
Simulabra

the software construction kit

simulabra.com
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What is Simulabra?

Simulabra is an object-oriented programming system for the web.

Almost anyone can use it to dream up software with the help of ubiquitous artificial assistance.

Design, build, test, and run all in one place, whether for payroll management software, multiplayer strategy games, or interactive educational websites.

*"...simulation is what the computer is all about, and all the different ways you can simulate things are what the computer's destiny is."
-- Alan Kay*

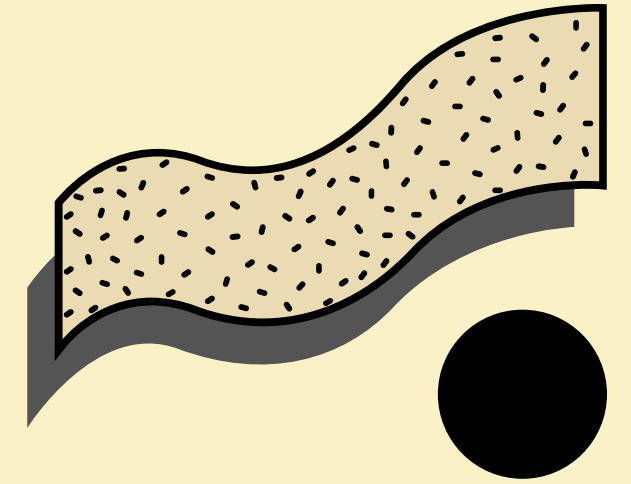
We are currently facing a *software crisis*.

- 1. Accidental Complexity** - bullshit grows with the scope of software, burns devs out
- 2. Crippling Costs** - companies that build software avoid risks, most small cos can't afford devs
- 3. No Silver Bullet** - no 10x pill, just hacks and architecture (like the rest of engineering)

"The software crisis is not an immovable obstacle but an irresistible force -- a vast economic incentive that will grow toward infinity as the global economy moves into the information age."

-- Brad Cox

Three components of Simulabra



Language

- Extends JS(X) with a class system and standard library
- Easier for humans and AIs
- Access to web ecosystem and browser tech

Editor

- Web-based and mobile friendly
- Built from the ground up with AI and malleability in mind
- For beginners and experts alike

Platform

- Deploy without the hassle
- Run locally, self-hosted, or in the cloud
- One huge computer simplifies APIs and services

"An operating system is a collection of things that don't fit into a language. There shouldn't be one."

-- Dan Ingalls

The search for a web-based programming system.

Illuminating through differences

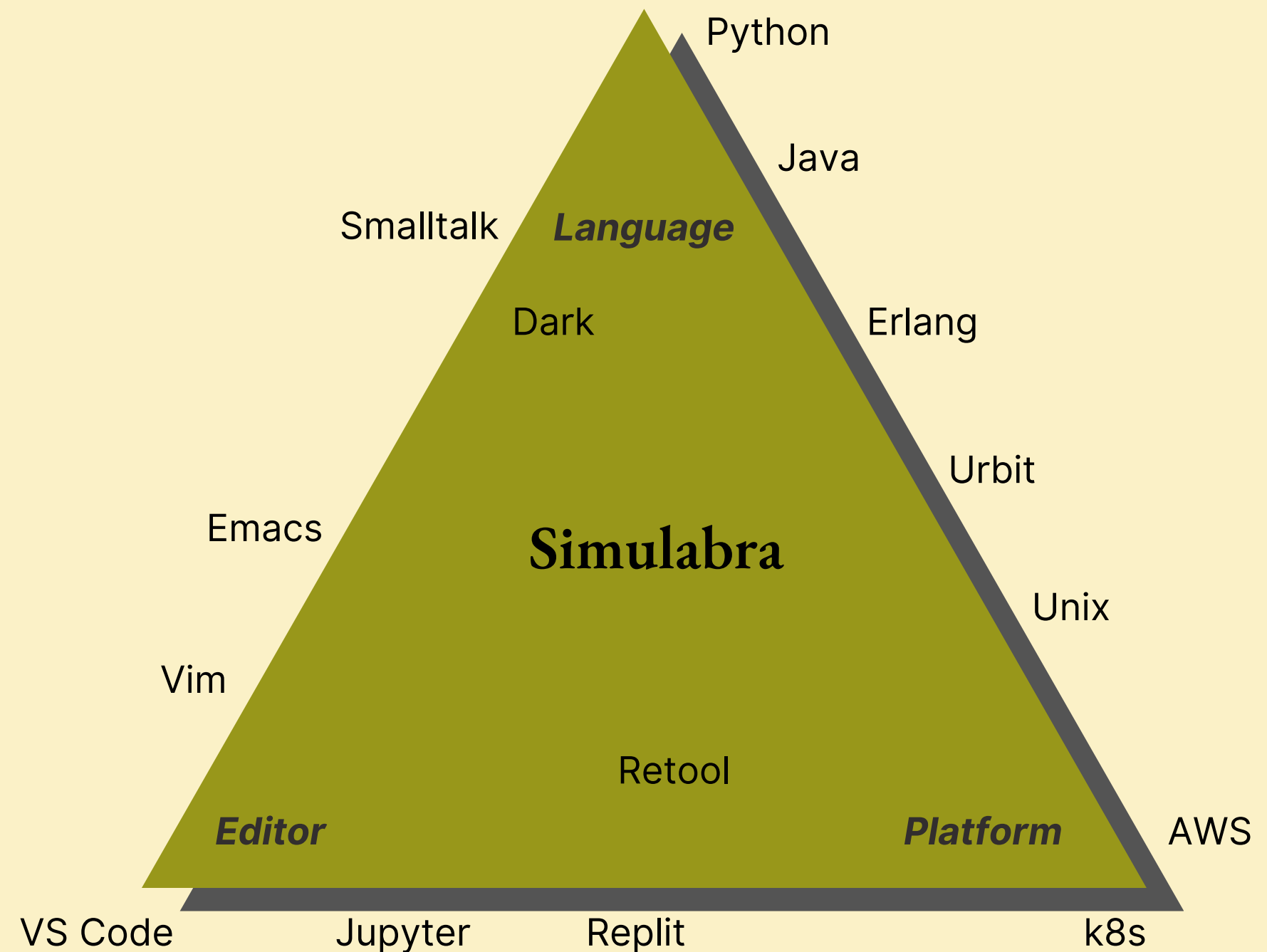
Dark eschews the front-end and focuses on traditional APIs

Retool and other no-code tools hit a ceiling quickly, don't run locally, and aren't fit for text-based LLMs

Emacs is tied to local Unix world and completely removed from web

Urbit has no native concept of editor and still relies on web frameworks for UIs

Replit is built for traditional programming languages and can only be extended via React components



Exploring how much easier AI can make things.

A programming system designed from the ground up for AI opens up new possibilities



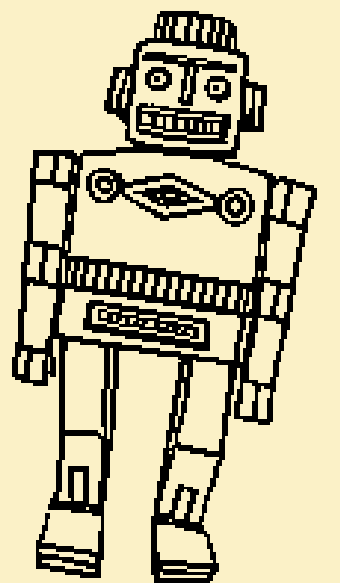
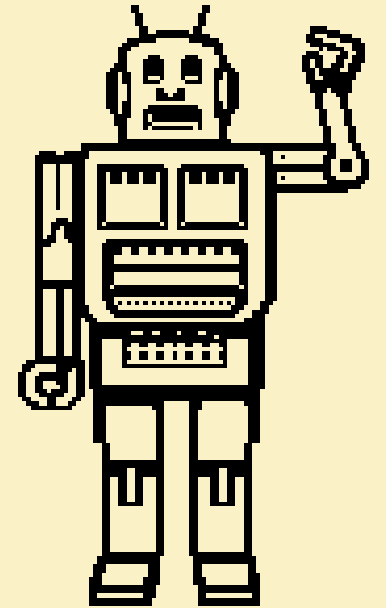
An AI assistant that works with far more than just code: condensed library docs, error messages, curated design prompts, revision history, etc.



Ability to access AI agents through chat interface, context menus, event triggers, and voice



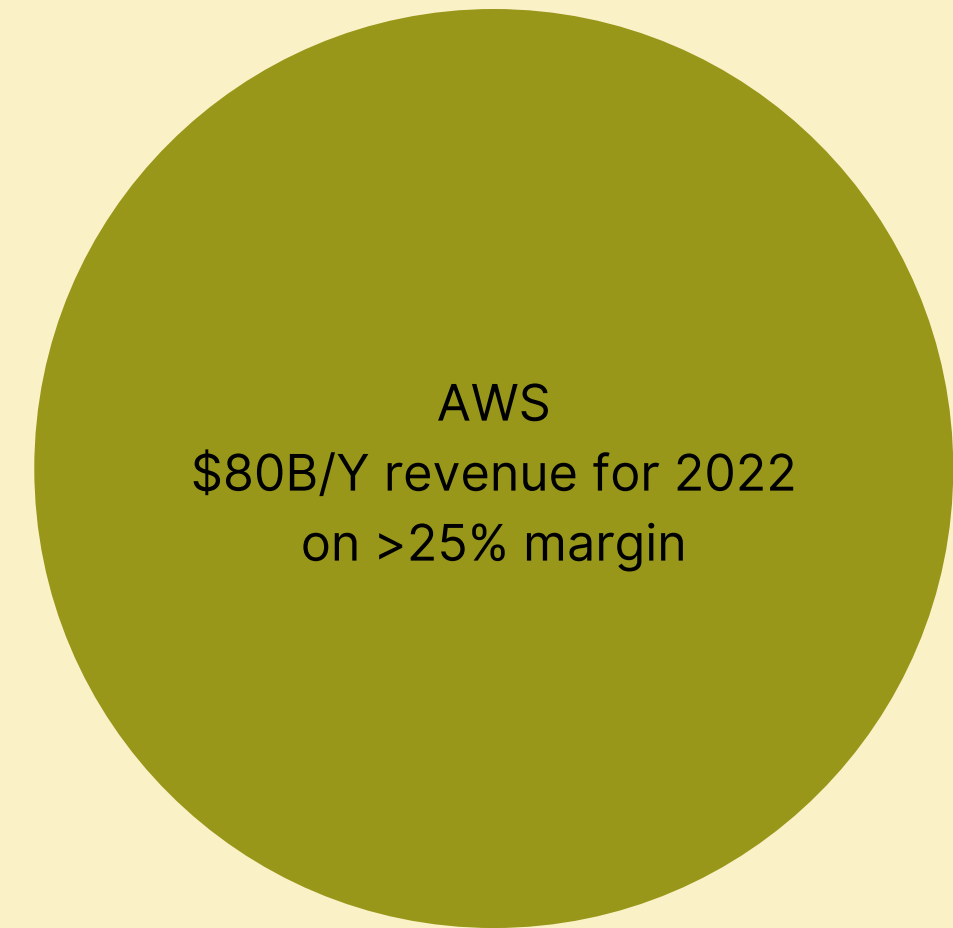
Language features such as type system, inline documentation, and first-class tests help instill confidence in code that is entirely generated by AI



The market for a web programming system

If we could only grab a tiny slice of that massive pie...

- Open source and free to run, locally or self-hosted
- Win on convenience and integration with web IDE
- Simulabra cloud provides compute, storage, and AI; roughly same cost as public clouds



Hello.

It's just me right now, Riley Stewart. I've been programming for about half my life, and while I love it, its deep flaws and countless frictions have always bothered me and kept me looking for a better way. History has always fascinated me, and the history of computing is no exception; full of drama, tragedy, and roads not taken as Moore's law made its course. The field tends to turn a blind eye to the past in its relentless pursuit of the future. In contrast to this, Simulabra is a continuation of the vision from the origin of the personal computer. I only hope that I can see it through.

Next Steps

- MVP of editor & platform
- Continue growing language
- Find advisors and alpha testers
- Define needs for first year - currently searching for co-founder(s)/founding engineers

