S23M

React Model Editor

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Contents

User Interface

Main View

Upon Accessing the webpage or loading a new File, you will be Presented with the following interface.

[Image of UI with numbers]

1. File menu
2. Semantic Editor
3. Selected Graph
4. Zoom out
5. Zoom in
6. Undo
7. Redo
8. Help button
9. Select Tool
10. Vertex Tool
11. Edge Tool
12. Treeview
13. Canvas

Tree View

Elements

{image of tree with each element}

The treeview Contains 4 types of objects, Packages, Graphs, Vertex's and Edge's.

A Package is a container object that can be used to store other objects in the treeview, including other packages.

A Graph is a displayable object that stores canvas objects (see Canvas)

A (Tree) Vertex is container object that can be drawn onto a graph, is the Origin of any drawn vertices. The Vertex icon will change between and orange square or an open folder icon depending on if the vertex it contains elements or not respectively.

An Edge is a relation between two Vertices that has been drawn within a graph. The icon next to the Edge name represents the relation type of the source and destination.

Creating/Deleting Elements

Tree view elements can be created through the context menu by right clicking on the desired parent container object and selecting "Add Package", "Add Graph" or "Add Vertex".

[image of a context menu with these objects]

You will then be prompted to name this new object, and upon hitting enter the new object will be created under the chosen container.

To delete an Element right click the element you wish to delete and select "Delete [Element]" from the context menu. This will prompt you do double check you wish to delete the chosen item, and upon selecting yes will delete said element and all of its dependents From the tree view and any graphs.

Other functionality

To rename an element, right click on the element and Select rename. Type the new name and hit enter.

Root

Root is a special package in that it isn't a real package and is only used as the top level to store packages. Therefore you can only created Packages in root, and cannot rename or delete Root.

The Canvas

The canvas is used to display and allowing editing of a Graph.

The two elements that can be drawn with the canvas are Vertex's and Edge's.

Creating Elements

Vertex's Can be Drawn on the Canvas in two ways, from an already existing vertex in a Package, or Created fresh on the canvas.

To Place an existing Vertex onto the canvas, simply drag and drop it from the Treeview onto the canvas. This will create a copy of the vertex stored in the tree. These vertex's will be semantically Linked. Ie. Dragging and dropping the same vertex onto two graphs will both have the same Semantic Identity.

When a Vertex is created on the graph from a different package, The vertex will appear white with its parent package in the vertex name.

To create a new Vertex directly on the canvas, Select the vertex tool and click on the canvas where you would like to create the Vertex. This new Vertex will initially be named "Drawn Vertex" and its origin Vertex will be created in the package of the currently selected graph.

The create an Edge, Select The Edge tool. Click on the vertex to be the source to begin creating the edge, and then on the vertex to be the destination to draw the Edge.

Element Properties

When Selecting an element on the Canavs with the select tool, the TreeView will be replaced with a properties panel for the specific object.

When changing a property, The change will happen dynamically, and in the case of Vertex's effect all semantically linked Vertex's as these are in essence the same object.

For example, If Vertex A exists on Graph 1 and Graph 2, making a change to Vertex A on either graph or the Treeview Vertex, will result in all 3 of these instances of Vertex A being updated.

Vertex Properties: (put this in table later)

Title: The name of the Vertex

Content: Text to display on vertex

Category Selector: Select ModaMode Categories and icons to display on vertex

Colour selector: Change the colour of a vertex

Is abstract? : toggle Italicized Title to signify abstract

*Vertex size will automatically adjust if needed to fit property values

Arrow Properties: (put this in table later)

Source is Navigable: toggle Navigable arrowhead on source end

Destination is Navigable: toggle Navigable arrowhead on destination end

Source is Aggregation: toggle Aggregation arrowhead on source end

Destination is Aggregation: toggle Aggregation arrowhead on destination end

Line Colour: Change the Colour of the Edge

Source Cardinality: Toggle visibility of cardinality based on numbers in text boxes

Destination Cardinality: Toggle visibility of cardinality based on numbers in text boxes

Source Label: Text to display on Source end

Destination Label: text to display on destination end

If you wish to Deselect an object, you can choose "Deselect" from the property panel or click an empty area on the canvas.

To Delete a canvas Object, either Select "Remove" from the property panel, or press the delete key while the object is selected.

Other functionality

Semantic editor

Navigation

Through the context menu there exists the ability to navigate to different occurrences of a Vertex.

To do this

Undo/Redo

Saving and Loading