NCToulminCard

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Stored: {qv}<notecards>1.3L>Library>NCToulminCard, .lcom, .ted
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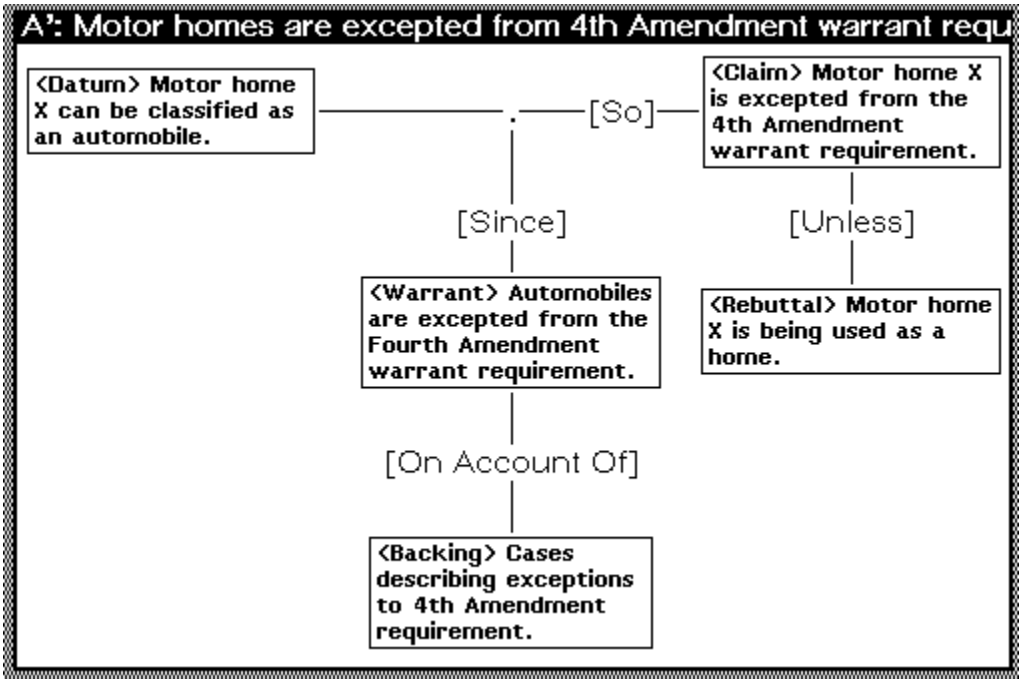
Introduction

Loading this package on top of NoteCards causes the creation of the *Toulmin* card type. This card type is based on the Graph card type, and is used to represent the Toulmin argument structure.
Toulmin structures are a fine-grained representation of an argument's logical content as first presented by Stephen Toulmin in The Uses of Argument, first published in 1958. They are designed to capture simple inferential reasoning steps as supported by some kind of background knowledge and have the provision for stating exceptions as a rebuttal.

A sample Toulmin card:



The argument elements of a Toulmin structure are:

Claim: an assertion about a specific entity or a central thesis.

Datum: a fact in support of the Claim.

Rebuttal: a counterclaim stating an exception - it may function as the Claim in another argument.

Warrant: a rule or principle governing the Datum/Claim relationship.

Backing: a case, model, or other support for the Warrant.

Creating a Toulmin card:

Upon creation of a Toulmin card, the user is asked to specify the cards which make up the elements of the argument, either by selecting existing cards, or creating new ones. Selecting "Cancel" at any time while selecting these cards aborts the creation of the Toulmin card. (The user is also given a chance to delete any new argument element cards created for the canceled Toulmin card.)

Each argument element card is automatically filed in a filebox whose name is selected from the list of filebox names in the global variable *NCToulmin.FileBoxNames*. The default value for this list of names is:

(QUOTE (DatumBox ClaimBox WarrantBox BackingBox RebuttalBox)).

Once all of the argument element cards are selected, links are created from the Toulmin card to the argument element cards, and their link icons are placed in the Toulmin card at specified locations. Labels are also placed in the Toulmin card, along with specified edges among the labels and link icons.

Once the new Toulmin card is created, the user is prompted for its title. The Toulmin card is is filed in the filebox specified by the global variable *NCToulmin.DefaultArgumentBoxName*, whose default value is (QUOTE ArgumentBox).

The user defines the placement of the link icons representing the links to the argument element cards through the *NCToulmin.NodeInfos* global variable. The optional labels to be placed in the Toulmin card are defined through the *NCToulmin.LabelInfos* global variable. Edges among the links and labels are specified through the global variable *NCToulmin.EdgeInfos*.

NCToulmin.NodeInfos is a list of *NCToulmin.NodeInfo* records. The fields of the *NCToulmin.NodeInfo* record are:

Name:	the name of the argument element node.
CardType:	the type of the card to be used for the argument element.
LinkType:	the type of link to be made between the Toulmin card and the argument element card.
Title:	the title to be used for a new card created to represent the argument element.
Position:	the position in the Toulmin card at which the link icon for the link to the argument element will be placed.

The definition of *NCToulmin.NodeInfos* for the above example is:

```
(QUOTE (    (Datum Text Datum Datum (75 . 275))
            (Claim Text Claim Claim (415 . 275))
            (Warrant Text Warrant Warrant (245 . 165))
            (Backing Text Backing Backing (245 . 35))
            (Rebuttal Text Rebuttal Rebuttal (415 . 165))) )
```

NCToulmin.LabelInfos is a list of *NCToulmin.LabelInfo* records. The fields of the *NCToulmin.LabelInfo* record are:

LabelName:	the name of the label.
LabelString:	the string to appear as the label in the Toulmin card.
LabelPosition:	the position of the label.
LabelFont:	the font in which the label should appear.
LabelBorder:	determines whether or not to draw a border (box) around the label. If it is non-NIL, a border will be drawn. If it is NIL, no border will be drawn.
LabelShade:	the background shade the label should have.

The definition of NCT*oulmin.LabelInfo fo*r the above example is:

```
(BQUOTE     ((Dot "." (245 . 275) (\, NCToulmin.LargeFont))
                (So "[So]" (300 . 275) (\, NCToulmin.LargeFont))
                (Since "[Since]" (245 . 220) (\,
            NCToulmin.LargeFont))
                (OnAccountOf "[On Account Of]" (245 . 100) (\,
```

NCToulmin.LargeFont))
(Unless "[Unless]" (415 . 220) (\,NCToulmin.LargeFont))))

[Where NCToulmin.LargeFont is initialized to be
(FONTCREATE (QUOTE HELVETICA) 14 (QUOTE MRR)).]

NCT*oulmin.EdgeInfos i*s a list of NCT*oulmin.EdgeInfo re*cords. The fields of the NCT*oulmin.EdgeInfo re*cord are:

Edg*eName:* the name of the edge.

Sou*rceNodeName:* the name of the node (link or label) at the source end of the edge.

Des*tinationNodeName:* the name of the node at the destination end of the edge.

The definition of NCT*oulmin.EdgeInfo fo*r the above example is:

```
(QUOTE (    (Edge1 Datum Dot)
            (Edge2 Dot So)
            (Edge3 So Claim)
            (Edge4 Dot Since)
            (Edge5 Since Warrant)
            (Edge6 Warrant OnAccountOf)
            (Edge7 OnAccountOf Backing)
            (Edge8 Claim Unless)
            (Edge9 Unless Rebuttal)) )
```

Deleting a Toulmin Card:

When the user deletes a Toulmin card, each of its argument element cards will be checked to see if it either a) belongs to one or more other Toulmin cards or b) is filed in one or more fileboxes other than the argument element fileboxes. If not, the user will be asked if it is okay to delete the argument element card. The assumption being made here is that cards that don't have a "raison d'etre" outside of a Toulmin card should not continue to exist after the Toulmin card has been deleted.