lifeline notation elements are placed across the top of the diagram. Lifelines are representative of roles or object instances that partake in the sequence being modeled. From a visual perspective, lifelines are shown as a box with a dashed line descending from the center of the bottom edge. The lifeline’s name is placed inside the box. Additionally, the lifeline name is underlined. What this means is that the lifeline represents a specific instance of a class in a sequence diagram.

**Messages**

For the sake of readability, the first message of a sequence diagram always starts at the top and is located on the left side of the diagram. Subsequent messages are then added to the diagram slightly lower then the previous message. To show an object or lifeline sending a message to another object, you draw a line to the receiving object with a solid arrowhead (if a synchronous call operation) or with a stick arrowhead (if an asynchronous signal). The message/method name is placed above the arrowed line. The message that is being sent to the receiving object represents an operation/method that the receiving object’s class implements.

**3. Guards**

When modeling object interactions, there will be times when a condition must be met for a message to be sent to an object. Guards are conditions that need to be used throughout UML diagrams to control flow. Remember that a guard could only be assigned to a single message. To draw a guard on a sequence diagram, you placed the guard element above the message line being guarded and in front of the message name, as shown below.

##### 4. Alternatives

This type of elements are utilized to indicate a mutually exclusive choice that exists between more that one message sequence. Alternatives allow the modeling of the “if then else” logic (e.g., if you were to buy three items, then you get 20% off your purchase; whereas you get 10% off your purchase). As you can see below, will notice that an alternative combination fragment element is drawn using a frame. The word “alt” is placed inside the frame’s name box.