



BITS Pilani

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Object Oriented Analysis & Design Module-4 (RL 4.2.3)

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Representation of Interaction Diagrams in UML

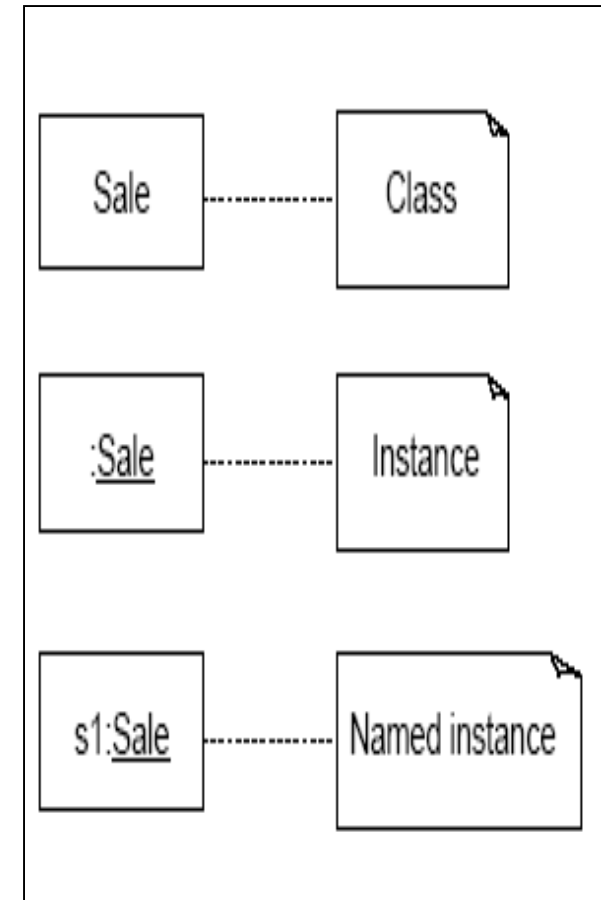
Illustrating Classes and Instances



- To show an instance of a class, the regular class box graphic symbol is used, but the name is underlined.

Additionally a class name should be preceded by a colon.

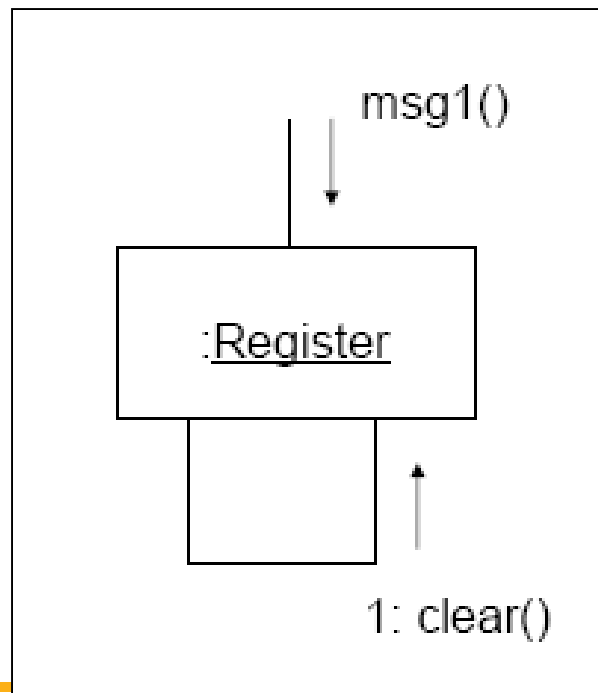
- An instance name can be used to uniquely identify the instance.



Messages to “self” or “this”



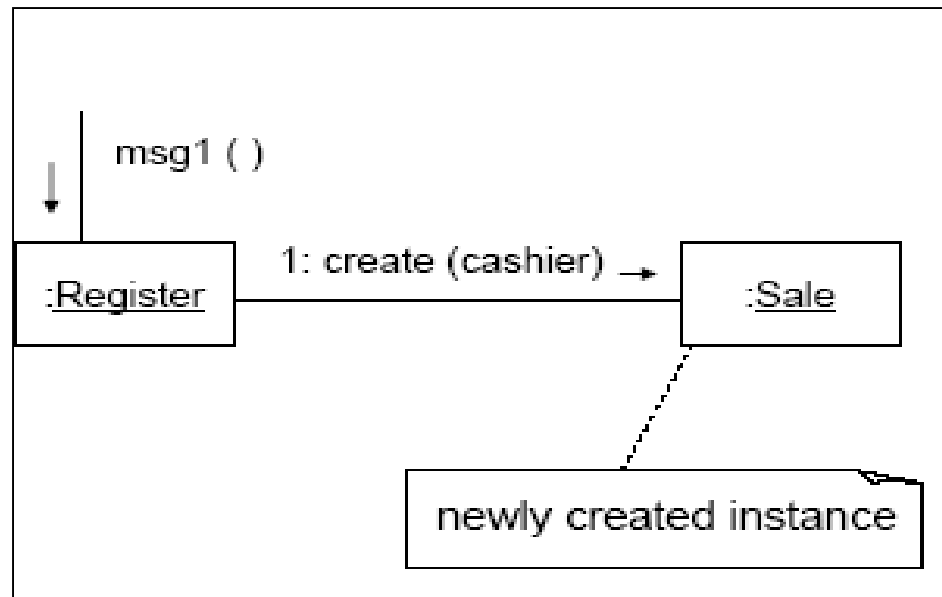
- A message can be sent from an object to itself.
- This is illustrated by a link to itself, with messages flowing along the link.



Creation of Instances



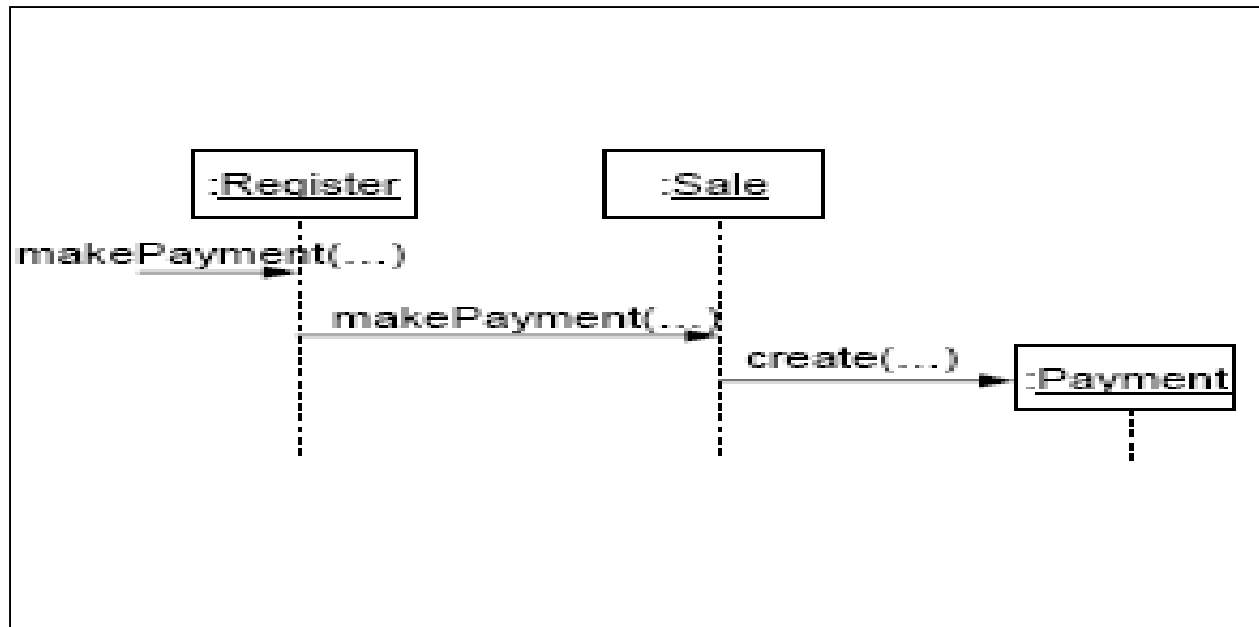
- The language independent creation message is create, being sent to the instance being created.
- The create message may include parameters, indicating passing of initial values.



Creation of Instances

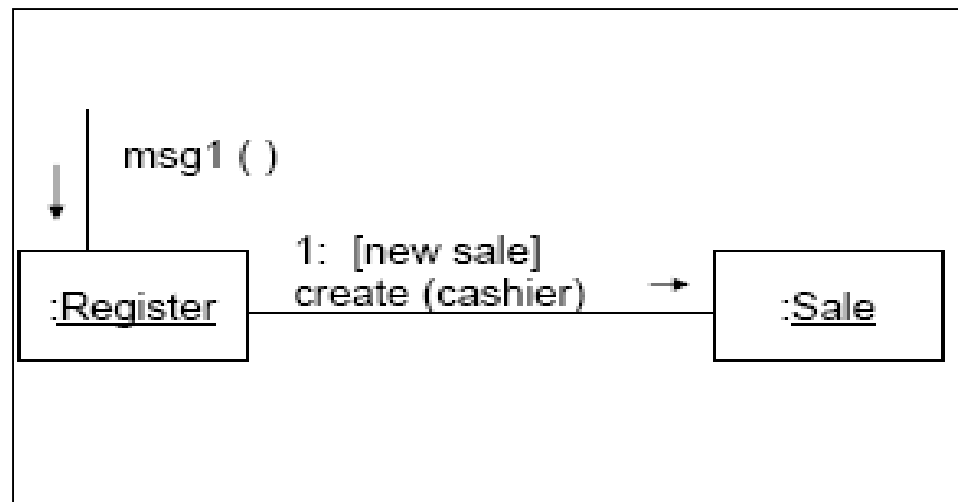


- An object lifeline shows the extend of the life of an object in the diagram.
- Note that newly created objects are placed at their creation height.

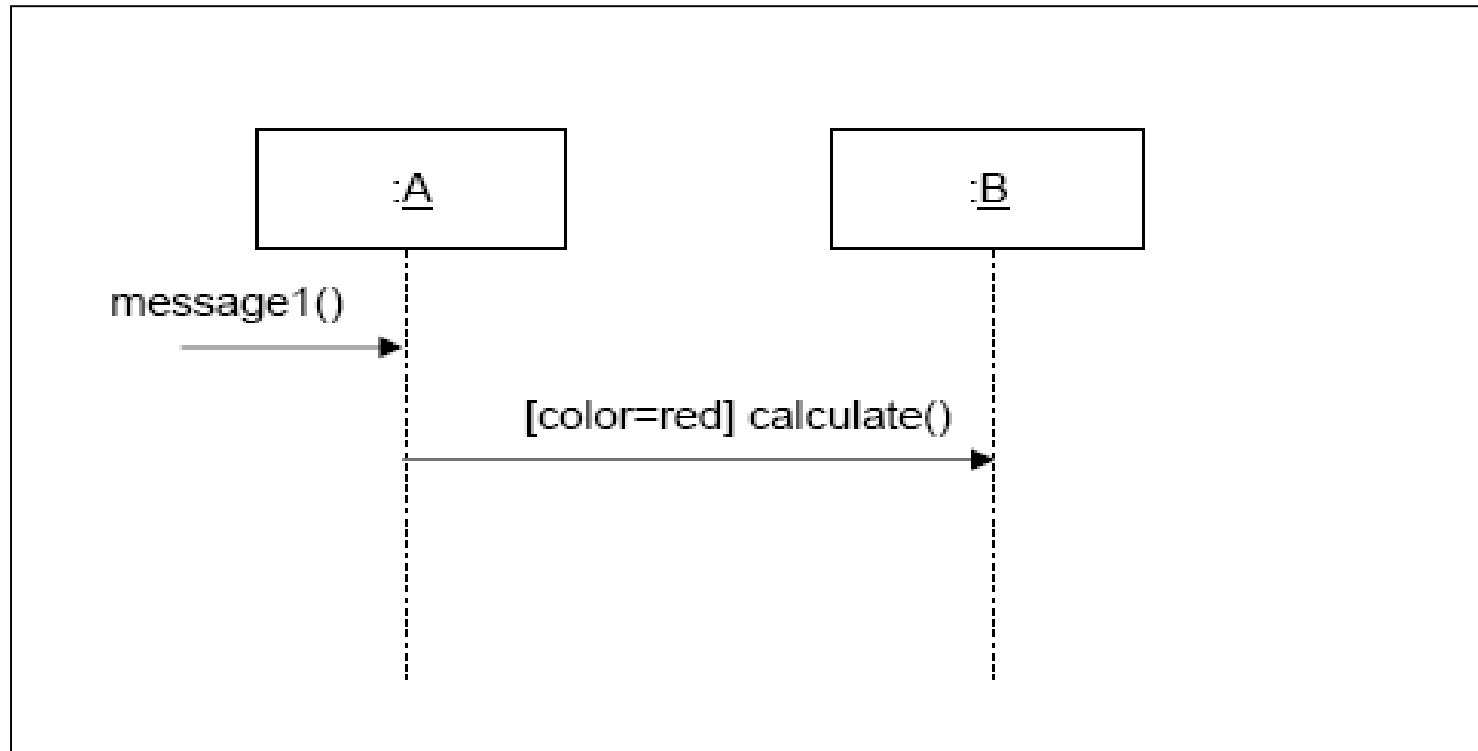


Conditional Messages

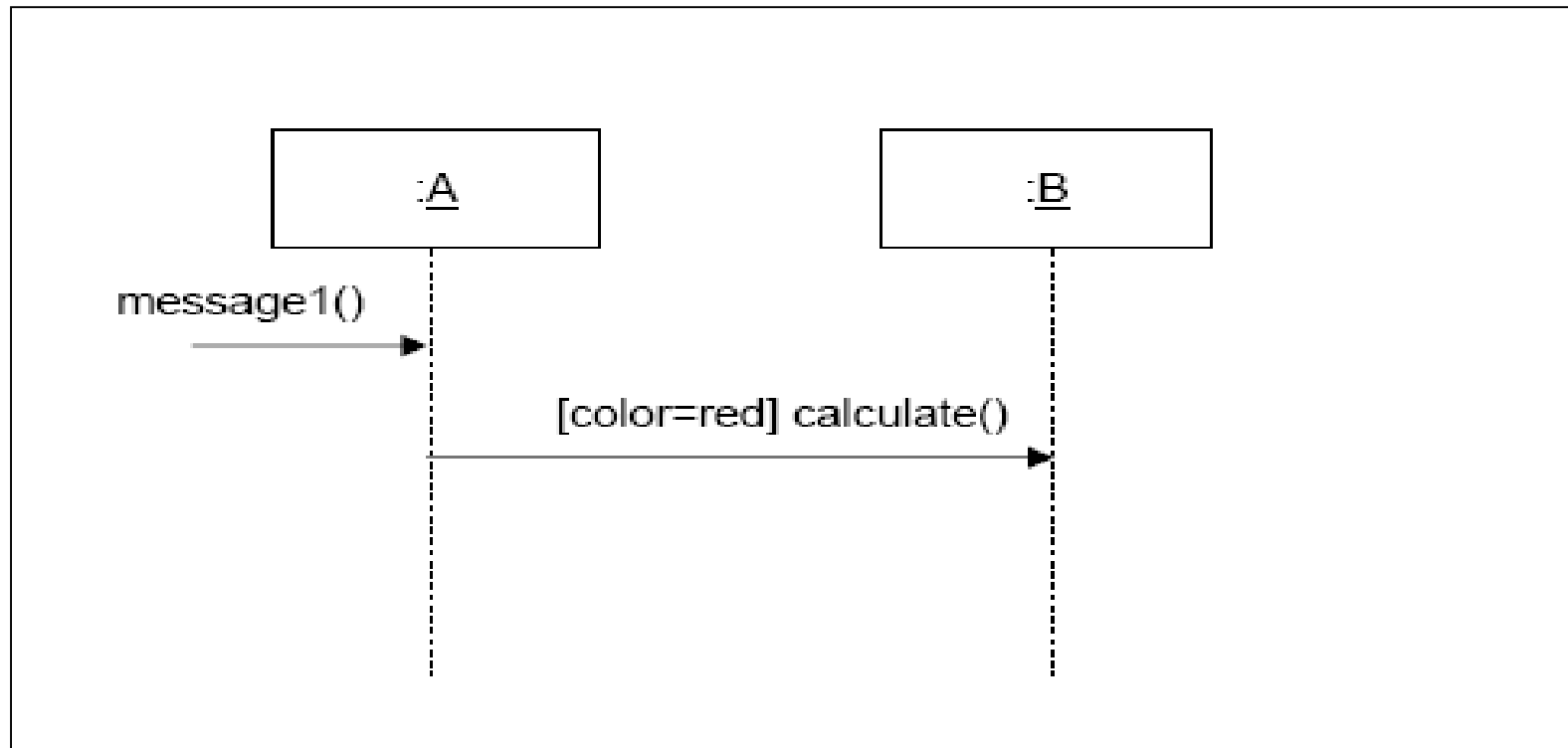
- A conditional message is shown by following a sequence number with a conditional clause in square brackets, similar to the iteration clause.
- The message is sent only if the clause evaluates to true.



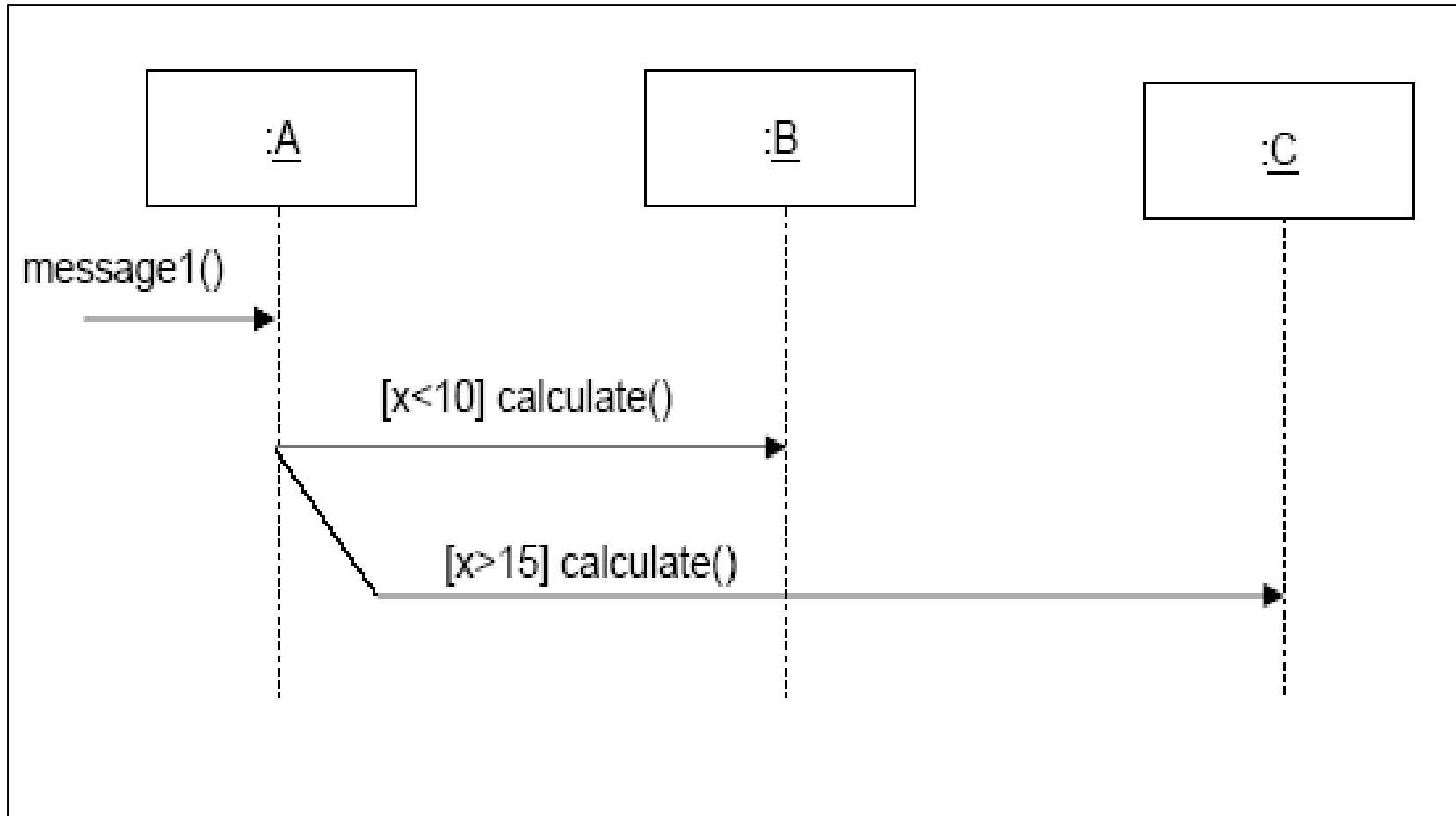
Conditional Messages



Mutually Exclusive Conditional Paths



Mutually Exclusive Conditional Messages



Iteration or Looping

- Iteration is indicated by following the sequence number with a star *
- This expresses that the message is being sent repeatedly, in a loop, to the receiver.
- It is also possible to include an iteration clause indicating the recurrence values.

