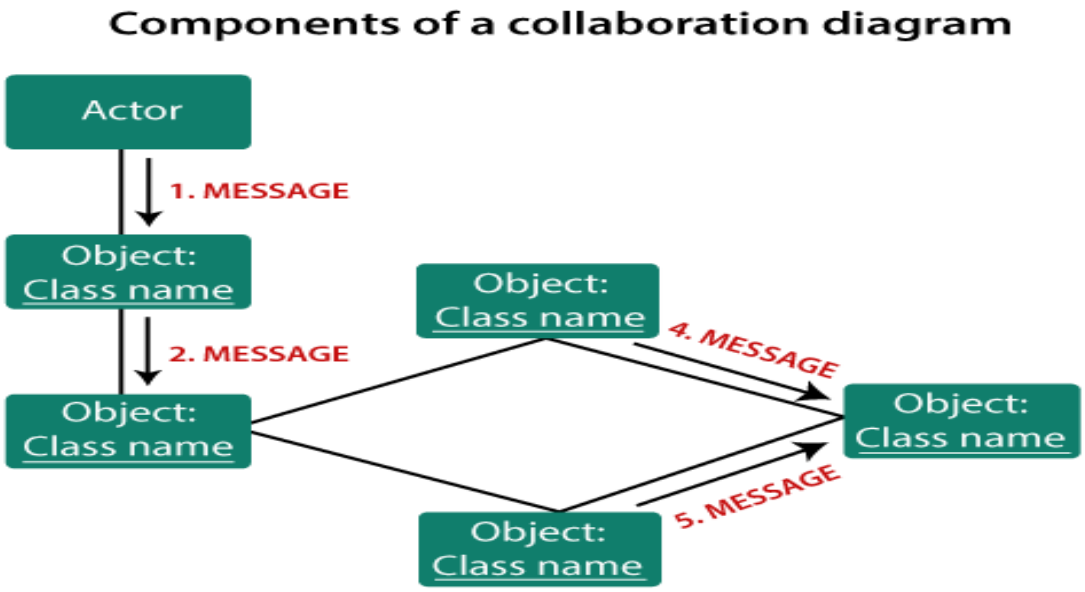

Lifeline
Actor
Lifeline
Message


sd Balance Lookup (int accountNumber) : int
buyersBank : Bank
ledger : AccountLedger
buyersAccount : CheckingAccount
getBalance (accountNumber)
retrieveAccount (accountNumber)
buyersAccount
getBalance ( )
balance
balance

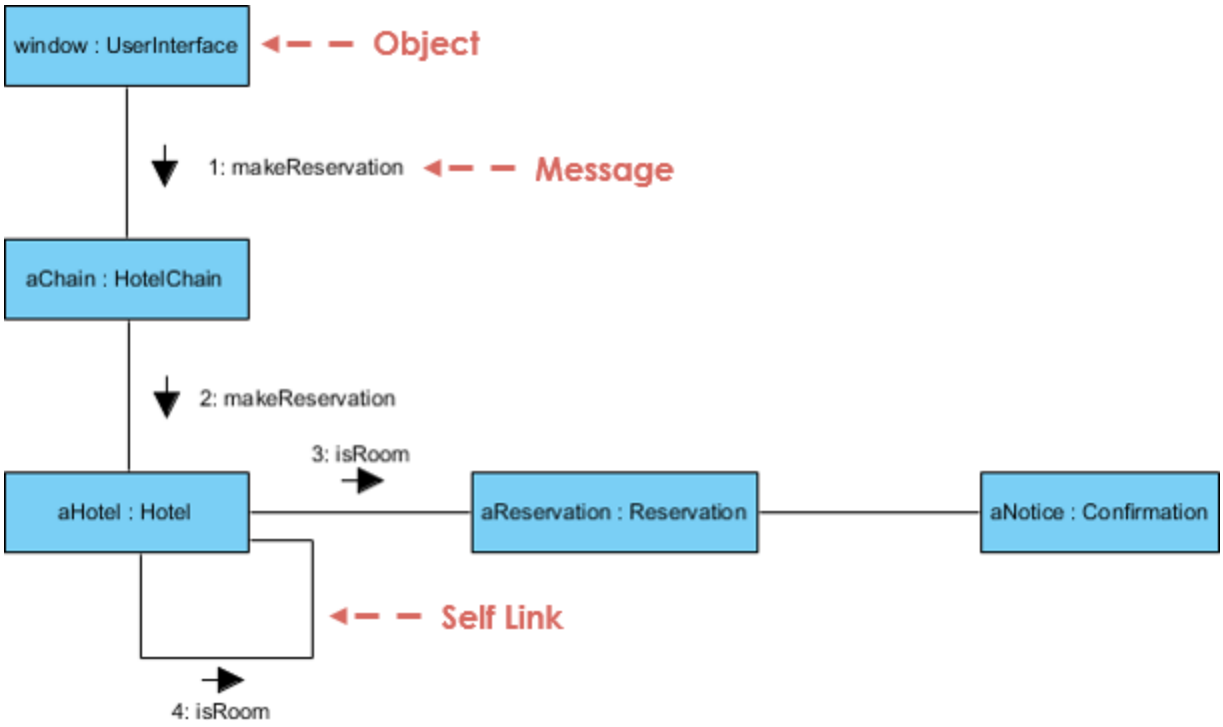


- **Collaboration diagram**

The collaboration diagram is used to show the relationship between the objects in a system. Both the sequence and the collaboration diagrams represent the same information but differently. Instead of showing the flow of messages, it depicts the architecture of the object residing in the system as it is based on object-oriented programming. An object consists of several features. Multiple objects present in the system are connected to each other. The collaboration diagram, which is also known as a communication diagram, is used to portray the object's architecture in the system.



Example:


window : UserInterface
Object
1: makeReservation
Message
aChain : HotelChain
2: makeReservation
3: isRoom
aHotel : Hotel
aReservation : Reservation
aNotice : Confirmation
Self Link
4: isRoom