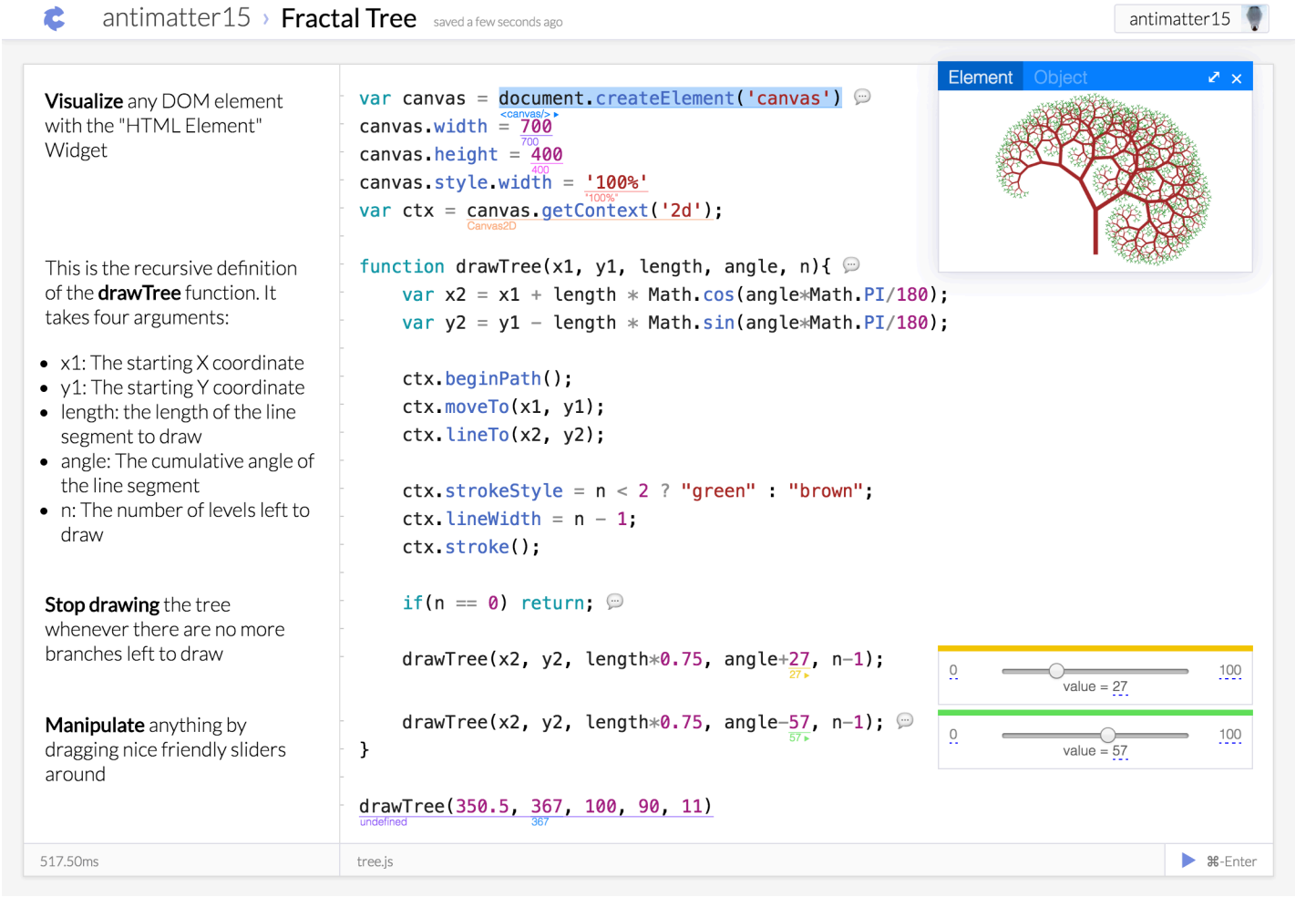
Carbide

Guillermo Webster and Kevin Kwok (2016)

Experimental programming environment with a variety of intriguing features. (I can't get the environment to load, and the site CSS is periodically failing for me).



- **Back propagation** (edit program output and input changes)
- Add **probes** to the variables, expressions, or subexpressions of running programs.
- **Extensible widgets for a variety of data types** that visualize and edit these values, e.g. numbers, sliders, HTML, map data, colors, graphics, strings, matrices, JavaScript object, JSON, binary data, etc…
- Supports (in theory) any language, although JavaScript is most supported right now.
- **Programming notebook** style cells (can't find a visual of this though). They point out you need fewer cells that other environments since so much visualization is handled for you.
- Rich text comments. (Pictures would be even better).
- Polished visuals and interaction design.

http://alpha.trycarbide.com