

SIMPLEDRAW.JS

also known as

LET'S REINVENT THE WHEEL... IN TYPESCRIPT

GOALS

(PREPARE YOURSELF)

To develop a very simple graphical editor to draw basic geometric objects, manipulate and persist them.

- Develop using HTML-related technologies (SVG, Canvas);
- All client-side (running in the browser);
- Typescript instead of pure javascript (because, sanity);
- Zero-dependencies for the engine (i.e. d3);
- Libraries for non-engine stuff only (i.e. sass, bootstrap);

FUNCTIONALITIES

(WHAT IS THIS SUPPOSED TO DO?)

- SimpleDraw is based on the notion of documents;
- Documents are rendered both in SVG or HTMLCanvas;
- Support persistence in multiple formats (TXT, XML, BIN);
- Extensible with different objects (triangles, arrows...);
- Extensible with new tools (rotate, translate, grid...);
- Drag to select multiple objects;
- Document layers (with compositing strategies).

ADVANCED FUNCTIONALITIES

(THERE'S ONE MORE THING...)

- Multiple views (viewports) of the same model;
- Viewport tools (translate, zoom);
- Different view styles per viewport (wireframe, color);
- Two interaction modes: point-n-click and REPLs;
- Support (un)limited Undo / Redo of all operations;
- **OP Mode.** Collaborate using multiple browsers and no backend/server.

APPROACH

(WHAT NOW?)

- Identify the main problems... identify the main patterns.
- Every person think differently. How do you convey the solution to your colleagues? Why is yours better?
- Are you prepared to scratch your whole solution every time you start tackling a new problem?
- How will you retain this knowledge so everyone will remember it later?

Therefore, come up with a minimalistic way to reason about your system without actually implementing it, that allows quick feedback from everyone, that evidences potential problems, and that allows you to retain its essence for the coming weeks.

ASSO

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