

Practical 9

AIM : To study Communication Diagram

Communication Diagram:

- Communication diagram (called collaboration diagram in UML) is a kind of UML interaction diagram which shows interactions between objects and/or parts (represented as lifelines) using sequenced messages in a free-form arrangement.
- It corresponds (i.e. could be converted to/from or replaced by) to a simple sequence diagram without structuring mechanisms such as interaction uses and combined fragments. It is also assumed that message overtaking (i.e., the order of the receptions are different from the order of sending of a given set of messages) will not take place or is irrelevant.

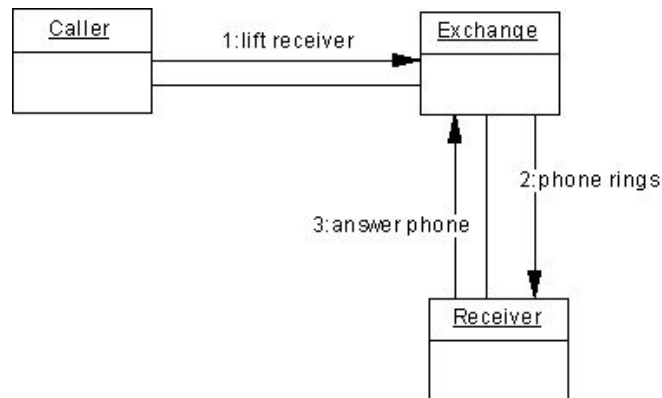


Fig 9.1

Components of Communication Diagram

The major elements of the communication diagram are shown on the picture below.

- Frame
- Lifeline
- Message

Frame

- Communication diagrams could be shown within a rectangular frame with the name in a compartment in the upper left corner.
- There is no specific long form name for communication diagrams heading types. The long form name interaction(used for interaction diagrams in general) could be used.

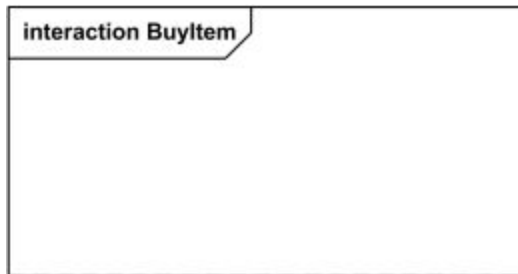


Fig 9.2

Lifeline

- Lifeline is a specialization of named element which represents an individual participant in the interaction. While parts and structural features may have multiplicity greater than 1, lifelines represent only one interacting entity.



Fig 9.3

Message

- Message in communication diagram is shown as a line with sequence expression and arrow above the line. The arrow indicates direction of the communication.

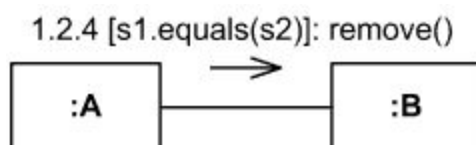


Fig 9.4

Communication Diagram for Online Shopping Portal

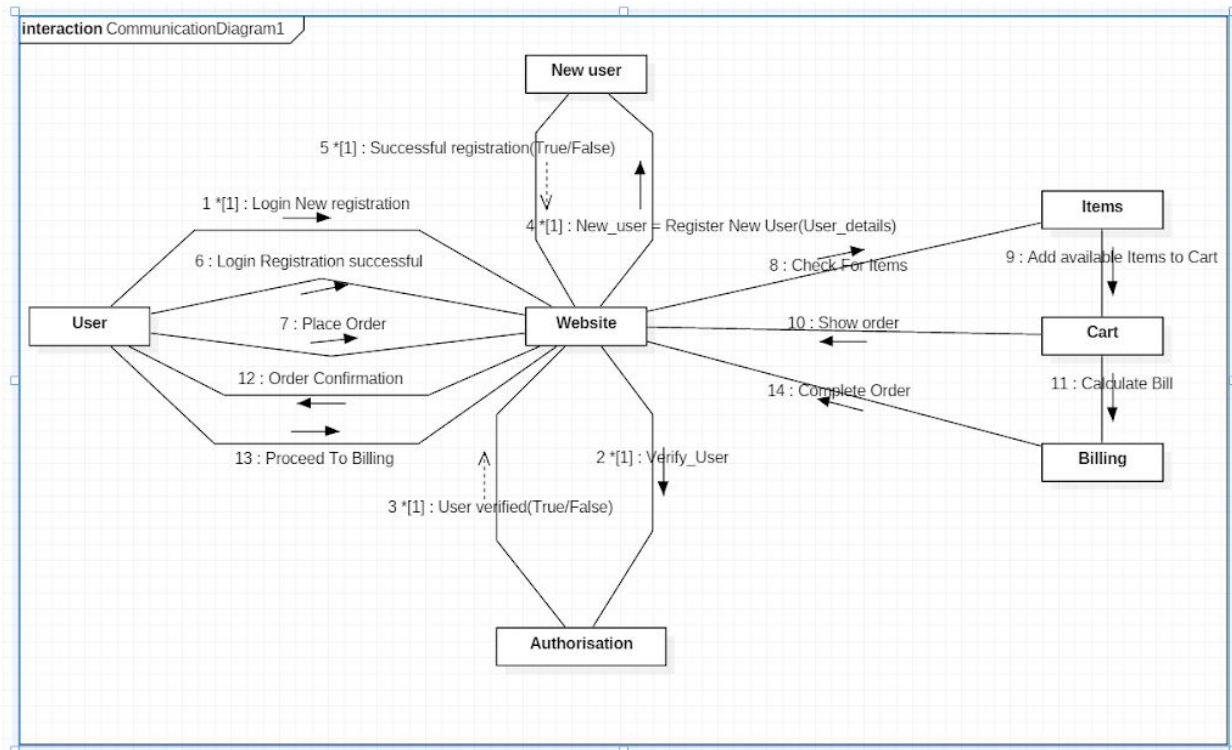


Fig 9.5