JavaScript Tree Libraries

Name: jsTree

URL: https://www.jstree.com

The advantages are that it is free, open source. It supports HTML, JSON and AJAX. It provides drag and drop support, functions such as edit, create and delete nodes. There is a demo on the website where you can move the nodes around and it will automatically update the tree. The only downside I see is that it does not look like it has an option for shapes. The only examples they provide is in list form like folder, subfolders and checkboxes.

Name: Treant.js

URL: http://fperucic.github.io/treant-js/

The advantages are that it is free, open source. It creates tree structure charts with HTML, CSS and SVG (scalable vector graphics), which is an XML-based vector image format for two-dimensional graphics with support for animation. I am not sure about if we would be able to move nodes around with this library, but it does show an example where you click on a parent node and it either adds another child or it makes the children disappear.

Name: Arboreal.js

URL: https://github.com/afiore/arboreal

The advantages are that it is free, open source. It has different methods for updating and checking each node in a tree. Therefore, we should be able to move nodes around since it provides a remove method. The disadvantage is that it does not have a shapes structure.

Name: Treed

URL: http://jaredforsyth.com/treed/

The advantages are that it is free, open source. It allows you to display, edit dynamically data in a tree view, and it supports undo manager. It uses the MVC pattern which makes it easier to create different views for the tree. There is the option to create a single node class where you can add buttons or anything you want. The disadvantage is that I am not sure if we would be able to move nodes around.

Name: TreeModel

URL: https://jnuno.com/tree-model-js/ and https://github.com/joaonuno/tree-model-js
The advantages are that it is free, open source. It allows you to manipulate and traverse tree structures. It has all of the necessary functions that we need to be able to move nodes around. It has all of the following functions: find, findAll, traverse, dop, add, get node's path, etc. It does not show an example where you can drag and drop but I feel like that's something it shouldn't be complicated to implement since we have all of these functions available. Also, the example that they have you can see how the nodes move around so we would just need to find a way where you can do that using drag and drop. Another disadvantage might be the shapes because it does show a circular shape on each node on the example, but I am not sure if there are other shapes available in the library.

Conclusion: The best JavaScript library I have found so far is the jsTree since it is the only one that has the drag and drop feature available. I think that would make things way easier to do the implementation. I will download it and play around with it to see if there would be a way to create the shapes.