

# Sequence diagrams

Begins 40:00 minutes Ends 46:35 minutes into the Week 04 Meeting

Meeting link: <https://www.youtube.com/watch?v=YpP2z0CW-9I>

Sequence diagrams are used to show the interaction between objects (both people and items) and what order something should occur in. Basically the logic of a complex operation, function, or procedure

In simple terms it is a visual programming language or visual programming form.

- The dashed lines hanging from the boxes are called object lifelines, representing the life span of the object during the scenario being modeled - See more at: <http://agilemodeling.com/artifacts/sequenceDiagram.htm#sthash.PrSv6t30.dpuf>
- The long, thin boxes on the lifelines are activation boxes, also called method-invocation boxes, which indicate processing is being performed by the target object/class to fulfill a message - See more at: <http://agilemodeling.com/artifacts/sequenceDiagram.htm#sthash.PrSv6t30.dpuf>
- Messages to objects are solid lines with arrows
- Return values are dashed lines in the reverse order.
- To draw an object calling itself, you draw a message as you would normally, but instead of connecting it to another object, you connect the message back to the object itself modeled - See more at: <http://www.ibm.com/developerworks/rational/library/3101.html>

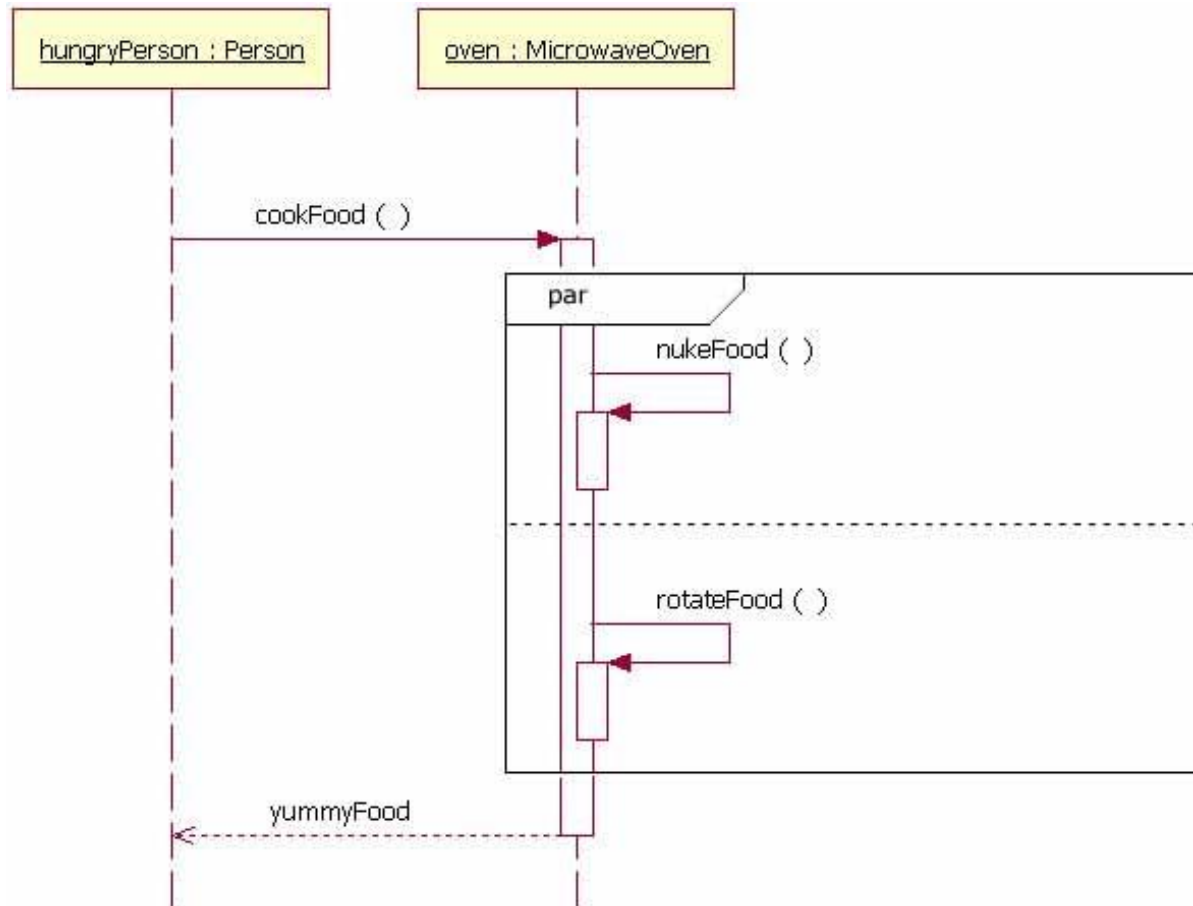


Image found at: [http://www.ibm.com/developerworks/rational/library/content/RationalEdge/feb04/3101\\_figure17.jpg](http://www.ibm.com/developerworks/rational/library/content/RationalEdge/feb04/3101_figure17.jpg)

In the above scenario:

A hungry person places food in a microwave to cook, as represented by a solid message line to the microwave object. The microwave 'nukes' the food and at the same time rotates the food, both are internal functions or messages. The bar represents the length of time the microwave performs the function. At the end of the function (the end of the bar) the microwave returns the food to the hungry person, as represented by the dashed line.

Subsequent function of setting a table or sitting down at a table and eating would be included in a separate set of Sequence Diagrams.

The most important thing about this is to keep it simple.