

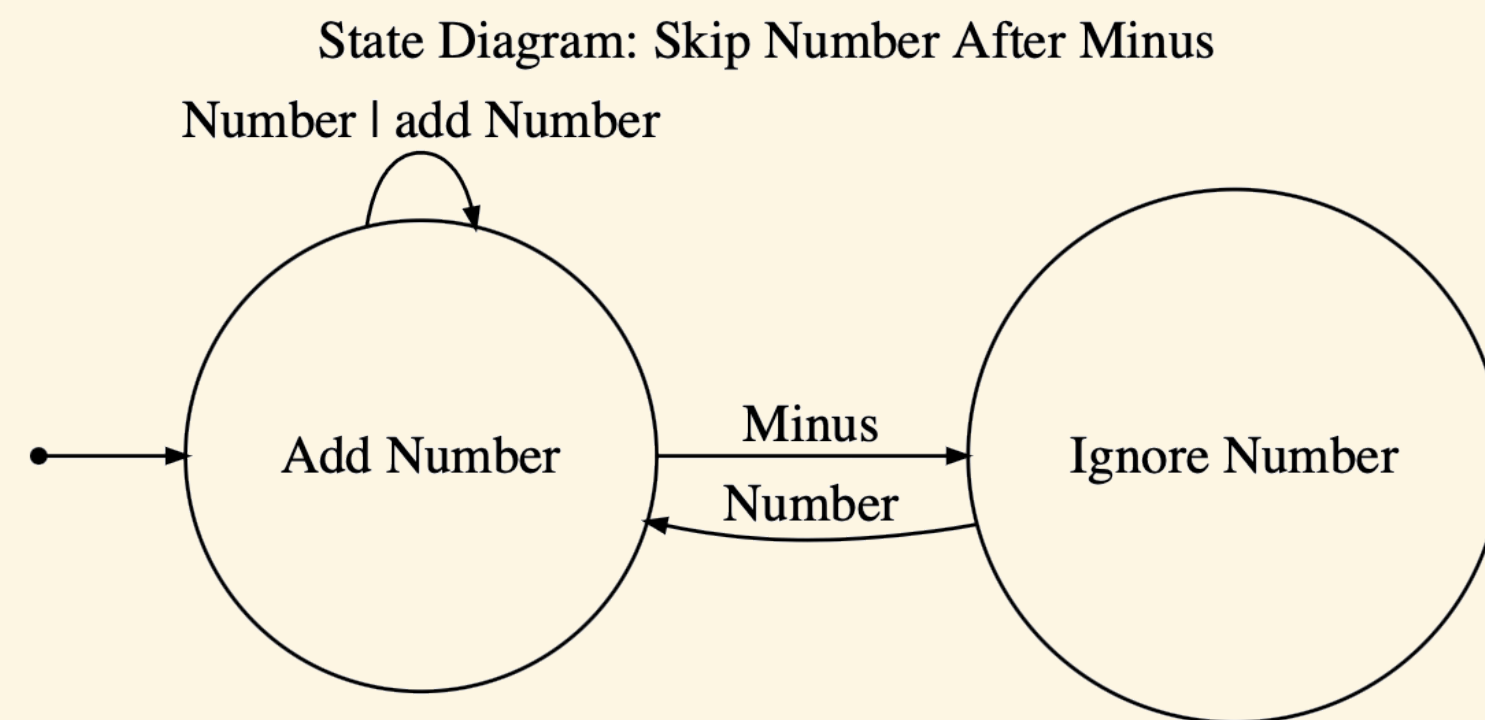
**Object-Oriented Programming**

# **Sequence Diagrams**

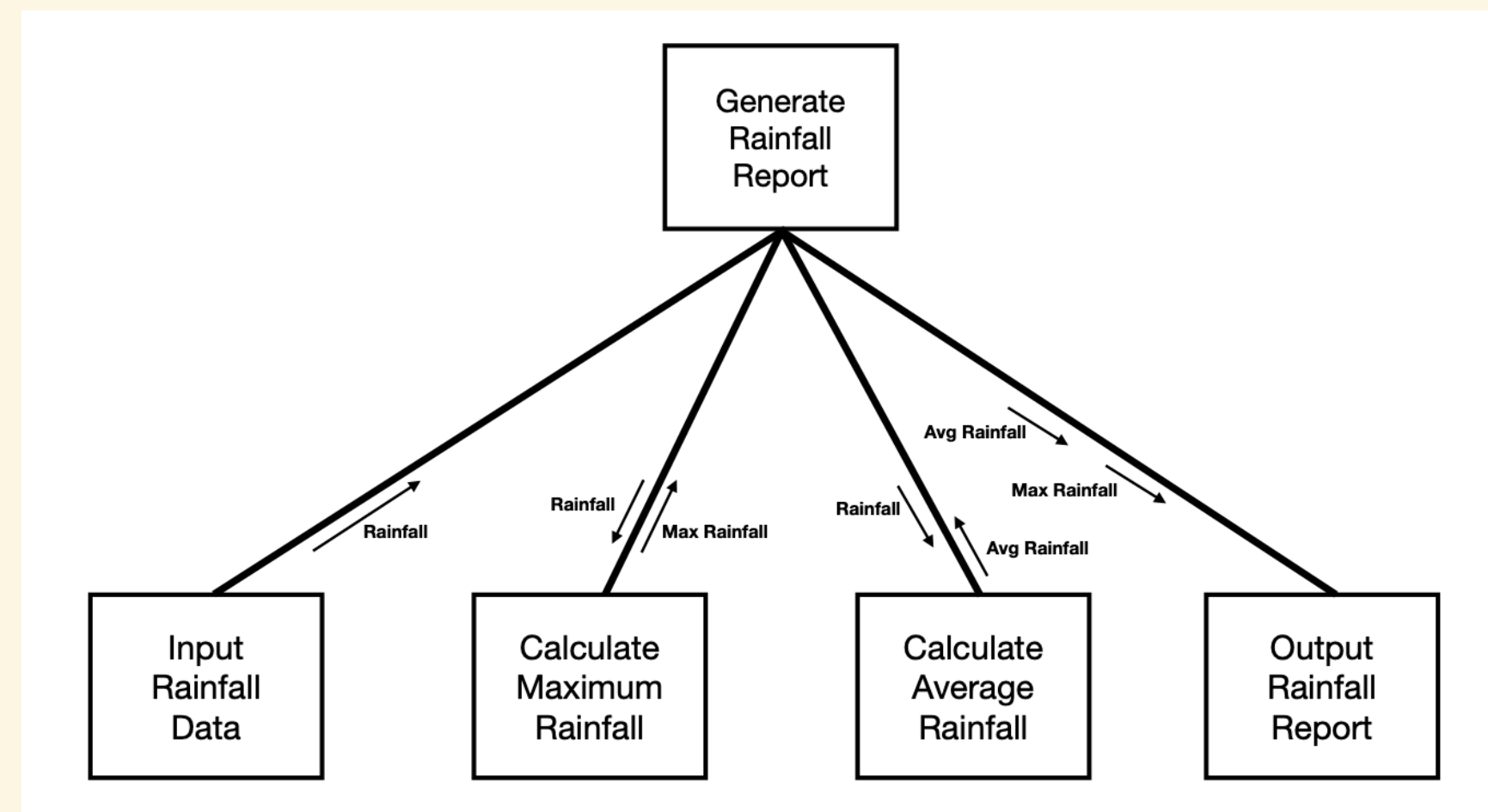
**Michael L. Collard, Ph.D.**

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## Modeling so far...

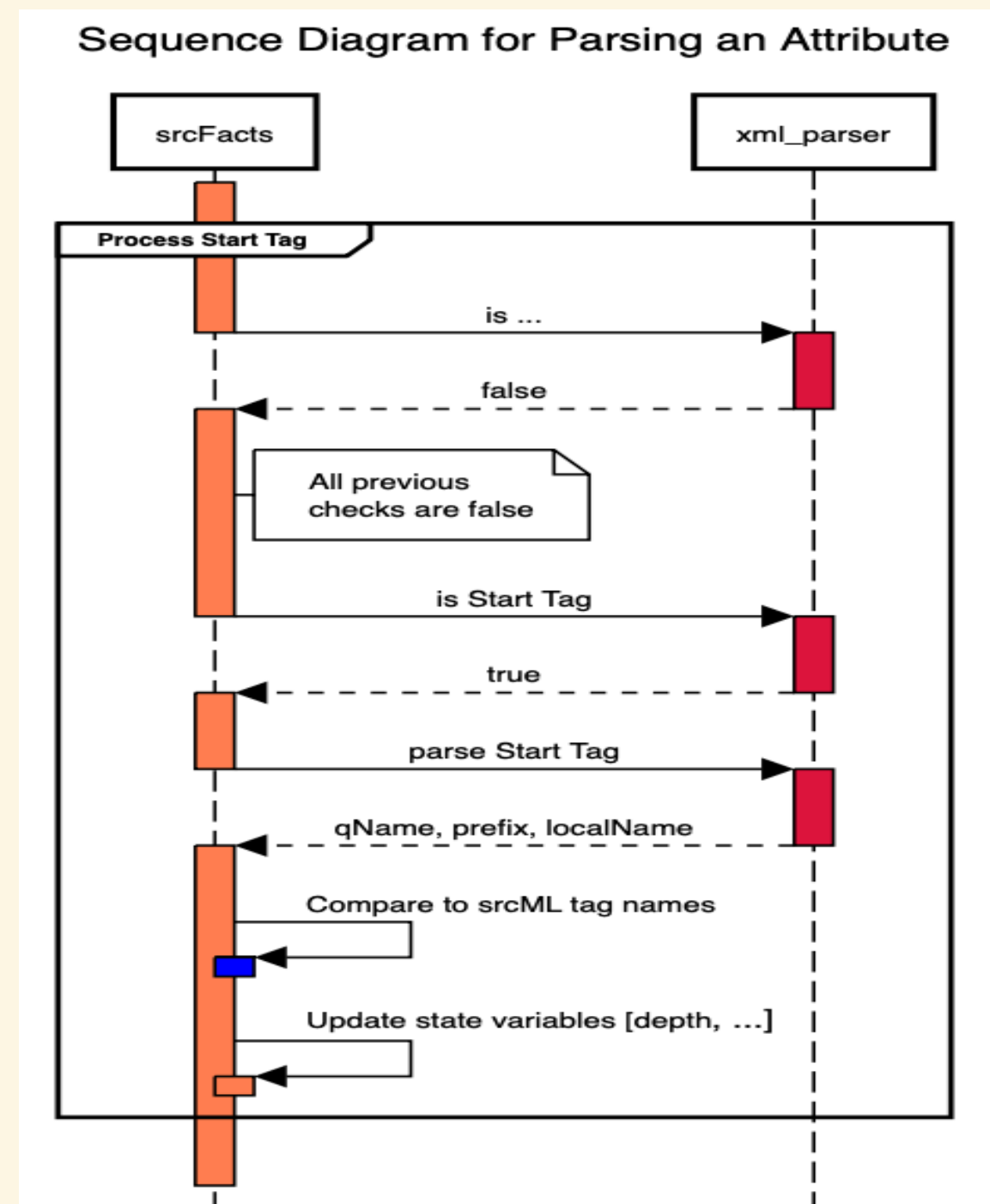


- State Chart - or *state diagram* for modeling complex state



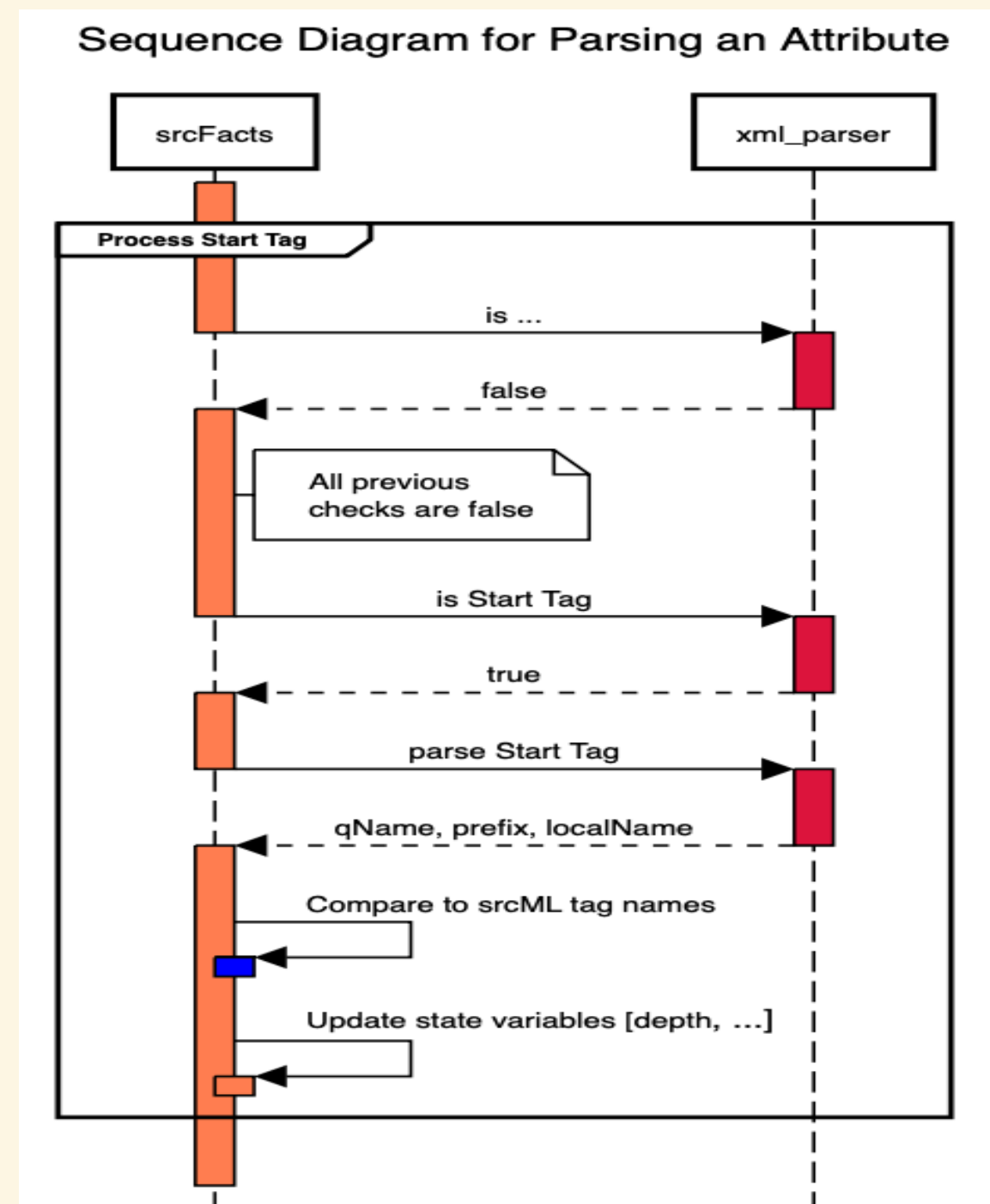
- Structure Chart - for modeling the structure of the algorithmic decomposition of the program

# Sequence Diagram



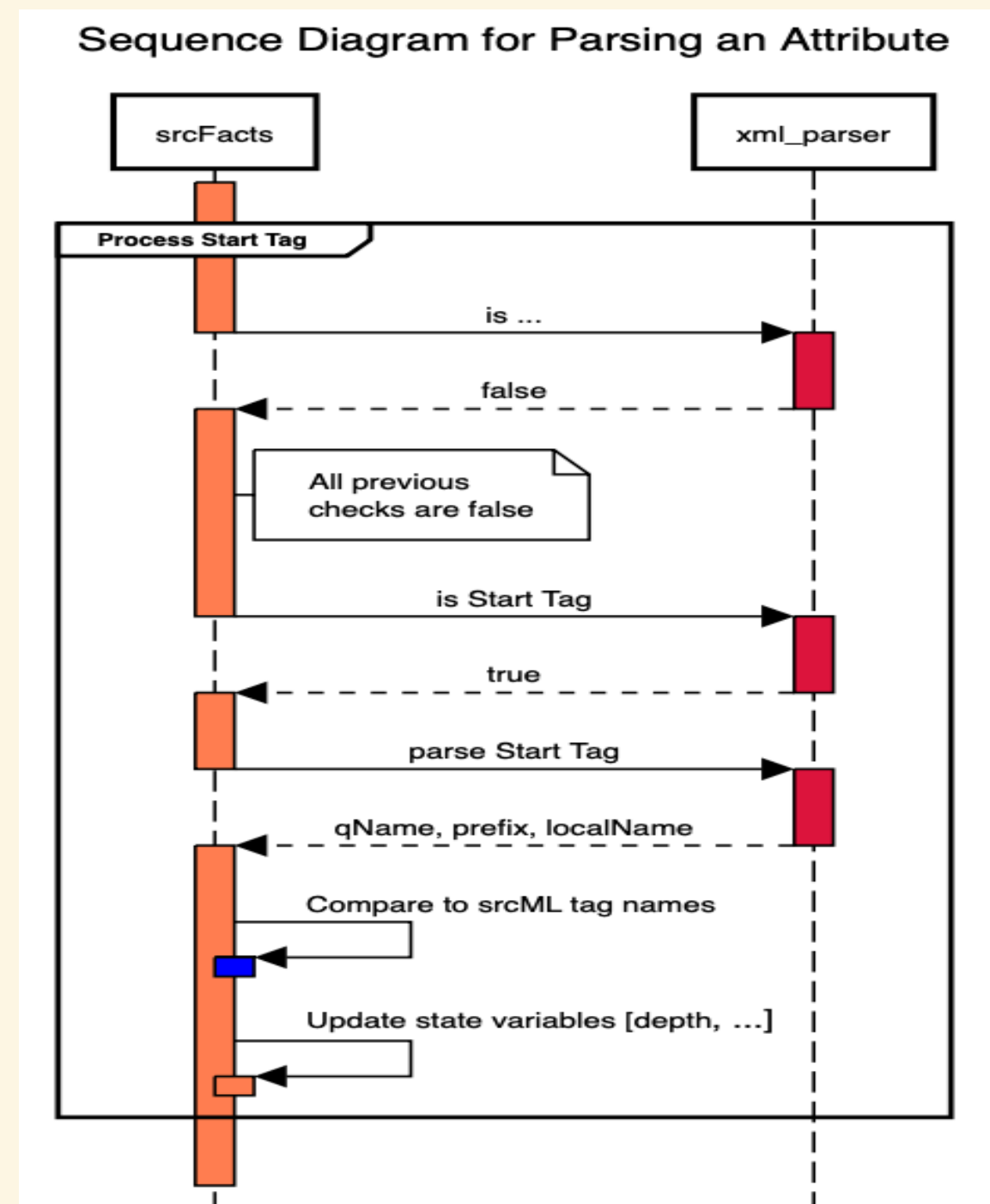
- UML diagram
- Consists of *participants*, typically object or sections of code
- Shows what happens during the *lifetime* of the *participant*
- Expresses a particular *scenario*, with multiple scenarios possible
- Allows explicit modeling of behavior
- Allows expression of *flow of control*

# Drawing Sequence Diagrams



- Could use software diagrams or general drawing tools
- Could draw on paper
- We will use [SequenceDiagram.org](https://sequencediagram.org)
- Uses a specification language which the tool uses to create the diagram

# Drawing Language



- Parts
- title
- participant
- activate
- Call
- deactivate
- Return
- Formatting & Organization
- Color
- Group
- Note
- Defaults
- Automatic Activation
- Active Color