

PlantUML Beginner Guide

Sequence Diagram

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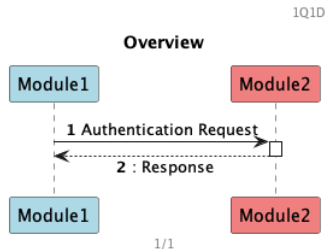
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Overview - Sequence Diagram

- A sequence diagram simply depicts interaction between objects in a sequential order i.e. the order in which these interactions take place. We can also use the terms event diagrams or event scenarios to refer to a sequence diagram.
- Sequence diagrams describe how and in what order the objects in a system function. These diagrams are widely used by businessmen and software developers to document and understand requirements for new and existing systems.

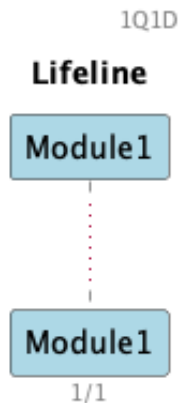


Overview - Sequence Diagram...

- Lifeline
- Synchronous and Asynchronous Messages
- Activation
- Alternatives, Options and Loops
- Grouping
- Reference other Sequence

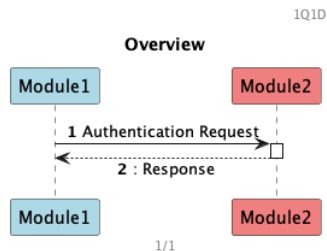
Lifeline

- In a sequence diagram, lifeline notation elements are placed across the top of the diagram.
- Lifelines represent either roles or object instances that participate in the sequence being modeled. (Note: In fully modeled systems the objects (instances of classes) will also be modeled on a system's class diagram.)
- Lifelines are drawn as a box with a dashed line descending from the center of the bottom edge. The lifeline's name is placed inside the box.



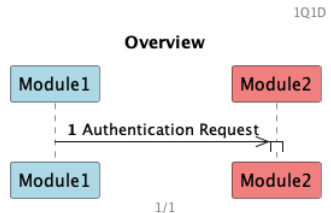
Synchronous Call

- A Synchronous Call is depicted by solid arrow head.
- The message/method name is placed above or below the arrowed line.
- The message that is being sent to the receiving object represents an operation/method that the receiving object's class implements.



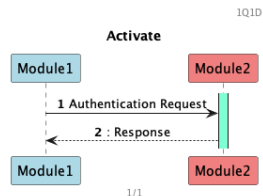
Asynchronous Calls

- A Synchronous Call is depicted by stick arrow head.
- The message/method name is placed above or below the arrowed line.
- The message that is being sent to the receiving object represents an operation/method that the receiving object's class implements.



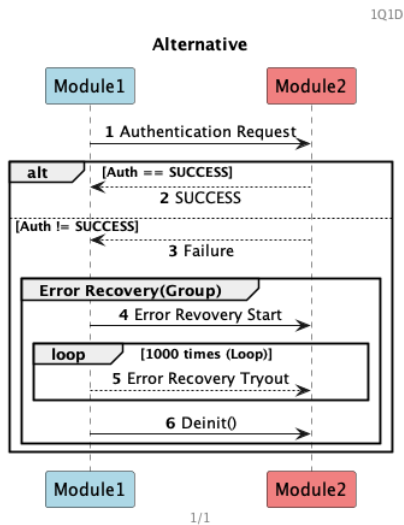
Activation

- When modeling object interactions, there will be times when a condition must be met for a message to be sent to the object.
- Activation are used throughout UML diagrams to control flow.
- To draw an Activation on a sequence diagram in PlantUML "autoactivate on" can be used to automatically show activation area.
- You placed the activation above the message line being activated and in front of the message



Conditions/Loops, Grouping, Periodic/Timing Messages

- Alternatives are used to designate a mutually exclusive choice between two or more message sequences.
- This will be similar to If/Else conditions in programming.
- Grouping is used to club various sequences to denote particular functionality like Error Recovery in figure.
- Loop can be used to denote retry before going for deinit sequence.



Reference

- Reference <https://plantuml.com/sequence-diagram>