Decision Modeling

The *Decision Modeling* pattern creates elements and a Decision Tree diagram that can be used to express the decisions and outcomes for a complex business or technical decision.

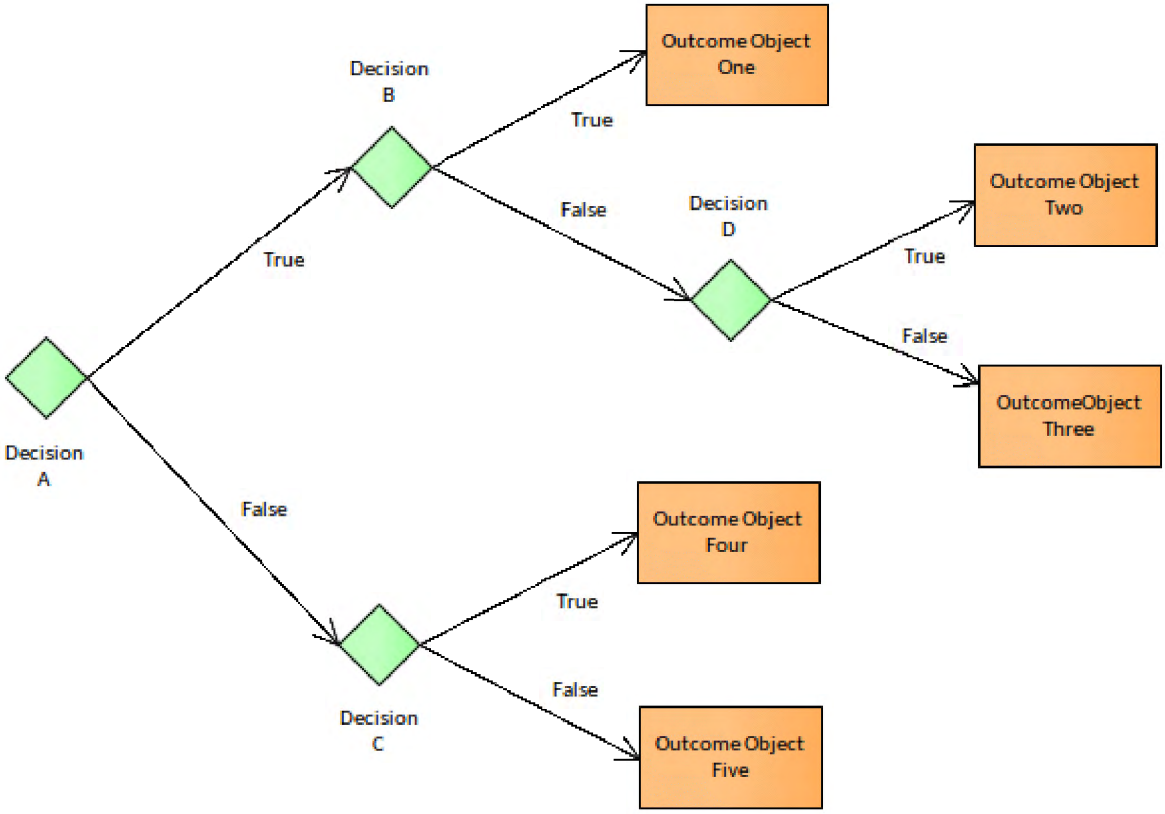

Figure 1. Shows a Decision Tree diagram that is used to model and visualize complex decisions.

Discussion

The purpose of the pattern is to allow Business Analysts, Implementation Teams and other stakeholders create or view a diagram that describes the decisions and possible outcomes in a given problem space.

Decision modeling examines and models the possible outcomes of selecting alternate decisions within the context of a specific problem. When a decision is made a single course of action is selected from several uncertain outcomes with different values. It can be used when:

- The problem is poorly defined.
- The action leading to a desired outcome is not fully understood.
- The external factors affecting a decision are not fully understood.
- The value of different outcomes is not understood or agreed upon by the various stakeholders and does not allow for direct comparison.

Reference

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

Decision Modeling

Decision Tree

Decision Table Editor

Business Analysis Body of Knowledge (BABOK)

Traceability Tools

Documentation

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

Decision Tree

A Decision Tree is a diagram that is part of the Strategic Modeling Technology and uses a visual notation to represent a series of decisions and possible outcomes. It can be used in either a descriptive or predictive manner to visualize outcomes and decision points. The Decision Tree diagram can be used to create a Five Whys diagram starting with the problem and fanning out. For more details see the Decision Tree help topic.

Decision Tables

The Decision Table Editor can be used simply to record the conditions and the conclusions that form the basis of decision making. Alternatively, implementation code can be generated using the Enterprise Architect Simulation Library (EASL) code generation macros. It uses a clear and understandable interface allowing the analyst to

enter conditions, condition value columns, defined values that act as a decision point, and one or more conclusions. For more details see the Decision Table Editor help topic.

Hand Drawn and Whiteboard Diagrams

The Hand Drawn and Whiteboard Mode are display options available for any diagram that changes a system-drawn diagram to appear as though it was drawn by hand and, optionally, hand drawn on a whiteboard. It is a powerful device to engage an audience by presenting the diagram in a rough and more immediate style giving the impression that it is just a sketch that can be changed. For more details see the Hand Drawn and Whiteboard Mode help topic.

Alternate and Images for Diagram Elements

Most standard elements allow an alternate image to be defined for an element that will be used in place of the graphical notation for the element either on a selected diagram or as a default on all diagrams. For more details see the Using the Image Manager help topic.

Diagram Layout

The Diagram Layout tool allows you to layout an entire diagram, selected elements or sections of a diagram to make it more visually appealing or meaningful to a particular audience. There are a wide range of layout types to choose from and some types have filters that can be applied. For more details see the Diagram Layout 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.

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.

Specification View

The Specification View can be used as a way of working with any element type in a spreadsheet or word process view. It is particularly useful when there are a large number of elements as is typically the case when describing a system of any appreciable size. For more details see the Specification View help topic.

Traceability Window

The Traceability Window automatically displays the relationships that exist between Use Cases and other model elements including up-process and down-process elements. The traceability tree view can be conveniently expanded to see deeper relationships and elements displayed in the window can be located in all diagrams in which they appear. For more details see the Traceability Window help topic.

© 2000 - 2018 Sparx Systems Pty Ltd. All rights Reserved.