

Vansh Nitin Jain

SRN : 202001351

Roll No : 26

Division B

SE LAB

Assignment 8

Online Library Management System

**To develop Communication Diagram for the target
System.**

Varsh Nitin Jain

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202001351

SE Lab Assignment - 08

To Develop Behavioural Model For Target System. Draw a Communication Diagram.

Communication diagram is a kind of UML interaction diagram which shows interactions between objects and/or parts using sequenced messages in a Free-Form arrangement.

Communication diagram corresponds (i.e. could be converted to/from or replaced by) to a simple sequence diagram without structuring mechanisms such as interaction uses & combined fragments.

It is also assumed that message overtaking (i.e. the order of the reception are different from the order of sending of a given set of message) will not take place or is irrelevant.

Communication Diagrams are best used when one use case has multiple scenarios that need depicting. They show the passing of messages b/w objects in a system or piece of software.

Depicting the interactions between objects

Visualize how messages are sent & received between objects, as well as the consequences.

Frame: Communication diagrams could be shown within a rectangular frame with the name in a compartment in the upper left corner.

Lifeline: Lifeline is a specialization of named element which represents an individual participant in the interaction. While parts & structural features may have multiplicity greater than 1, lifeline represent only one interacting entity IF the referenced connectable element is multivalued (i.e. has a multiplicity > 1) then the lifeline may have an expression (selector) that specifies which particular part is represented by this lifeline. IF the selector is omitted, this means that an arbitrary representative of the multivalued connectable element is chosen.

A lifeline is shown as a rectangle. Lifeline in sequence diagram does have "tail" representing the line of life. whereas "lifeline" in communication diagram has no line, just "head".

message : message in communication diagram is shown as a line with sequence expression & arrow above the line. The arrow indicates direction of the communication.

Conclusion :

The UML Communication diagram is one of the methodologies that help to contribute the creation of online library management system.

Communication Diagram :

