Starter Sequence Diagram

The *Starter Sequence Diagram* pattern creates elements and a Sequence diagram that describes the interaction of an Actor and two Components showing the time ordered calling of messages. The reurn messages are not explicitly shown in this diagram.

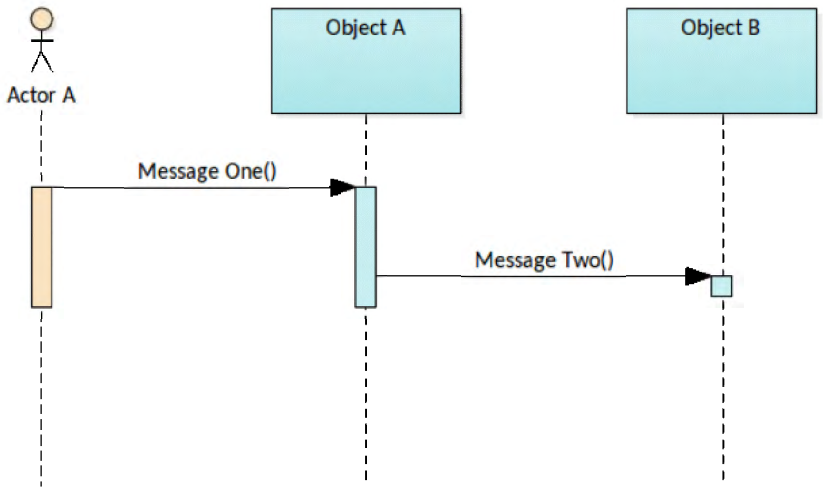

Figure 1. Shows a Sequence diagram and the interaction of an Actor and two Components and the messages they exchange.

Discussion

The purpose is to allow the interaction between the elements to be visualized. Designers and Implementations teams typically create the Sequence diagrams either as a design tool or for the purposes of documentation. The pattern allows a modeler to show how resources, such as Classes can be created and once they have served their purpose in the interaction can be destroyed. The sequence of messages can often inform a design decision or bring clarity to a problem discovered in an operation system.

The pattern is typically used during the design or implementation phase but can also be used when an initiative has been completed and documentation is required. It can be used to:

- Start modeling the interaction between Objects and the messages that are sent

between the Objects and Nodes that participate in the interaction.

The following is a list of some things you may want to do when working with this pattern.

- Change the name of the Actor and Components to suit the initiative.
- Change the name of the diagram to suit the initiative.
- Change the names of the Operations defined in the Components to suit the initiative.
- Change the name of the Class that is created during the interaction.

The following is a list of some things you may want to do when working with this pattern.

- Extend the diagram to include other elements that reflect the sequence that needs to be analyzed.
- Create additional Classes and other elements that need to be utilized during the interaction.
- Use the Visual Execution Analyzer to automatically create Sequence and to build, debug, record, profile implemented systems.

Useful Workspace Layouts

Core | Core Modeling

Reference

The following help topics will assist you learn about how to work with this pattern.

Sequence Diagrams

Layout of Sequence Diagrams

Sequence Element Activations

Component

Operation

Message

Tools you may find useful

The following are some of the tools that will be helpful when working with this pattern.

Visual Execution Analyzer

The Visual Execution Analyzer is made up of an advanced and powerful suite of tools that allow you to build, debug, record, profile, simulate and otherwise construct and verify your software development while keeping the code tightly integrated with your model. Enterprise Architect has rich support for a wide range of popular compilers and platforms, in particular the Java, .Net and Microsoft Windows C++ environments. Software development becomes a highly streamlined visual experience, quite unlike working in traditional environments. For more details see the Visual Execution Analyzer help topic.

Scenario Builder

The Scenario Builder is a productive and unique too l and editor that allows the analyst to work with the text of Use Cases and Scenarios directly inside the model. Many analysts will be familiar with creating long and voluminous Word Processor documents describing the details of Use Cases. With the Scenario Builder the descriptions and steps of Scenarios can be entered directly into the repository and linked to other elements. Alternate and Exception paths can be defined including branch and re-entry points. Sequence and other behavioral diagrams representing the steps in a scenario can be generated and automatically synchronized. For more details see the Scenario Builder help topic.

Element Discussions

The Element Discussion facility is a fully featured collaboration tool allowing modelers and model viewers and reviewers to communicate with each other directly inside the repository. Modelers using the full client or occasional viewers using WebEA can both post and reply to discussions and communicate and engage in chat. For more details see the Element Discussions help topic.

Pan and Zoom

The Pan and Zoom facility is one of the tools that can be used to navigate around a large diagram. Often the resolution of a diagram must be reduced to ensure it is wholly visible but by using the Pan and Zoom window you can leave the diagram at a readable resolution and pan around to areas of interest zooming in when necessary. For more details see the Pan and Zoom help topic.

Diagram Legends

The Diagram Legend facility is useful for manually or automatically changing the appearance of elements and connectors on a diagram. A legend can be added from the Common Toolbox and configured to codify the fill and line color and line thickness. This is a powerful way to add meaning and expression to a diagram and is particularly expressive when applied automatically based on element or connector properties. It can be used with a number of specialized diagrams such as roadmaps to create a powerful visualization. For more details see the Diagram Legends help topic.

Document Generator

The Document Generator is a powerful facility in Enterprise Architect that allows a Database Engineer or other stakeholder to create high quality corporate or technical documentation directly from the model, suitable for internal or external audiences. For more details see the Documentation help topic or the more general topic on Model Publishing.