# Svelte Snowpack Shoelace

IndyJS 1/20/2021

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# Devops & Backend

# Svelte

- No virtual DOM
- Compiler...magic disappearing framework
- Quick and easy to learn, esp. for beginners
- You see it used it in New York Times web site, where Svelte creator, Rich Harris works

# Snowpack

- Develop faster, with a dev server that starts up/HMRs in 50ms or less.
- See changes reflected instantly in the browser.
- Integrate your favorite bundler for a production-optimized build.
- Enjoy out-of-the-box support for TypeScript, JSX, CSS Modules and more.
- Connect your favorite tools with third-party plugins.

#### Shoelace

• A forward-thinking library of web components.

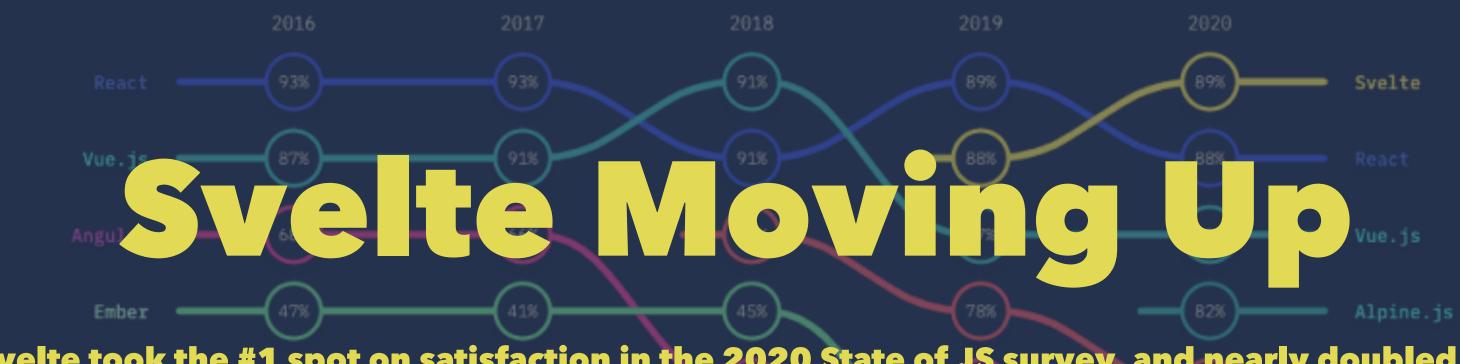
## Ionic

 An open source mobile UI toolkit for building high quality, cross-platform native and web app experiences.

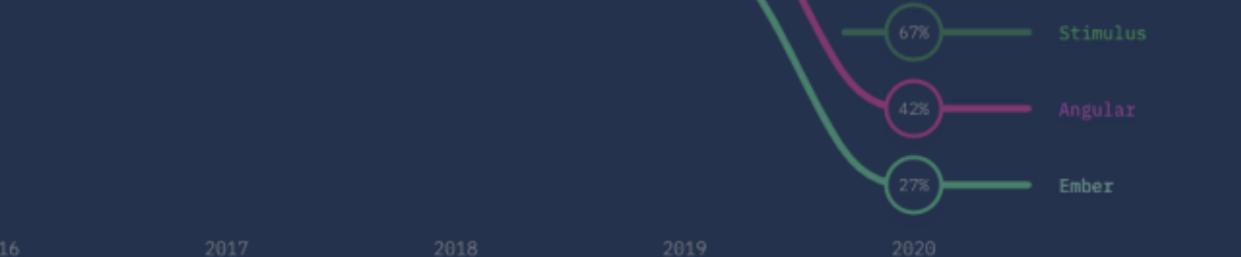
#### Svelte Features

- No virtual DOM means it's easier to interface to JS packages that touch the DOM (I'm looking at you, D3)
- Typescript support (good and getting better)
- Syntax and semantics
- Write less code

Satisfaction, interest, usage, and awareness ratio rankings.







# Svelte Features (more)

- Compiler does a lot of work for you
- Great performance
- Feels straightforward
- Aligns with the web platform
- Built in store support
- Scoped CCS styling
- Built in svelte-head component

#### Svelte Issues?

- Compilers moves the complexity, harder to debug when stuck
- Reactive syntax is for components only, but you can easily use svelte stores
- Rendering blocks the main thread (as do others)

## Svelte Potential drawbacks?

- Semi-immature tools, but skyrocketing interest on github
- Best practices are still evolving
- Young library ecosystem
- Fewer jobs today
- It's a volunteer effort (as is Vue, etc.)

# Syntactic Sugar for Reactivity Like a spreadsheets for UI

- reactive assignments
- reactive declarations
- reactive statements
- Reactive Debugger

# More Syntactic Sugar

- declaring props
- store auto subscriptions, rxjs observable compatible
- transitions
- event forwarding, alternative to prop handler drilling
- optional two-way binding, makes forms simple!

#### Batteries Included

#### From: Why I Enjoy Svelte

- Transitions: transition:fn and in:fn/out:fn vs React Transition
   Group
- Animations: animate:fn vs React Spring/Framer Motion
- Static Scoped Styling: <style> vs Linaria/Astroturf/Styled-Components + Babel Plugin
- Head management: <svelte:head> vs react-helmet/reactasync-helmet

# Demo: A Few Feature examples

<u>Intro</u>

2 Way Binding

Directive shortcuts

Scoped CSS

**DOM Event Modifiers** 

Loop "else" clause

**Transitions** 

Slot props and the let:variable directive

# Demo: Snowpack with Svelte

#### Demo Code

- simple
- tailwind
- shoelace

# Snowpack

- ES Modules
- Super fast dev update as you type
- You may have odd issues with some older NPM packages
- HMR Hot Module Reloading

### Shoelace: Their words

- Works with all frameworks
- Works with CDNs
- Fully customizable with CSS
- Includes an official dark theme
- Built with accessibility in mind 6
- Open source

## Shoelace

- Modern web component ui components
- Fast, easy to style, lazy loaded
- Focus on accessibility, theming, dark mode
- Uses modern web tech:
  - Web components
  - CSS part styling
  - Constraint Validation API

### UI Libs for Svelte

- Tailwind CSS
- Material UI Web Components
- Framework7 & Framework7 Svelte
- Svelte Native
- Bootstrap, MUI and other variants exist

#### Resources: Svelte

- Svelte Docs
- Svelte REPL Tutorial
- Why Svelte
- Svelte Intro
- Svelte Quick Start
- Why I Enjoy Svelte
- 7 Svelte features that bring me joy

#### More Resources: Svelte

- React Hooks vs Svelte
  - Blog Entry
- Joy of Svelte
- Front End Masters
- Tommertom/svelte-ionic-app
- Awesome Svelte

# Svelte Repls

- Svelte & Shoelace
- Svelte & Ionic
- Svelte & Ionic/Shoelace
- Examples

# Resources: Snowpack

Snowpack Docs

#### Resources: Shoelace & Ionic

- Shoelace Web Components
- More Shoelace Info
- Shoelace Intro
- lonic
  - also easy to use with Svelte
- Shoelace, Ionic & Svelte

# Thanks!

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