

VanJS: A 0.9kB Grab 'n Go Reactive UI Framework without React/JSX

 [VanJS 1.0.0 is here →](#)

Enable everyone to build useful UI apps with a few lines of code, anywhere, any time, on any device.

VanJS ([abbreviated Vanilla JavaScript](#)) is an **ultra-lightweight**, **zero-dependency**, and **unopinionated** Reactive UI framework based on pure vanilla JavaScript and DOM. Programming with **VanJS** feels like building React apps in a [scripting language](#), without JSX. Check-out the Hello World code below:

```
1 // Reusable components can be just pure vanilla JavaScript functions.
2 // Here we capitalize the first letter to follow React conventions.
3 const Hello = () => div(
4   p("👋Hello"),
5   ul(
6     li("🌍World"),
7     li(a({href: "https://vanjs.org/"}), "👉 VanJS")),
8   ),
9 )
10
11 van.add(document.body, Hello())
12 // Alternatively, you can write:
13 // document.body.appendChild(Hello())
```

[Try on jsfiddle](#)

You can convert any HTML snippet into **VanJS** code with our online [converter](#).

VanJS helps you manage states and UI bindings as well, with a more natural API:

```
1 const Counter = () => {
2   const counter = van.state(0)
3   return span(
4     "♥ ", counter, " ",
5     button({onclick: () => ++counter.val}, "👍"),
6     button({onclick: () => --counter.val}, "👎"),
7   )
8 }
9
10 van.add(document.body, Counter())
```



Reactive Programming without React/JSX

Declarative DOM tree composition, reusable components, reactive state binding - **VanJS** offers every good aspect that React does, but without the need of React, JSX, transpiling, virtual DOM, or any hidden logic. Everything is built with simple JavaScript functions and DOM.

Grab 'n Go

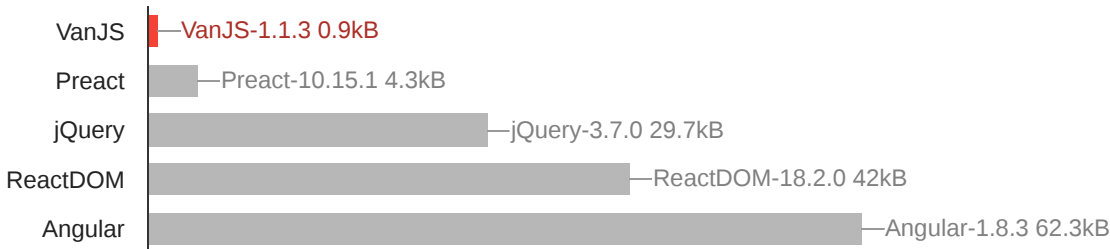
No installation, no configuration, no dependencies, no transpiling, no IDE setups. Adding a line to your script or HTML file is all you need to start coding. **VanJS** allows you to focus on the business logic of your application, rather than getting bogged down in frameworks and tools.

Ultra-Lightweight

VanJS is a very thin layer on top of Vanilla JavaScript and DOM, barely enough to make the DOM manipulation and state binding as ergonomic as (if not more than) React, and it delegates most of work to standard browser APIs implemented in native code. As a result, the minified bundled size of **VanJS** is just 1.7kB (0.9kB gzipped), which is **50~100 times** smaller than most popular UI frameworks, making it the smallest reactive UI framework in the world:

.min.js.gz .min.js

Bundle Size Comparison (Minified + Gzipped)



Perfection is achieved, not when there is nothing more to add, but when there is nothing left to take away.

-- Antoine de Saint-Exupéry, Airman's Odyssey

TypeScript Support

VanJS provides first-class support for TypeScript. Simply download the corresponding `.d.ts` file along with your `.js` file, and you'll be able to take advantage of type-checking, IntelliSense, large-scale refactoring

Easy to Learn

Simplicity at its core. 4 major functions (`van.tags`, `van.add`, `van.state`, `van.derive`) + 4 auxiliary functions (`van.tagsNS`, `van._`, `van.val`, `van.oldVal`). The [walkthrough tutorial](#) is the same as the full API reference, and can be learned within 1 hour for most developers.

Want to Learn More?

- [Get Started](#) (CDN, NPM or local download)
- Learn from the [Tutorial](#)
- Learn by [Examples](#) (and also [Community Examples](#))
- Convert HTML snippet to **VanJS** code with our online [HTML to VanJS Converter](#)
- Check out [VanUI](#) - A collection of grab 'n go reusable UI components for **VanJS**
- Want server-side rendering? Check out [Mini-Van](#) (the entire vanjs.org site is built on top of **Mini-Van**)
- For questions, feedback or general discussions, visit our [Discussions](#) page

Source Code

 github.com/vanjs-org/van

Support & Feedback

🙏 **VanJS** aims to build a better world by reducing the entry barrier for UI programming, with no intention or plan on commercialization whatsoever. If you find **VanJS** interesting, or could be useful for you some day, please consider starring the project on [GitHub](#). It takes just a few seconds but your support means the world to us and helps spread **VanJS** to a wider audience.

 Star 2,344  Watch  Discuss  Issue  Follow @vanjs-org

*In the name of **Vanilla of the House JavaScript**, [the First of its name](#), Smallest Reactive UI Framework, 0.9kB JSX-free Grab 'n Go Library, [Scripting Language](#) for GUI, [ChatGPT-Empowered](#) Toolkit, by the word of Tao of the House Xin, Founder and Maintainer of **VanJS**, I do hereby grant you the permission of **VanJS** under [MIT License](#).*

Contact us:  [@taoxin](#) /  [Tao Xin](#) /  tao@vanjs.org /  [Tao Xin](#)