Get To Know Alpine.js!

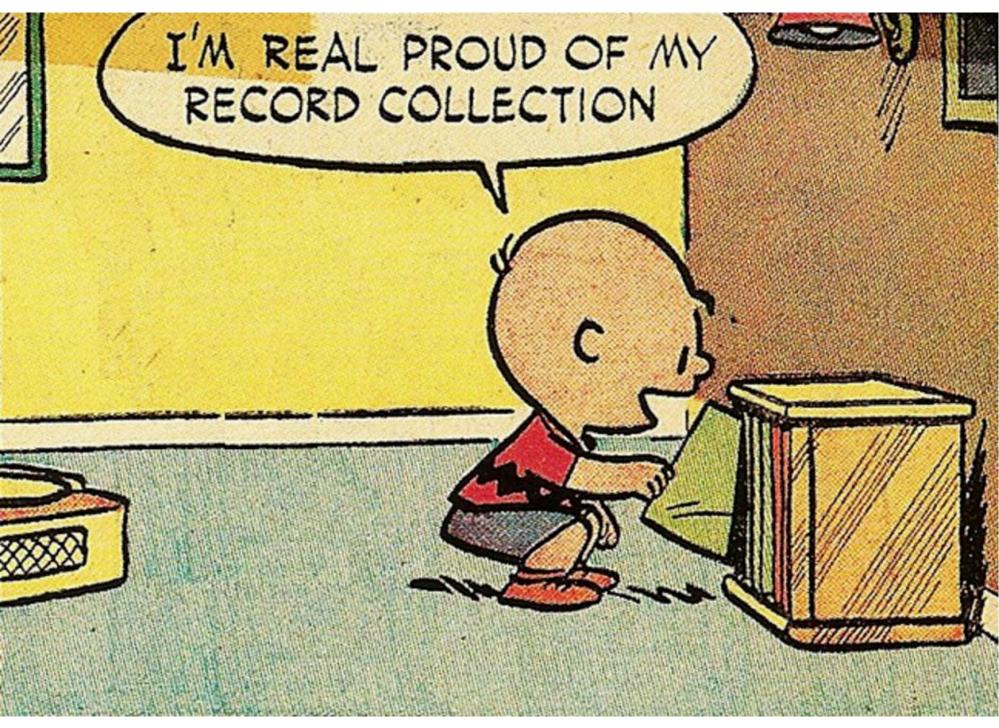
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About Me

- Owner / Director, South of Shasta Consulting
- Manager, Sac Interactive Tech Meetup
- Reformed Video Game Developer Grim Fandango, SimPark, StarWars Rogue Squadron, etc...
- Music Junkie





Code And Slides

github.com/nolanerck

get-to-know-alpine-js

Alpine.js

- "jQuery for the Modern Web"
- Similar to Vue.js
- No build step required
- Node / npm install not required

Alpine.js

- Very lightweight and simple, by design
- 1 JS file
- 15 attributes, 6 properties, 2 methods
- Alpine components, not apps
- For specific bits of interactivity on the page
- If you need sitename.com/#routes, use Vue, React, etc

Alpine.js vs jQuery vs Vue

- jQuery: manipulate the entire DOM
- Alpine: designate a portion of the DOM to be managed (similar-ish to Vue)
- Template syntax also similar to Vue
- Demo 1: Hello World

x-data

- Where all your Alpine stuff lives
- Define variables
- Event handlers
- Listen for Alpine init
- Define methods
- Everything that makes up an Alpine component can go in here
- Similar to new Vue({});

Conditional logic

- x-show and x-if
- x-show: hide/show
 Still in the DOM, just hidden
- x-if: add/remove
 Actually removed from the DOM, not just hidden
 Must use <template > tag and a root element
- Demo 2: Conditionals

Attribute Binding

- x-bind
- x-bind:someHTMLAttribute="the value"
-
- Shorthand, just use ":" without x-bind <img:src="myVariableName">
- I don't like the shorthand syntax
- Demo 3: Attribute Binding

Loops

- x-for
- Must use <template > tag with 1 root item
- Demo 4: Looping
- :key if you need to reorder items (ala Vue, kind of)
- Demo 5: Looping and Keys

Forms and Binding

- x-model
- Works on all form fields except type=file (for security reasons)
- 2-way binding ala MVVM
- Demo 6: Form Model Binding

Modifiers

- Can use modifiers to (duh) modify how data is handled
- By default JavaScript (x-model) treats form data like a string
- .number and .boolean for better numeric and bool data functionality
- debounce<input type="text" x-model.debounce.500ms="search">
- throttle<input type="text" x-model.throttle.500ms="search">
- Demo 7: Form Binding w/ Modifiers

Getters

- For methods that return data based on some other state
- If the method uses any data, Alpine will notice if the data changes
- ala "Computed Properties" in Vue (but not cached)
- get fullName(){ ... }
- "get" not req'd, but adds to self-documenting
- Demo 8: Getters

Events

- x-on
- Run code for dispatched events
- <button x-on:click="alert('Hello World!')">Say Hi</button>
- Shorthand version: <button @click="alert('Hello World!')">Say Hi</button>
- IMHO: use x- stuff everywhere, for consistency and self-documentation
- Demo 9: Events

JS and HTML mixed together?!



Separate JS and HTML

- Can move all the code to .js file
- <div x-data="theApp"> (ala Vue)
- x-cloak to hide things until properly init'd
- Demo 10: Separate files

Multiple Alpine Components

- Each x-data is a "component"
- x-data's cannot talk to each other directly
- Tho you can dispatch messages ala vanilla JS
- https://alpinejs.dev/magics/dispatch
- Use Alpine.store() for global state management

Other stuff

Transitions

- x-transition
- For CSS transition animation things

Magics

- \$magicsLookLikeThis
- \$watch Watch a component property to see when it changes and run some code
- init(\$watch('firstName', value => console.log(value)));
- \$dispatch shortcut for dispatching browser events
- <button @click="\$dispatch('notify', { message: 'Hello World!' })">

Even more cool stuff!

- Alpine.store()
- Other Magics (el, refs, store, nextTick, root, data, id)
- Plugins
- Advanced things like CSP, Reactivity, Extending, Async
- Plus more!

More Resources

- Raymond Camden's Blog
- alpinejs.dev
- alpinejs.dev/components
- Official(?) Discord
- Twitter: @Alpine_JS
- southofshasta.com/training/alpine-js-crash-course/

Learning in 30 minutes a day.

Questions? Comments?

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Thanks!