Vivus: Light Javascript library used to animate SVGs.

* Demo <http://maxwellito.github.io/vivus>

|  |  |
| --- | --- |
| Pros | Cons |
| Allows for animation of pictures to give them the look of being drawn in time | Must follow the conditions:   * All elements must have the stroke property and cannot be filled * Hidden path elements cause undesired effects * Text elements cannot be used |
| Three types of animation: Async, delayed, oneByone | Some SVG do not work on Firefox and IE |
| Path morphing for the drawing animation |  |

This library will not be great for our project because most of the animation we want to do on our diagrams will involve moving things around after drawing them and showing the changes to the system. The fact that there are issues on certain browsers is also off putting as we want to be compatible on all systems

Bonsai: A lightweight graphics library with an intuitive graphics API and an SVG renderer.

* Demo: <http://demos.bonsaijs.org/demos/draggable-shapes/index.html>
* Online editor: <http://orbit.bonsaijs.org/>

|  |  |
| --- | --- |
| Pros | Cons |
| Compatible on the following browsers:   * Chrome >=20 * Safari >=5 * Firefox >=18 * IE >=9 * Opera >=12 | More complex library will take time to understand |
| Allows use of audio video and images |  |
| Path morphing for drawing animation |  |

Bonsai looks like a great library to use for this project. Looking at the online demos it seems like we can create any SVG animation we need to with this library. It is compatible with all major browsers which is very important for this project. The online editor allows for testing animations so we can see how things should look before using it in UPOD. It also seems that everything that can be done with Vivus can also be done with Bonsai.