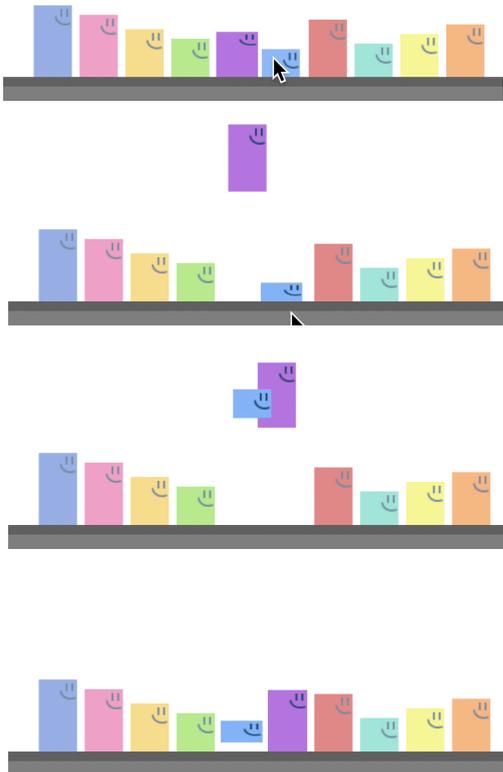
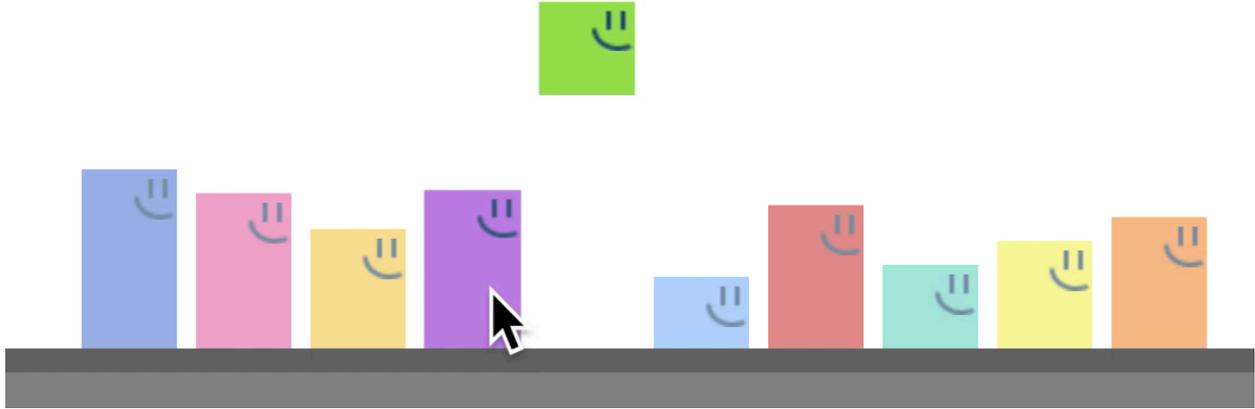


# Bubble Sort

Glen Chiacchieri (2016)

An explanation of bubble sort that uses “showing and doing”, “play”, and “exploration.” While Glen’s piece is a work in progress of a much longer explanatory essay, I want to call attention here to a key interactive:



A line of characters represents an array of data to be sorted. If you touch a character, it jumps—and will jump over its neighbor if they are in the wrong order.

Admirable qualities to note:

- Player puppet the algorithm, from the algorithm’s points of view—where it is iterating from.
- Data is concrete.
- Representation is appealing: characters, colors, sound, animation.

What I would push further on:

- Make data more tangible: allow me to reorder and stretch the characters.
- Make more of the algorithm tangible. e.g. A butterfly flying overhead that can also be moved; A comparator function that is somehow tangible.
- Start and build up from simplest thing: two characters to play with.
- Even simpler: play starts by manually sorting two elements themselves (no comparator and auto-jump; just click to jump and swap.)

Glen’s project is unpublished. Contact him and he might send you a link.