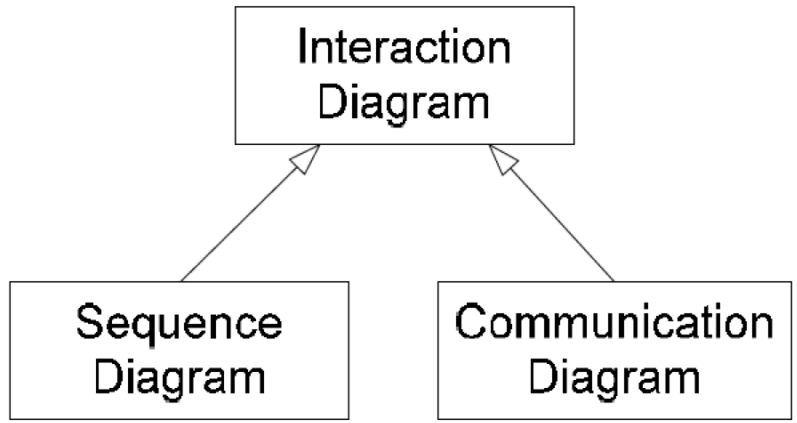
Sequence Diagrams

Interaction Diagrams

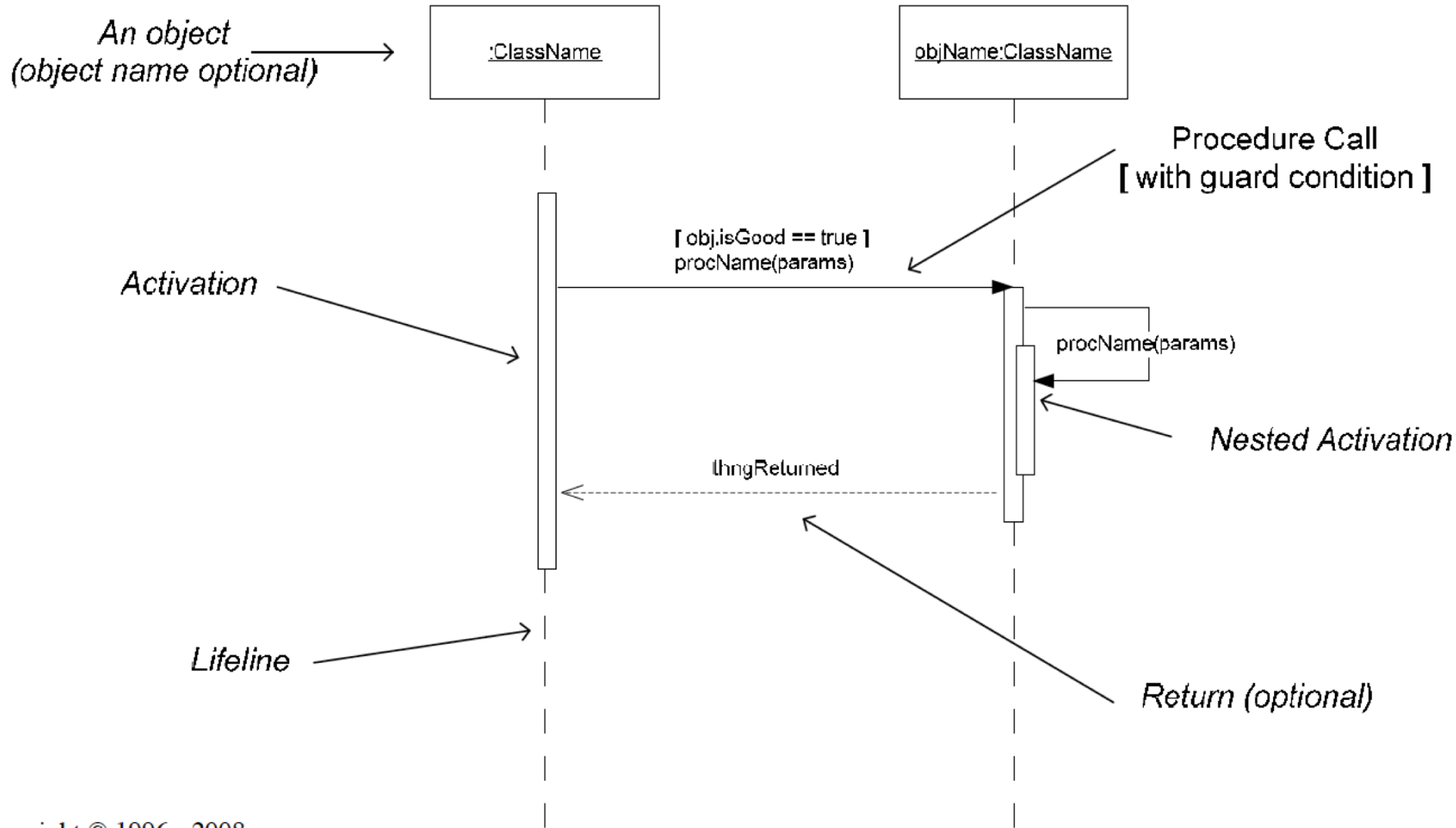


- Communication Diagrams (formerly known as Collaboration Diagrams) are roughly equivalent to Sequence Diagrams semantically; they are just laid out differently, with Sequence Diagrams placing more emphasis on the time-flow aspect of the situation.

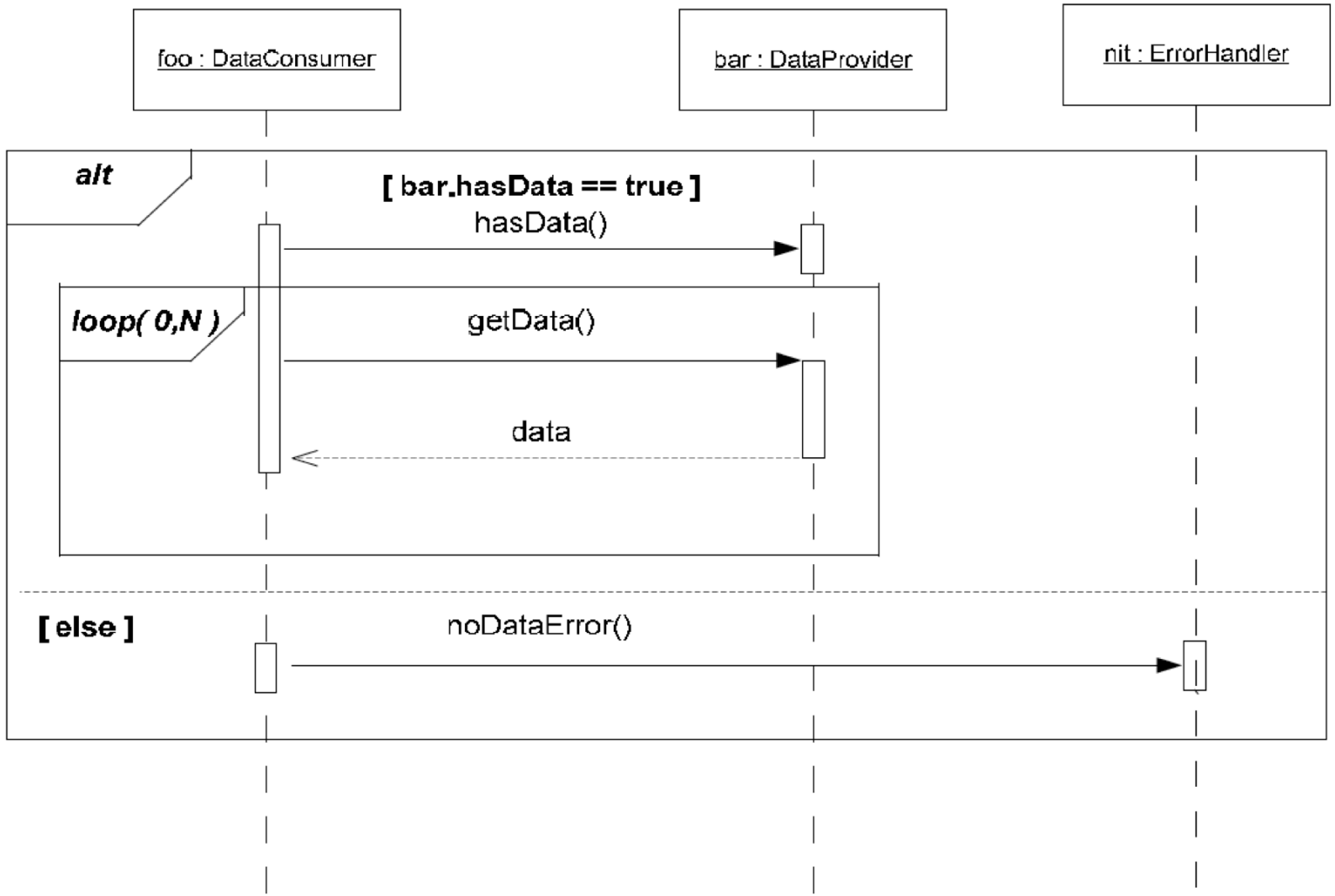
Sequence Diagram

- Shows the object collaborations over time for one scenario.
- Useful for understanding use cases.
- Useful for determining which object and classes should have which responsibilities.
- Start drawing these diagrams as soon as you have candidate classes, and before you spend too much time refining them.
- Can get messy when there is more than one thread of control within the scenario (if..else, looping). Simplify, don't clutter.

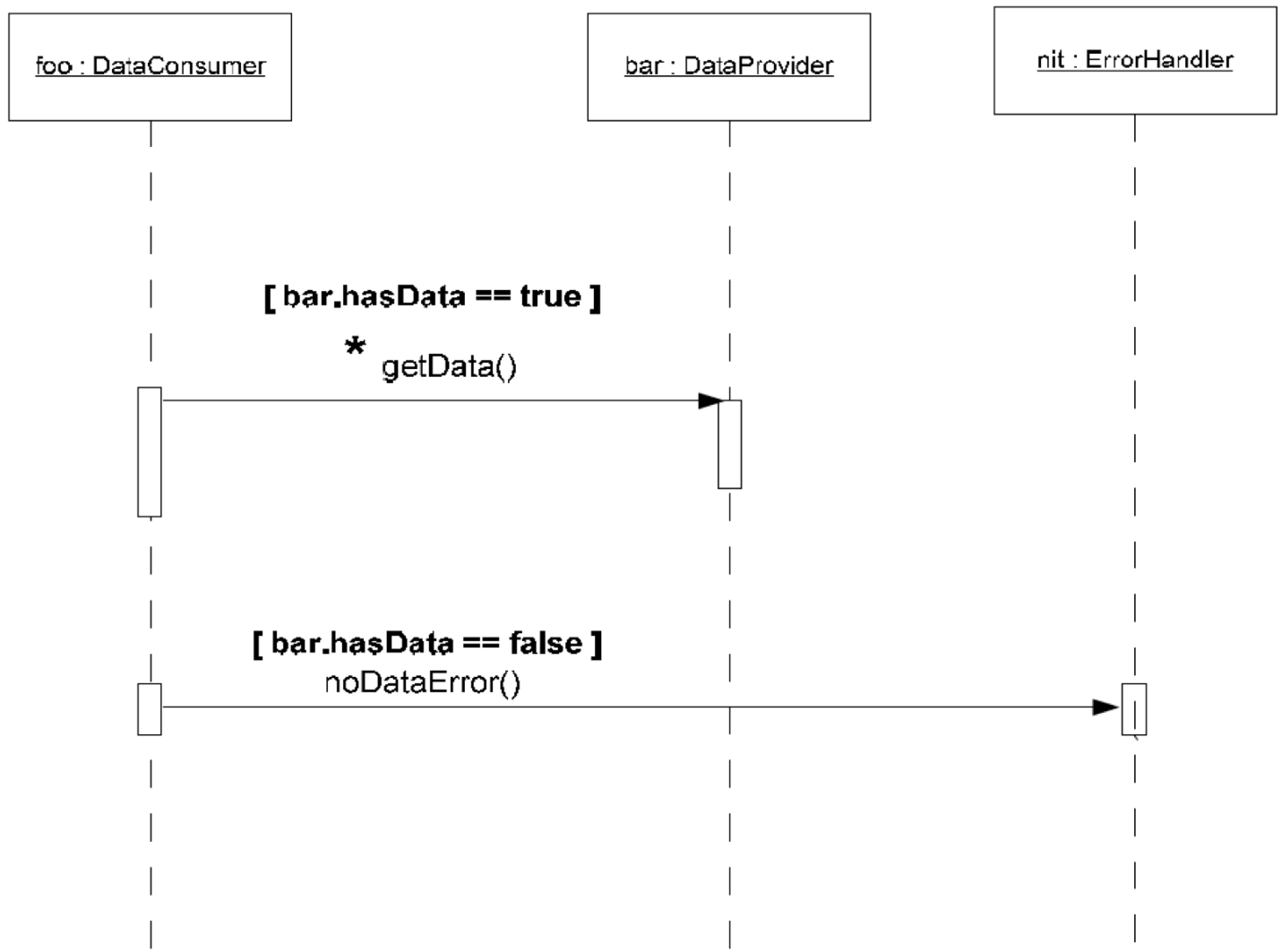
Sequence Diagram Notation



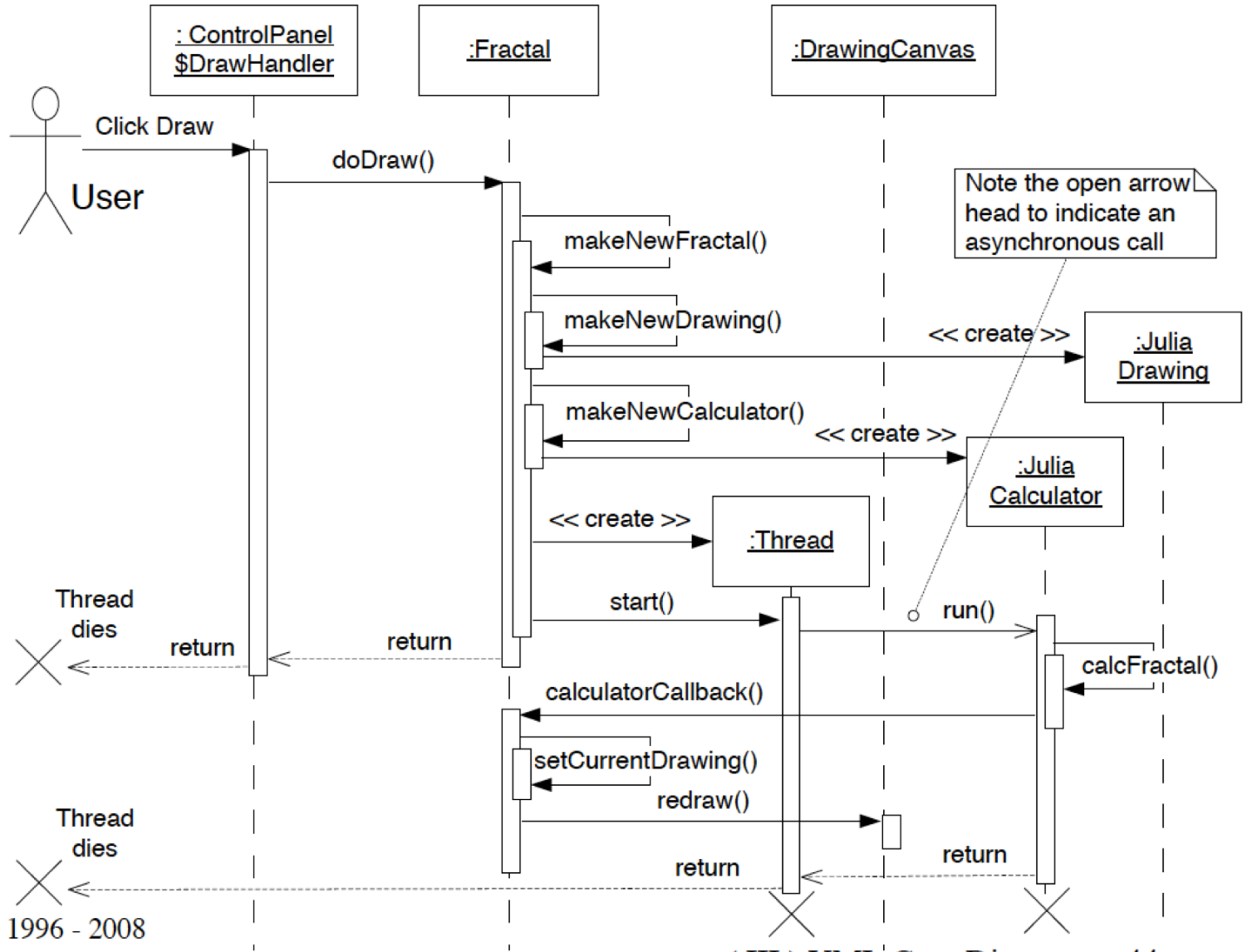
Another Sequence Diagram Example



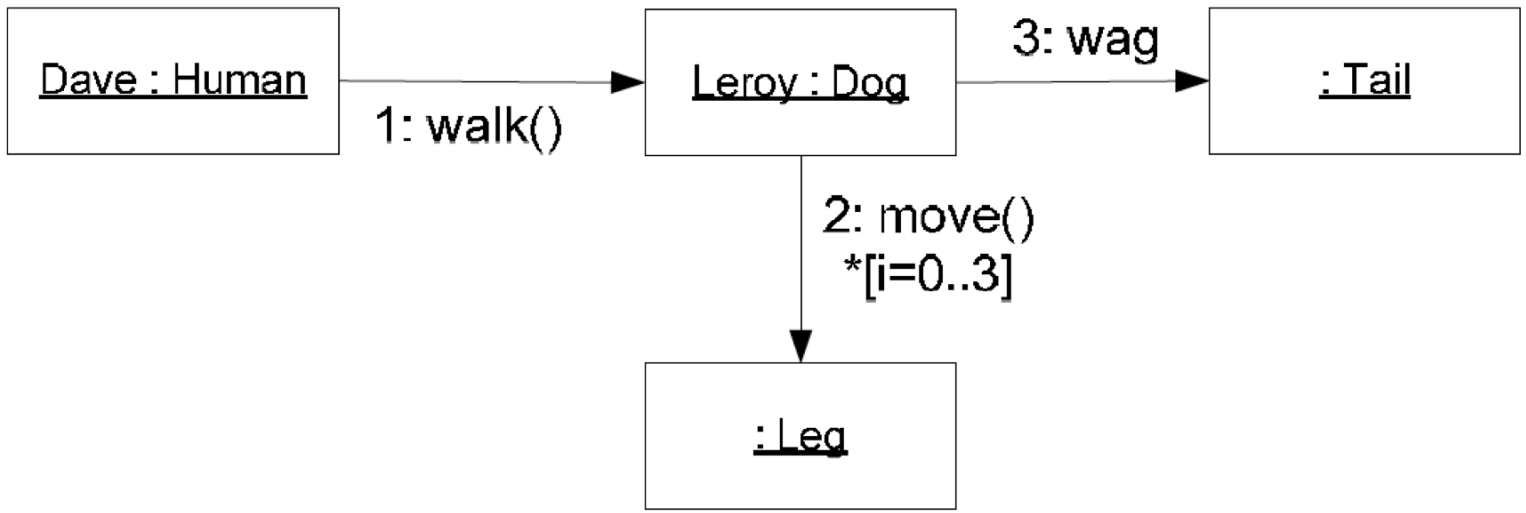
Another Whiteboard-Friendly Alternative



Example Sequence Diagram



Communication Diagram



- Objects communicate, not classes.
- *[i=0..3] is UML standard syntax for a looping constraint.
- An alternative model could have the 4 leg objects shown with sequence numbers 2a, 2b, 2c, and 2d.

Example: Sticks Game Sequence Diagram