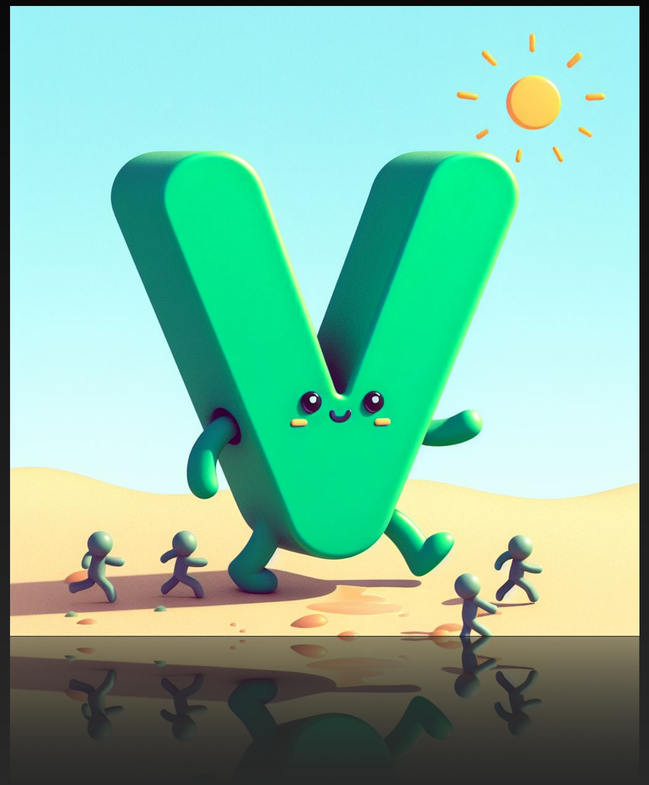


Vue with Pinegrow and beyond

pinegrow

http://pinegrow.com

Vue Designer

https://vuedesigner.com

About this series (4 videos)

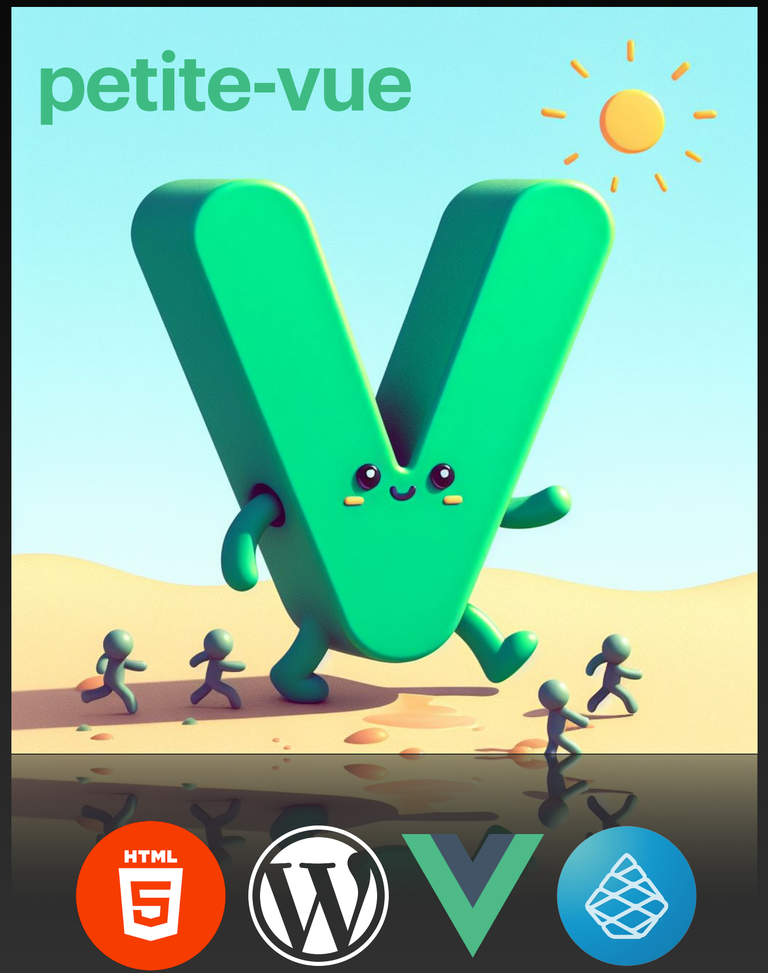
1. Progressive Enhancement of HTML with Petite-Vue
2. Progressive Hydration of Islands with 11ty in Static HTML
3. Progressive Enhancement of HTML with Standard-Vue
4. Progressive Hydration of Islands with Astro, Iles & Nuxt

Pinegrow for HTML Projects

- Static HTML pages
- No build tools (for HTML)
- Refresh when working with Javascript

Vue Designer for Vue + Vite

- .vue components, app tree, state binding
- Vite-powered meta-frameworks
- HMR authoring experience



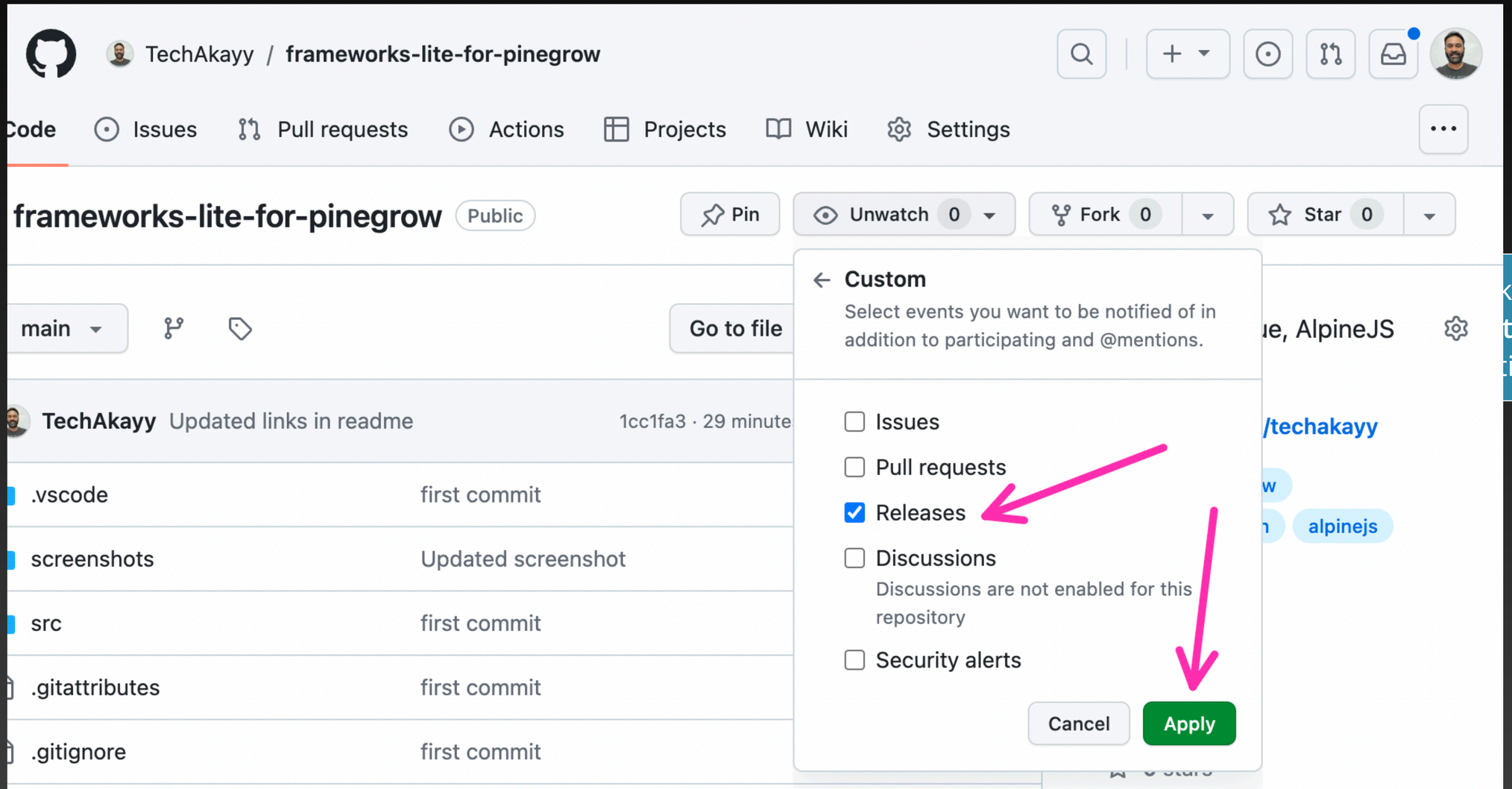
Progressive enhancement of HTML with Petite-vue (1)

pinegrow

http://pinegrow.com

Frameworks Lite for Pinegrow

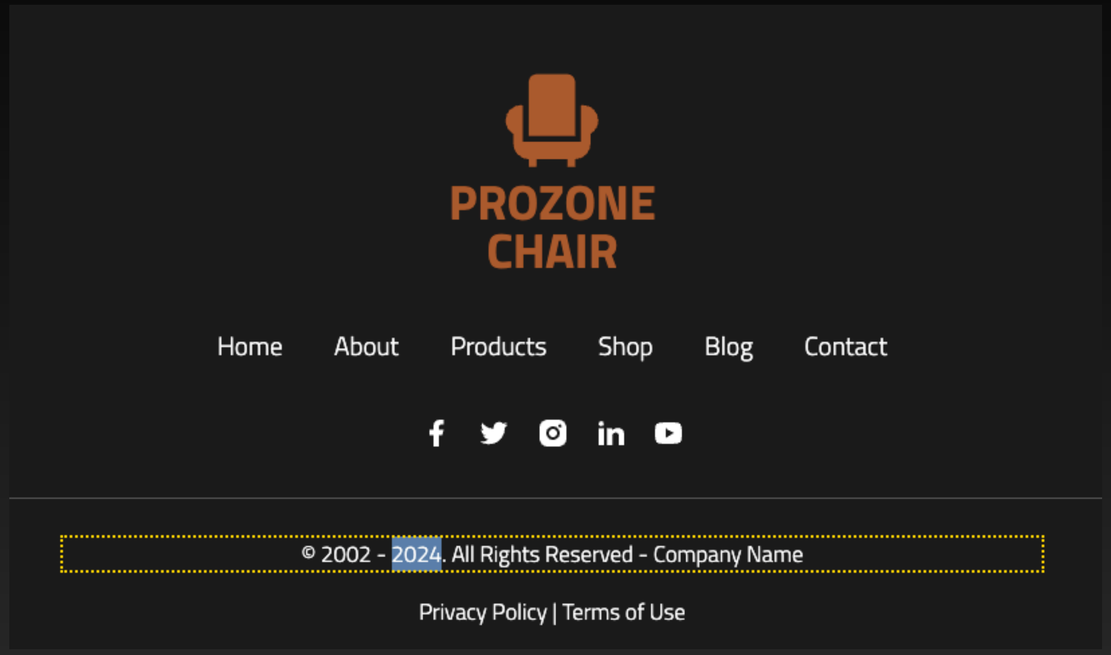
https://github.com/TechAkayy/frameworks-lite-for-pinegrow - free & open-source (MIT)



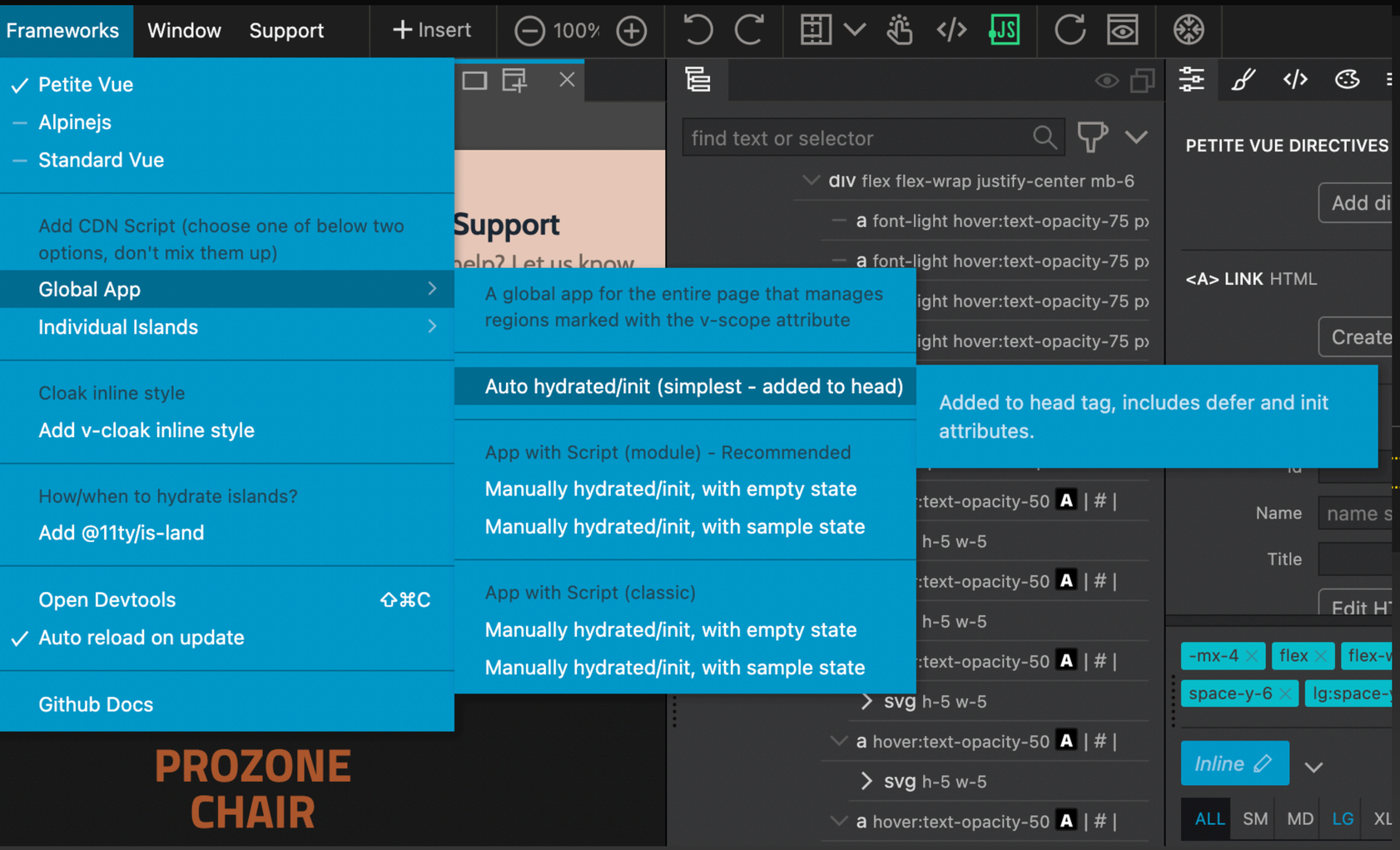
Task 1 - Text Interpolation

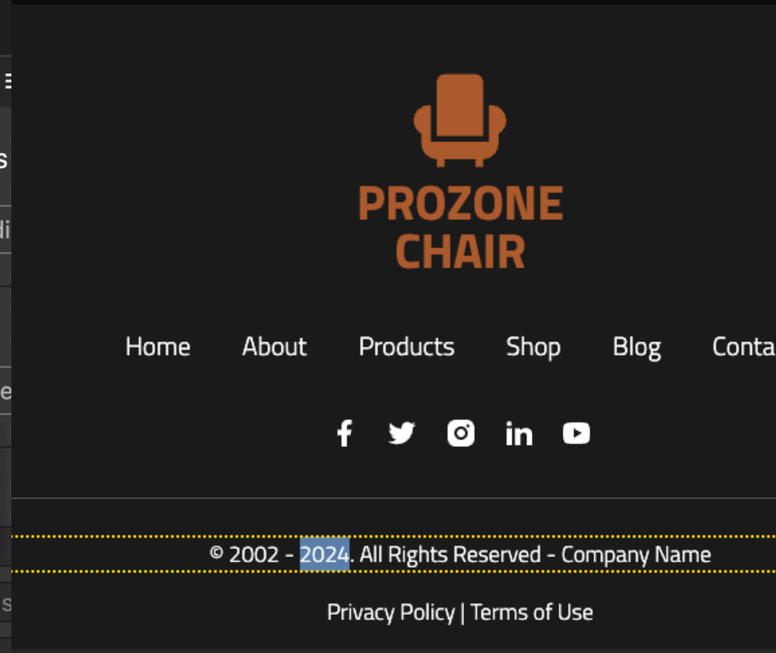
In the Footer,

1. Display the current year as the end of year range.
2. Note that the page is served from a static hosting, so no server-side rendering (for eg, using php).



Task 1 - Revue





v-scope="{}

{{ new Date().getFullYear() }}

v-effect="$el.textContent = count"

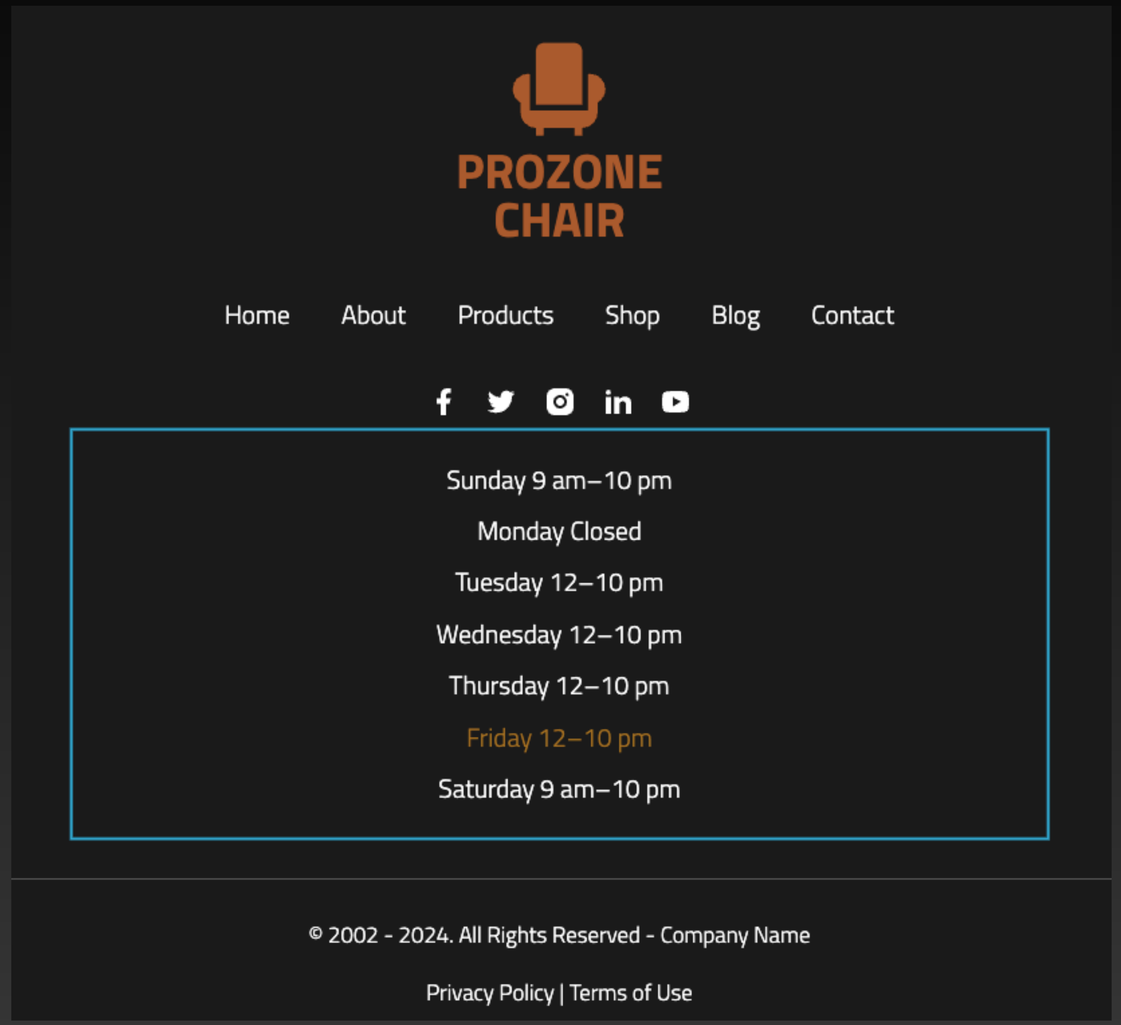
v-text

v-html

Task 2 - Loops, Data binding, Conditionals

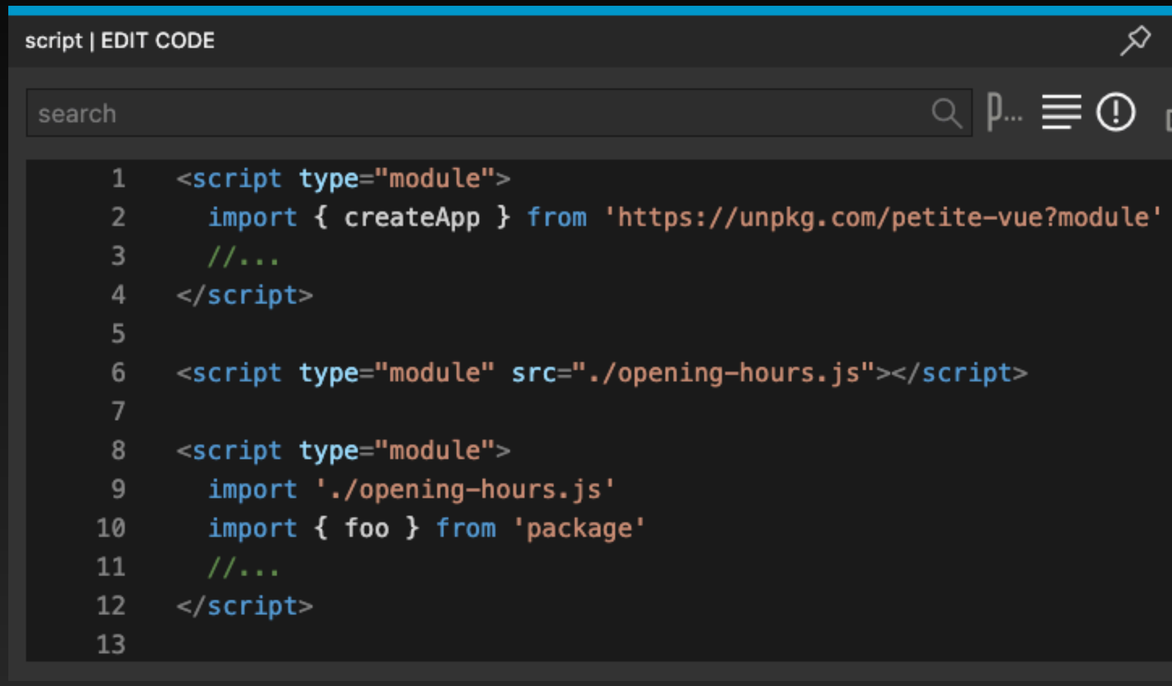
In the Footer,

1. Display the opening hours for the whole week.
2. Use an local array for now! The data is maintained in a headless CMS (sunday to saturday), so we will replace the local array with a api fetch later.
3. Highlight today's opening hours in primary color.



Module Script

1. **Singleton** - loaded only once, even if imported multiple times.
2. **Deferred by default** - execute after HTML content is parsed. Can be anywhere within the document.
3. **Modern ES module syntax** - modular code with import/export.
4. **Strict mode** - all objects (let, const, var, function, class) are private unless explicitly exported.
5. **No File Protocol** - External module imports don't support file protocol.

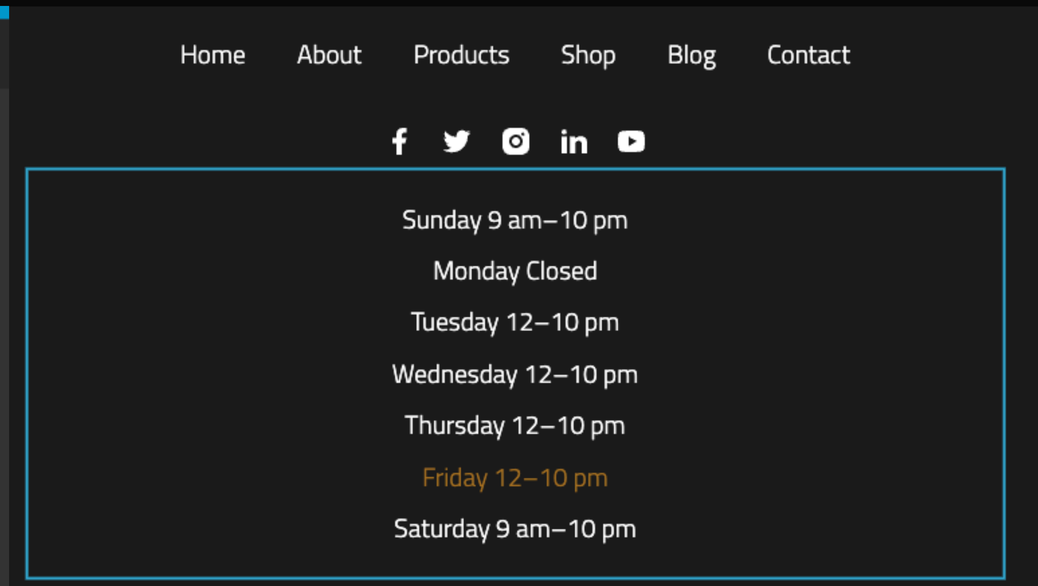


Task 2 - Revue

script | EDIT CODE

search

```
1   <script type="module" data-pg-name="App-Petite Vue">
2     import { createApp } from 'https://unpkg.com/petite-vue?
        module'
3
4     const state = {
5       // state exposed to all expressions within v-scope
            regions
6       weekDays: [
7           'Sunday 9 am–10 pm',
8           'Monday Closed',
9           'Tuesday 12–10 pm',
10          'Wednesday 12–10 pm',
11          'Thursday 12–10 pm',
12          'Friday 12–10 pm',
13          'Saturday 9 am–10 pm',
14        ],
15      get todaysOpeningHours() {
16          return this.weekDays[new Date().getDay()]
17      },
```

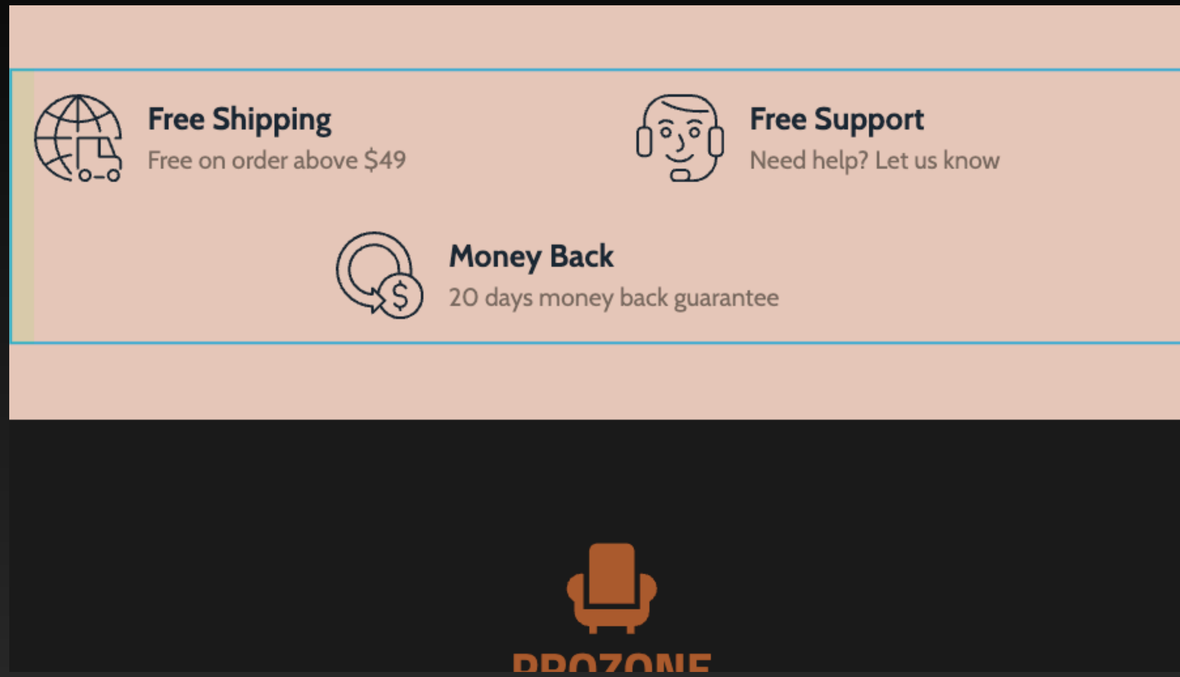


- v-for / :key
- v-bind (:)
- v-show
- v-if, v-else, v-else-if

Task (experimental) - Client-side rendering

In the Deals section (just above Footer),

1. If you are following along, skip doing this task at your end.
2. The three deals boxes, can they be looped?
    a. Free Shipping
    b. Free Support
    c. Money Back
3. SEO impact while client-side rendering



Use Cases - Petite-Vue

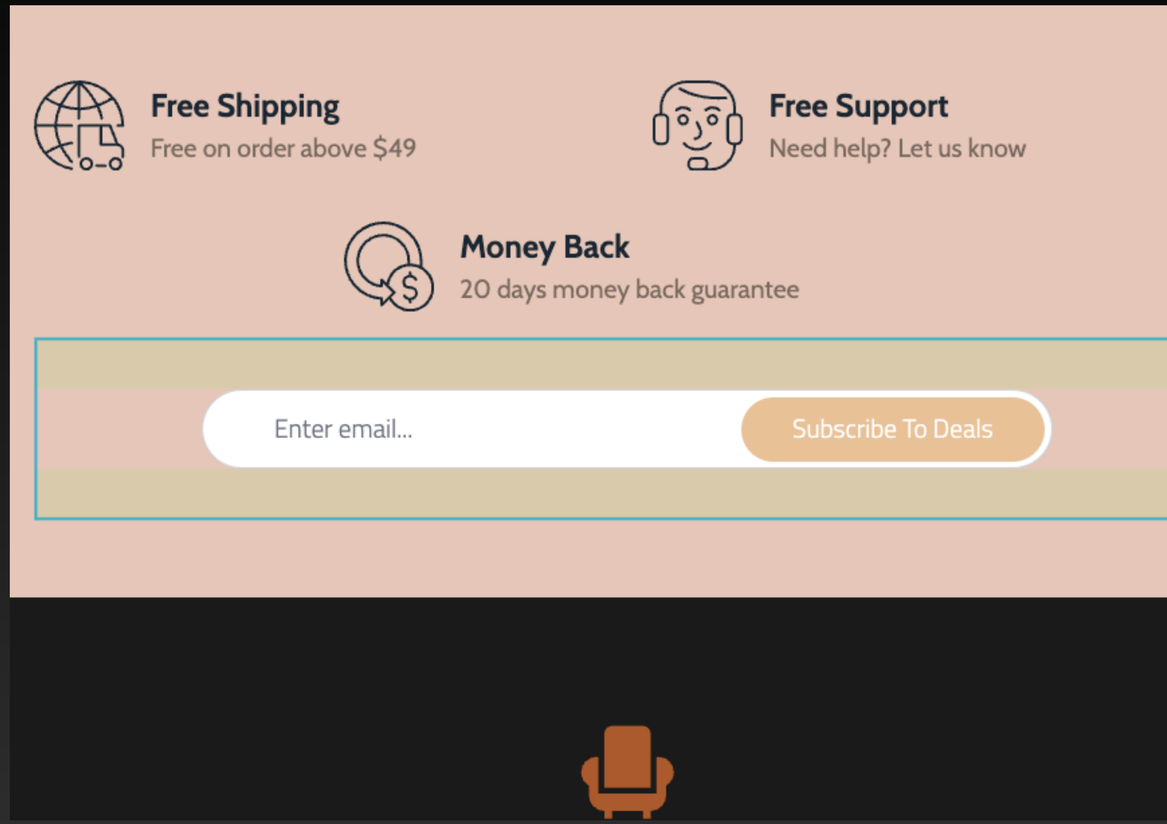
Progressive enhancement is ideally done on top of SSG / SSR
“sprinkles" of interactions (CSR)

	MPA	SPA
SSG	11ty Eleventy, Iles, Astro	Vitepress, Nuxt
SSR	Wordpress, Laravel, Astro	Nuxt, Quasar

Task 3 - Two-way data binding, Events

In the Deals section (just above Footer),

1. Add a subscription form to let users enter their email and subscribe to deals.
2. Enable the subscribe button only if a valid email is entered.
3. Validate the email address when leaving the input and display an error message below.
4. The subscribe button shall post the email to an API endpoint later. For now, just console log the email address.

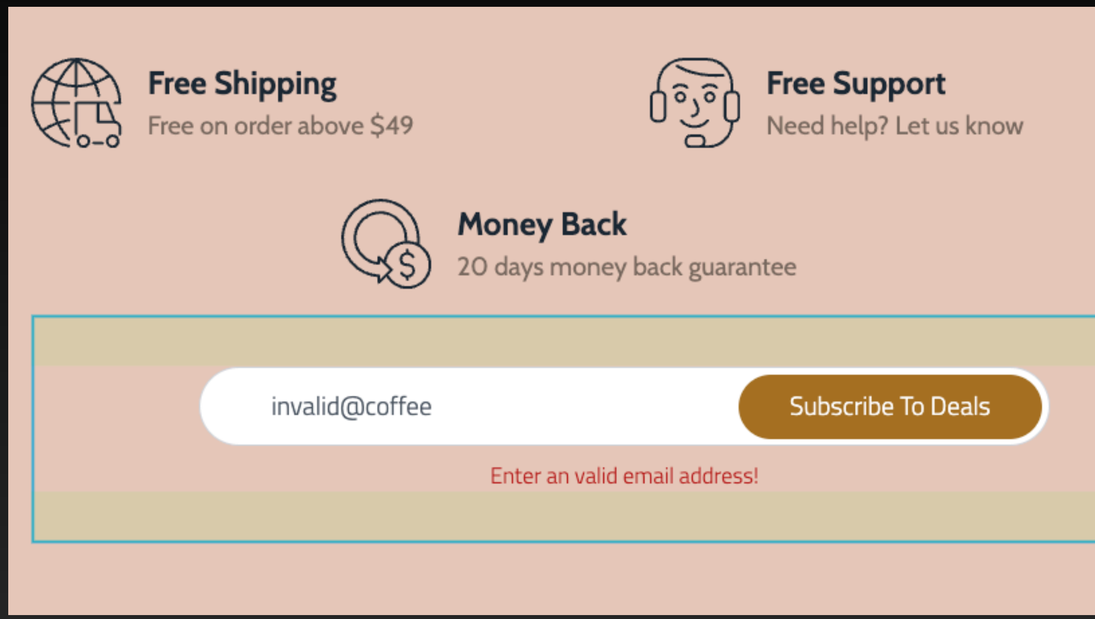


Task 3 - Revue

script | EDIT CODE

search

```
23        email: '',
24        invalidMessage: '',
25        validateEmail() {
26            const re = /^(([^<>()\[\]\\.,;:\s@"]+(\.[^<>()\[\]\\.,;:\s@"]+)
                  *)|(".+"))@((\[[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,3}\.[0-9]{1,
                  3}])|(([a-zA-Z\-0-9]+\.)+[a-zA-Z]{2,}))$/
27            if (re.test(this.email)) {
28                this.invalidMessage = ''
29            } else {
30                this.invalidMessage = 'Enter an valid email address!'
31            }
32        },
33        subscribe() {
34            if (!this.invalidMessage) {
35                console.log(this.email)
36            }
37        },
38    }
39
40    createApp(state).mount()
41  </script>
```

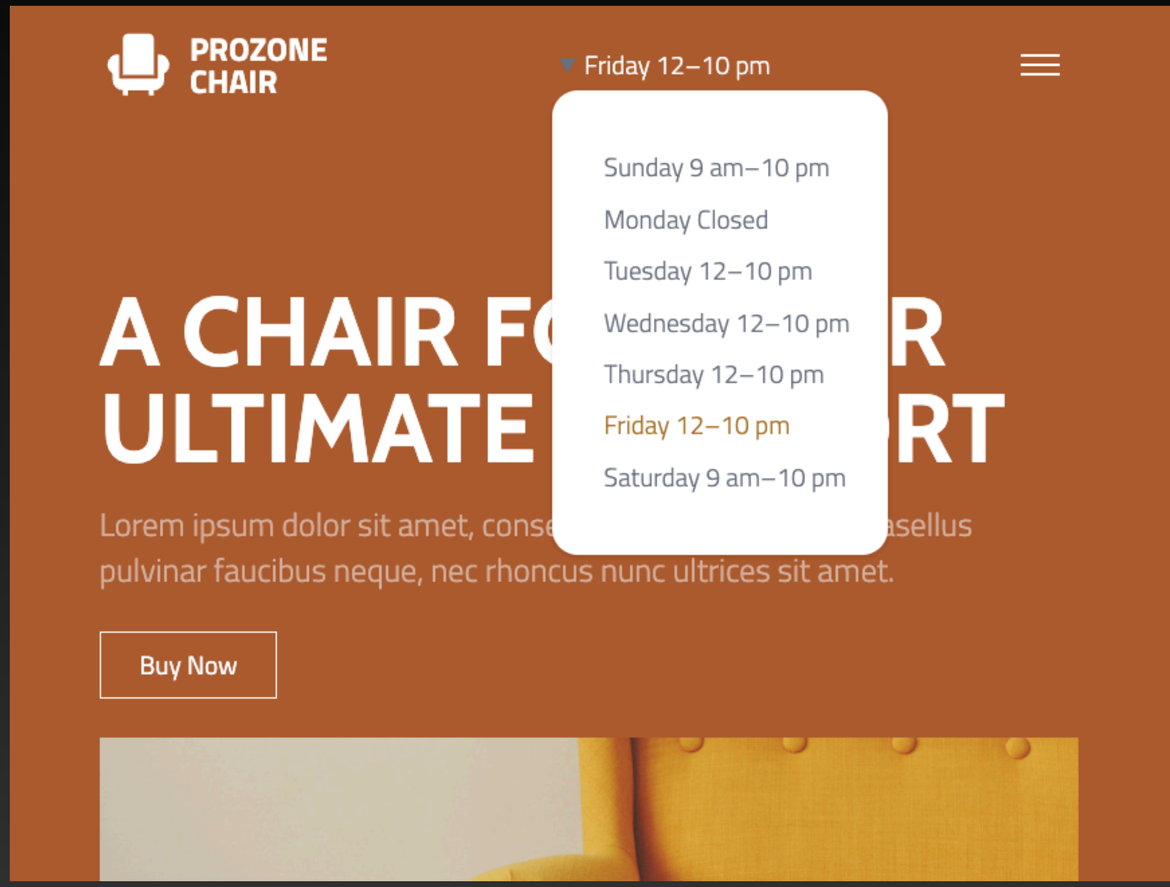


v-model
v-bind:attr
v-on:blur
v-on:click

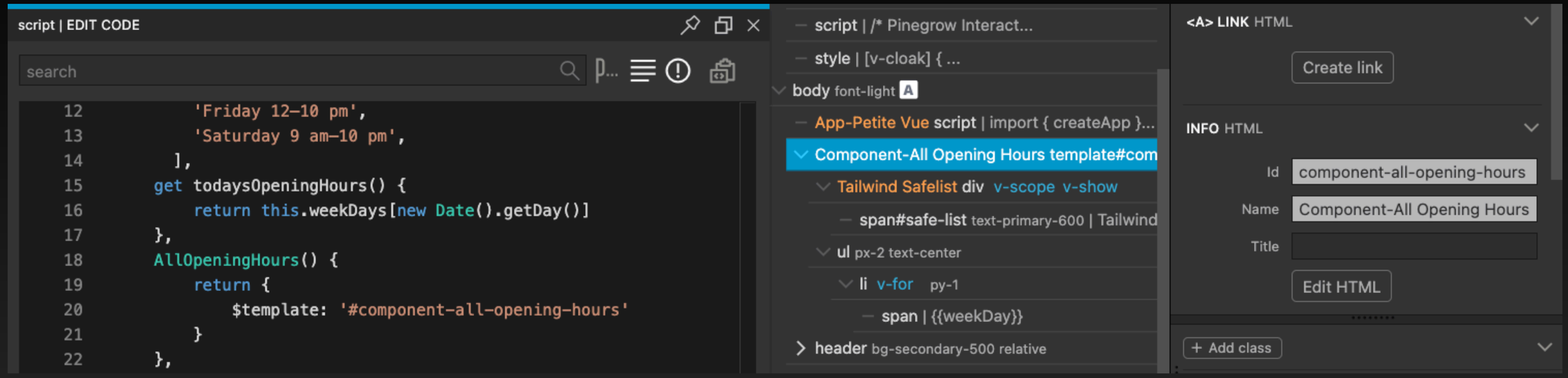
Task 4 - Components, Cloak

In the Navbar,

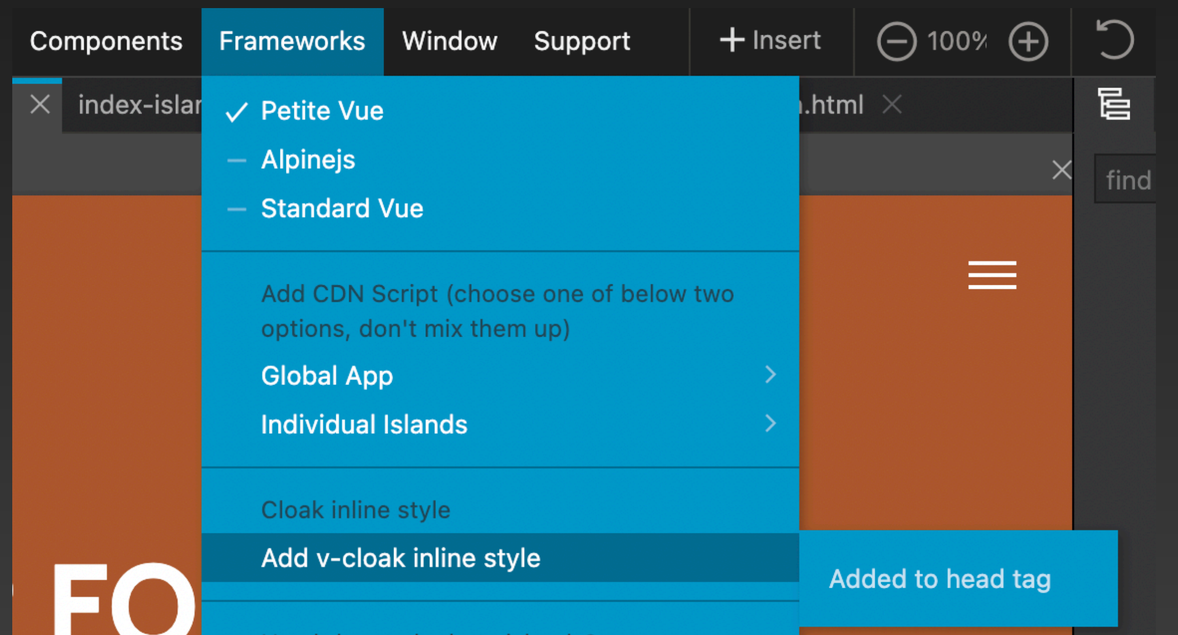
1. Display today's opening hours
2. When clicked, display the opening hours for the whole week in a popover.
3. Clicking on it again (or) clicking away should close the popover.
4. Ensure there is no "blip" of unrendered characters, across the whole page, for eg, {{ foo }}.



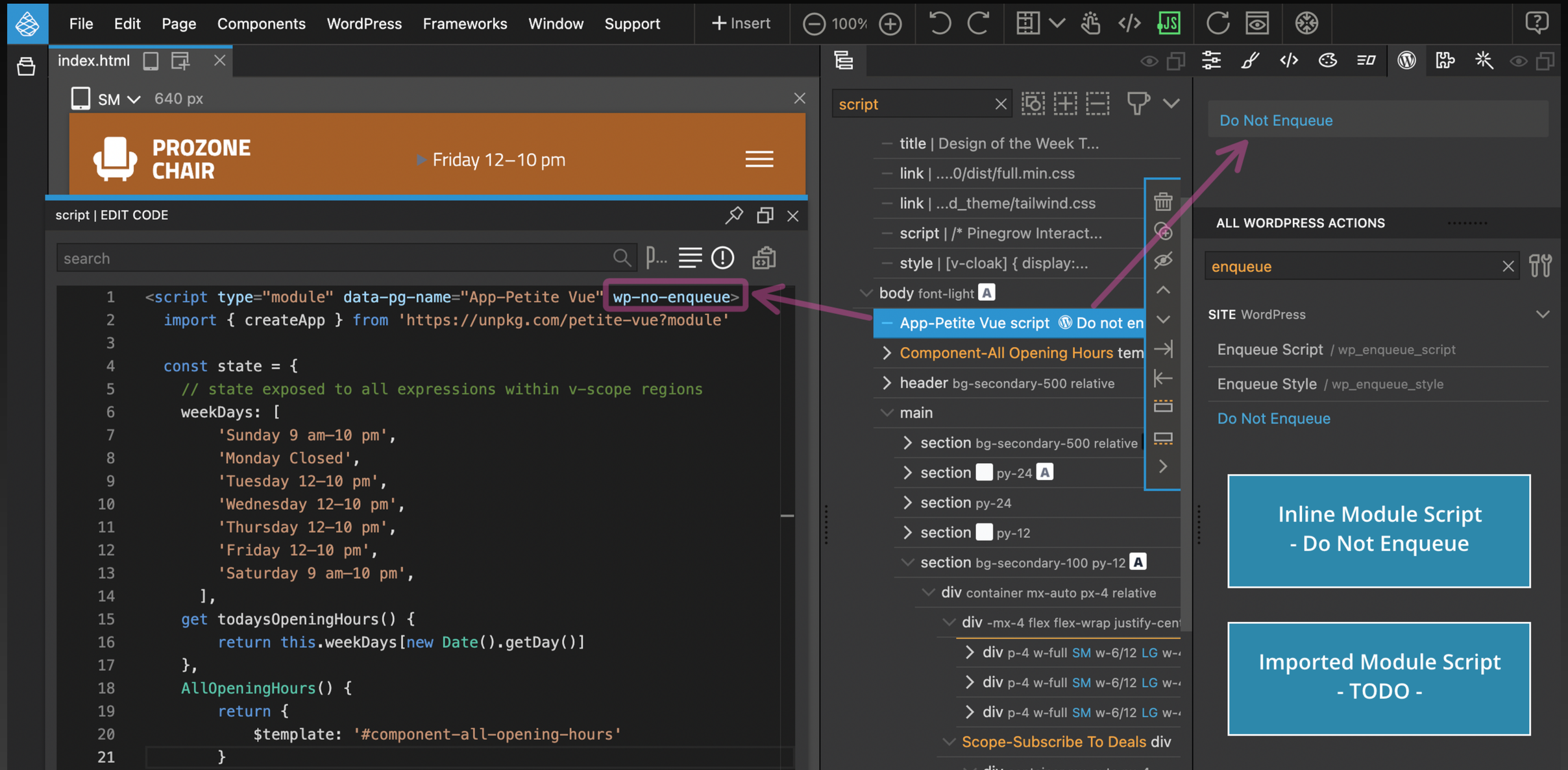
Task 4 - Revue

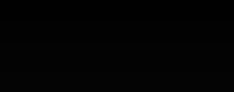

script | EDIT CODE
search
'Friday 12–10 pm',
'Saturday 9 am–10 pm',
],
get todaysOpeningHours() {
return this.weekDays[new Date().getDay()]
},
AllOpeningHours() {
return {
$template: '#component-all-opening-hours'
}
},
script | /* Pinegrow Interact...
style | [v-cloak] { ...
body font-light A
App-Petite Vue script | import { createApp }...
Component-All Opening Hours template#com
Tailwind Safelist div v-scope v-show
span#safe-list text-primary-600 | Tailwind
ul px-2 text-center
li v-for py-1
span | {{weekDay}}
header bg-secondary-500 relative
<A> LINK HTML
Create link
INFO HTML
Id
component-all-opening-hours
Name
Component-All Opening Hours
Title
Edit HTML
+ Add class

PROZONE CHAIR
Friday 12–10 pm
Sunday 9 am–10 pm
Monday Closed
Tuesday 12–10 pm
Wednesday 12–10 pm
Thursday 12–10 pm
Friday 12–10 pm
Saturday 9 am–10 pm
A CHAIR FO R
ULTIMATE RT
Lorem ipsum dolor sit amet, conse asellus
pulvinar faucibus neque, nec rhoncus nunc ultrices sit amet.


Components
Frameworks
Window
Support
Insert
100%
index-islar
.html
Petite Vue
Alpinejs
Standard Vue
Add CDN Script (choose one of below two options, don't mix them up)
Global App
Individual Islands
Cloak inline style
Add v-cloak inline style
Added to head tag
find

Wordpress + Progressive Enhancement





1. Scope	v-scope="{ count: 0 }"	x-data="{ count: 0 }"
2. Initialization / lifecycle	@vue:mounted="count=10"	x-init="count=10"
3. Text interpolation	Count is: {{ count }}, v-cloak	Count is: <span x-cloak x-text="count">
4. Re-evaluation	v-effect="count=15"	x-effect="count=15"
5. Show/hide conditionally	v-show	x-show
6. Render conditionally	v-if, v-else, v-else-if	x-if
7. Looping	v-for / :key	x-for / :key
8. Data Binding (attributes, class, style)	v-bind (:)	x-bind (:)
9. Two-way binding	v-model	x-model
10. Event	v-on (@)	x-on (@)
11. Text/Html content	v-text / v-html	x-text / x-html
12. Template Refs	ref	x-ref
** Other Features **	Components, Custom Directives & Global Store	and more...

Petite-vue is 2 yrs old, Alpinejs 4-5 yrs old

DIY

Alpinejs can be installed via npm

Alpinejs Transitions & Magics

Alpinejs Plugins

Alpinejs UI Components / Design Blocks

* Not an exhaustive comparison

petite-vue

1. Progressive enhancement.
2. Same template syntax as standard Vue.
3. Optimized for "sprinkling" a small amount of interactions on an server-rendered HTML document.
    a. Light-weight ~6kb (cdn), no build step
    b. DOM *is* the template (no virtual-dom)
    c. Similar to Alpinejs, but part of the Vue ecosystem
    d. Feature-complete, stable for years to come...

Some tips

1. Understand `v-show` versus `v-if`
2. `v-on:click`, not `@click`
3. Avoid arrow functions
4. `x-for, x-if` must be on a <template> tag, only one root container
5. `x-for/v-for :key`, if re-ordering is important
6. `v-html, x-html` - avoid them, xss vulnerabilities
7. Understand SEO impact while client-side rendering
8. Alpine.js & Vue devtools
9. Share you tips in the comments.

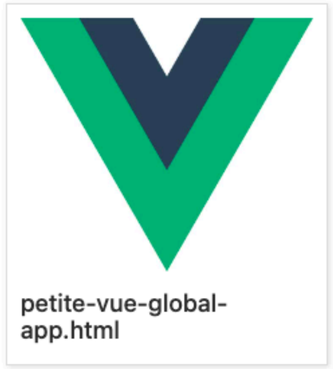
Petite-Vue Templates & Examples

Create a new page or project

Choose what kind of page you wish to create:

- Bootstrap 5 Blocks
- Tailwind CSS Blocks
- Interactions Blueprints
- Bootstrap 4 Blocks
- Frameworks Lite 1.1
- Bootstrap 5
- Tailwind CSS
- Plain HTML
- Tailwind UI
- Foundation 6.6
- Bootstrap 3 Blocks for WP
- Bootstrap 3 Blocks
- Bootstrap 4
- Foundation 5

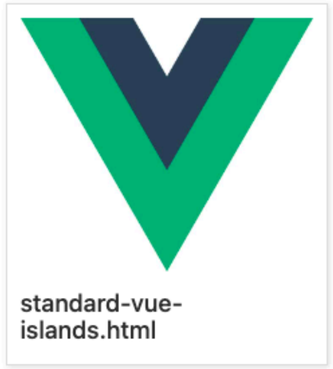
Frameworks Lite 1.1 components & blocks. | By Ahmed Kaja



petite-vue-global-app.html

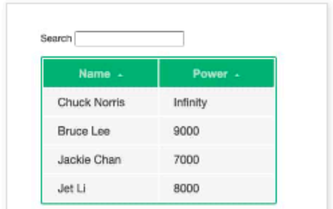
petite-vue-islands.html

alpinejs-global-app.html



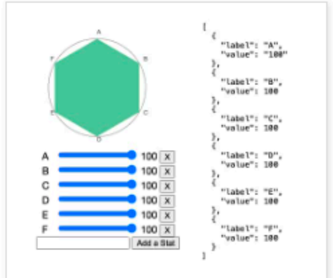
standard-vue-islands.html

example-commits.html



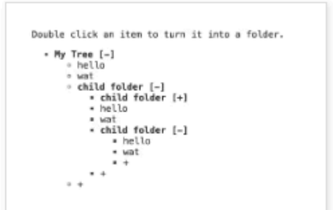
example-grid.html

example-markdown.html



example-svg.html

example-todomvc.html



example-tree.html

Production

Production CDN URLs

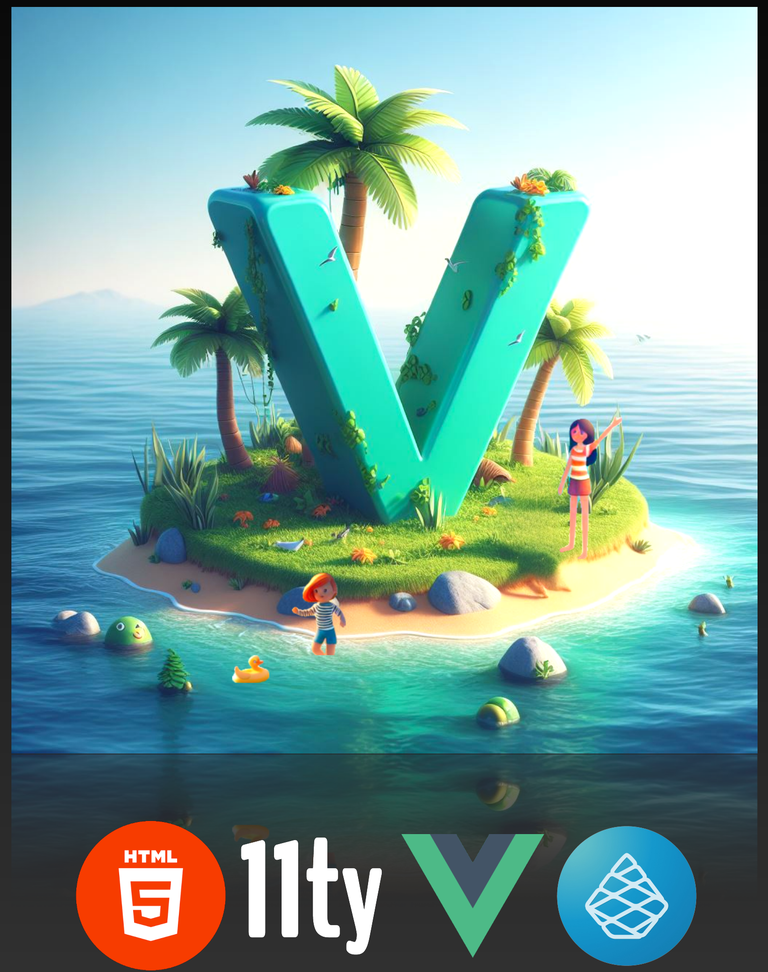
The short CDN URL is meant for prototyping. For production usage, use a fully resolved CDN URL to avoid resolving and redirect cost:

- Global build: `https://unpkg.com/petite-vue@0.2.2/dist/petite-vue.iife.js`
  - exposes `PetiteVue` global, supports auto init
- ESM build: `https://unpkg.com/petite-vue@0.2.2/dist/petite-vue.es.js`
  - Must be used with `<script type="module">`

> Don't forget the "defer" attribute in the **`<script>`** tag.

Notice the **`@3.x.x`** in the provided CDN link. This will pull the latest version of Alpine version 3. For stability in production, it's recommended that you hardcode the latest version in the CDN link.

```
<script defer src="https://cdn.jsdelivr.net/npm/alpinejs@3.13.3/dist/cdn.min.js"></s
```

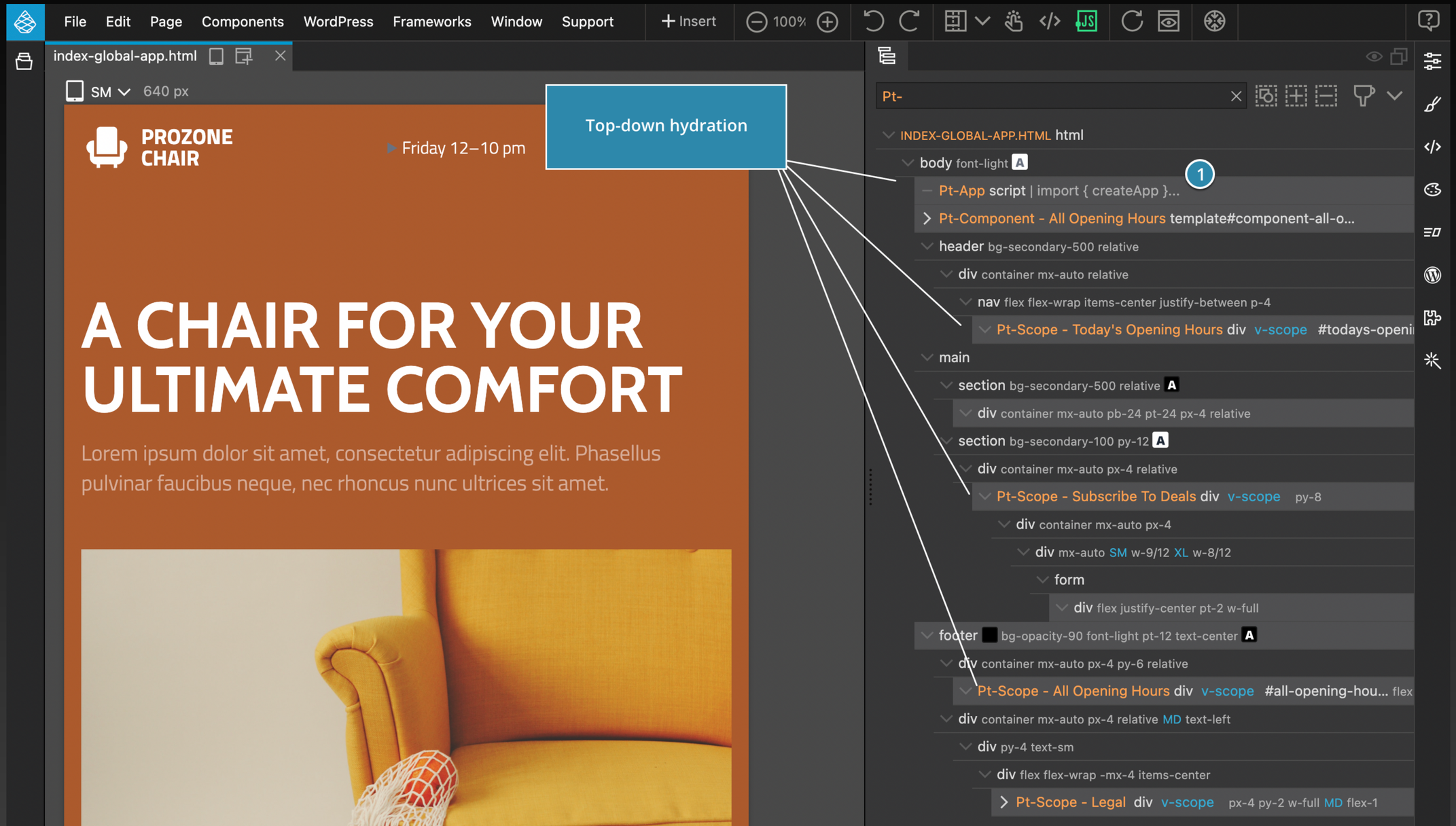


Progressive Hydration of Islands with 11ty in static HTML (2)

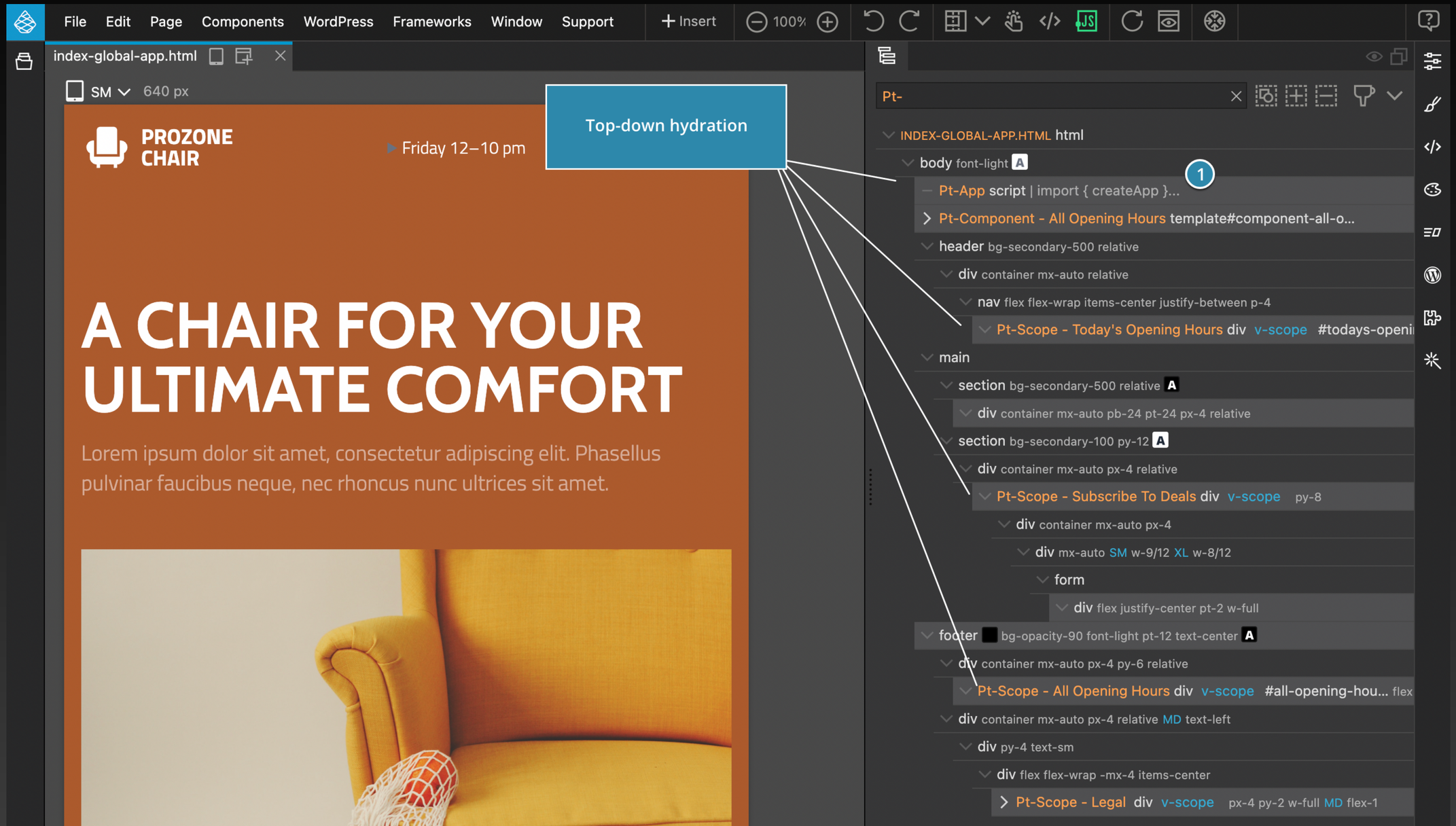
pinegrow

http://pinegrow.com

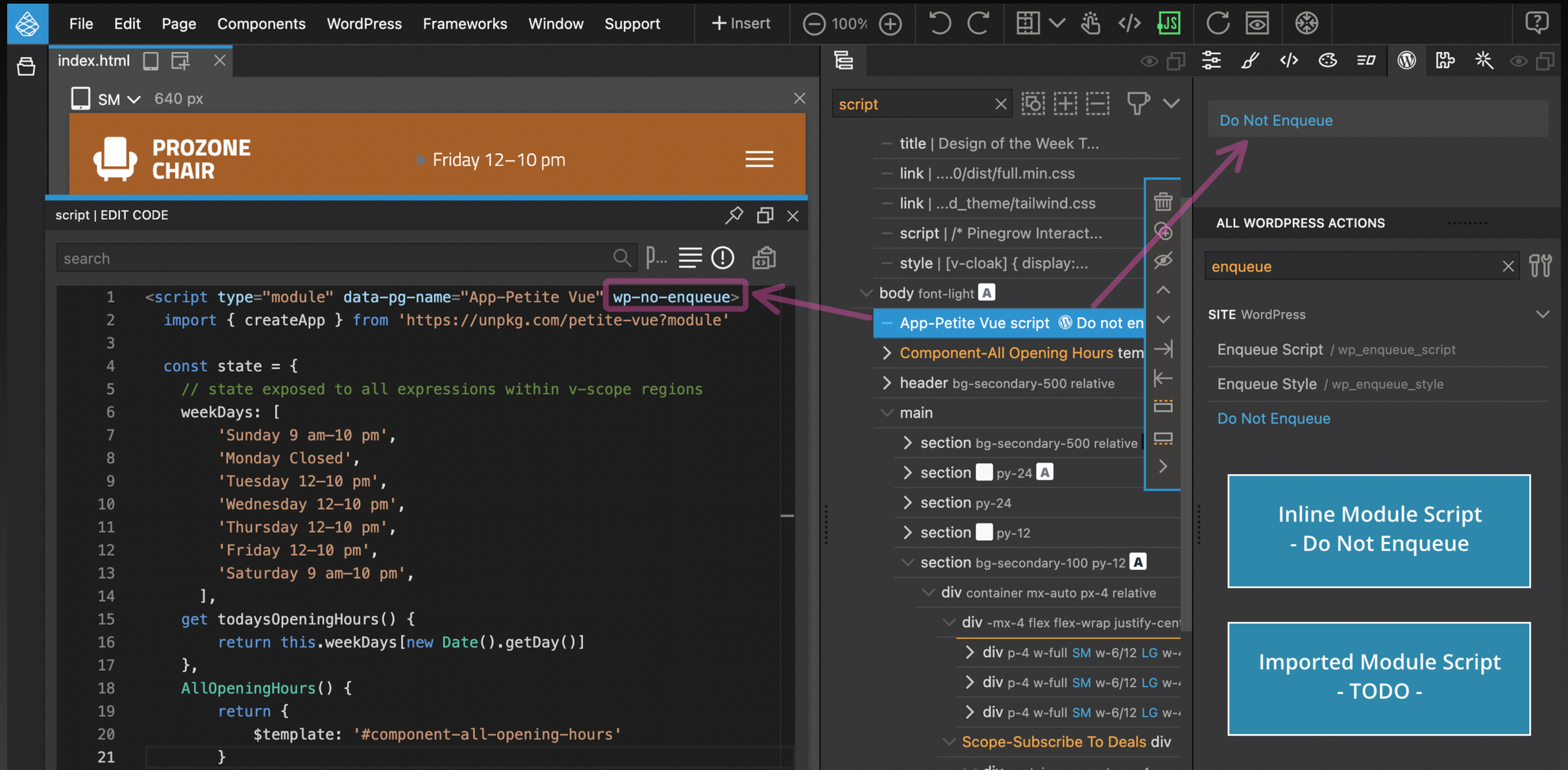
Monolithic Architecture

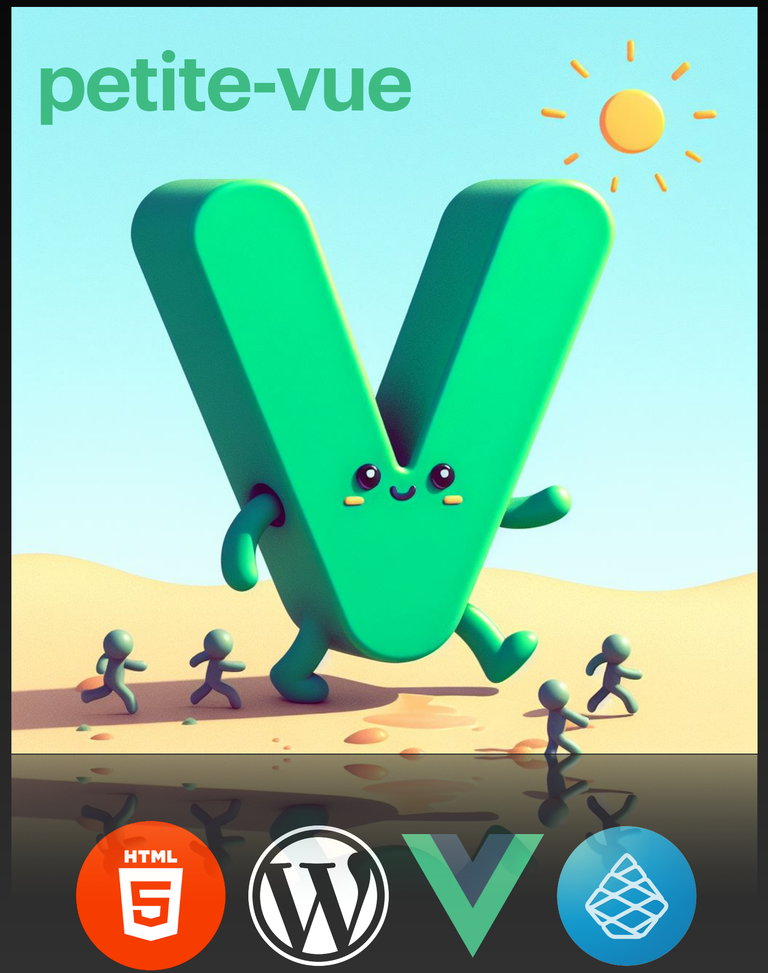


Islands Architecture



Wordpress + Progressive Hydration





Progressive enhancement of HTML with Standard-VUE (3)

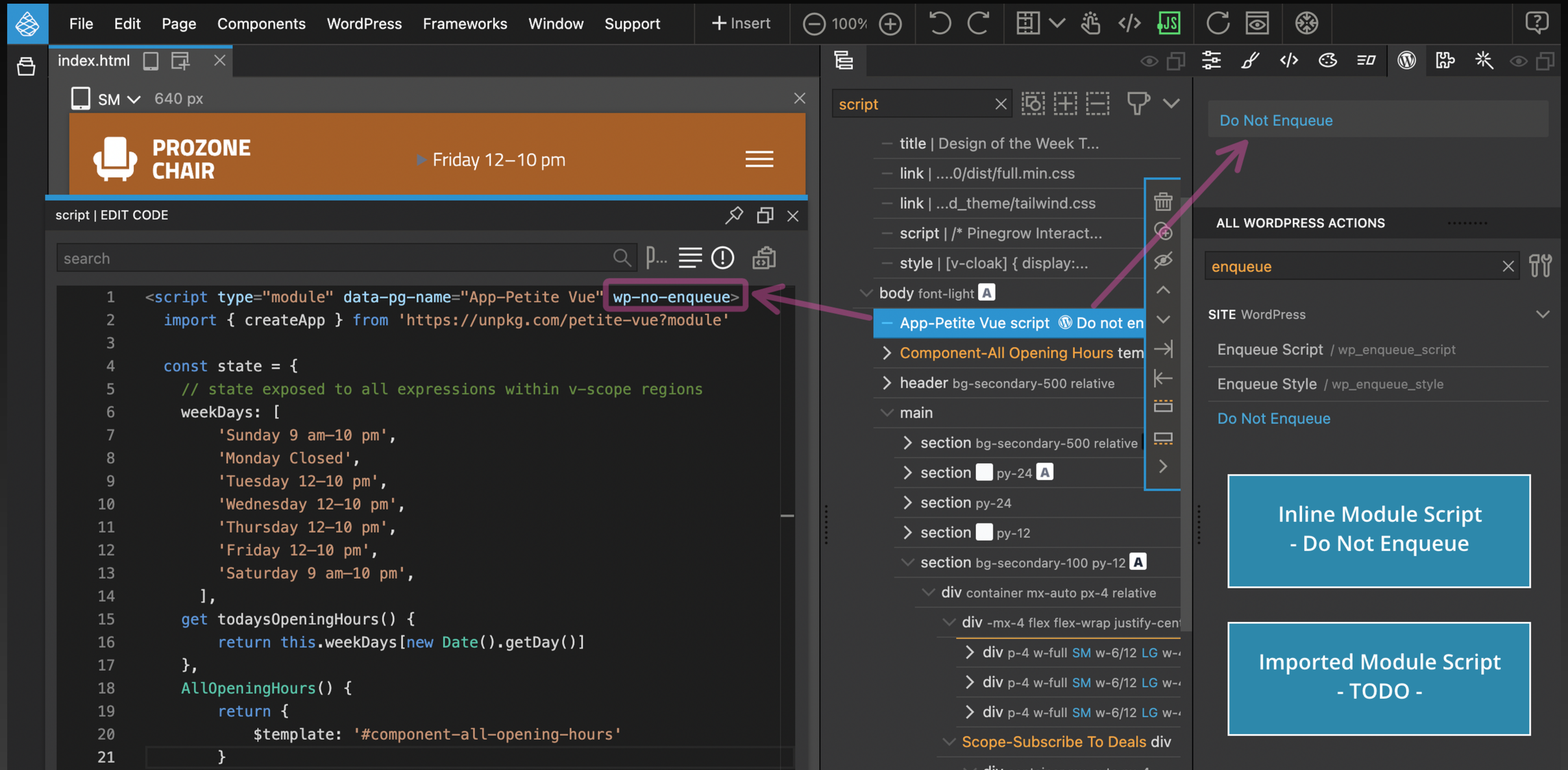
pinegrow

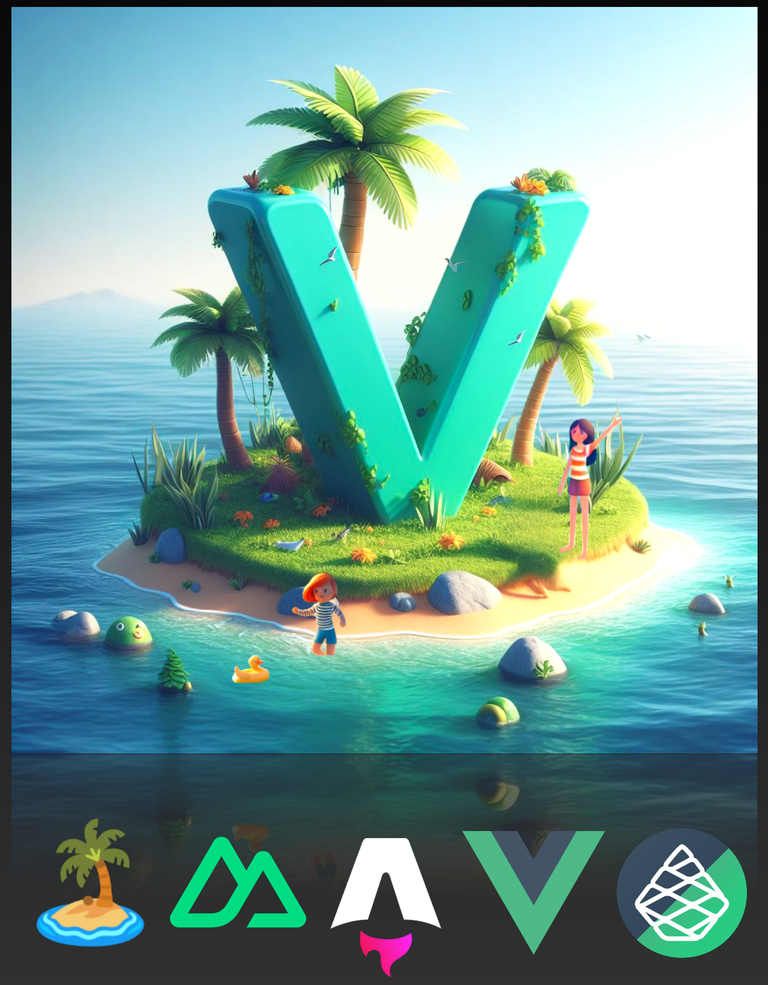
http://pinegrow.com

petite-vue (or) standard-vue?

1. Both - load from CDN, no “build step”.
2. DOM-based vs Virtual DOM (vue-devtools support).
3. Petite-vue additionally has v-scope & v-effect. Standard vue, has full set of vue directives, all reactivity apis, slots, components, etc
4. Setup - composition api / options api.
5. Use standard-vue if the client-side processing is little heavier than simple interactions.
6. Use standard-vue if templating to export as .vue component.
7. Use standard-vue to use component libraries like Vuetify via cdn.

Wordpress + Progressive Hydration





Progressive Hydration of Islands with Astro, Iles & Nuxt (4)

Vue Designer

https://vuedesigner.com

Authoring Components

HTML-based Syntax

JSX

DSLs - Domain specific languages

Authoring Experience

	Iles, Nuxt & Quasar	Vitepress	Astro
Components	Vue SFC	Vue SFC	.astro, vue, svelte, jsx/tsx (multi-frameworks)
Layouts	Vue SFC	Vue SFC	.astro
Pages	Vue SFC, markdown	Markdown with config-driven & customizable theme	.astro, markdown

Component Islands

Dynamic & Static Islands

	Iles 🏝️	Nuxt
Hydration (JS)	Explicitly opt-in	Optionally opt-out
Beliefs	Static is default	Dynamic is default
Islands	Dynamic Islands in mostly static surroundings	Static Islands in mostly dynamic surroundings
Manage By	Client directives	Server components

How	`client:load`
	`client:idle`
	`client:visible`
	`client:media`
	`client:none`
		BlogPost.server.vue

JS shipped to browser	Helps with not shipping JS or to hydrate conditionally	Helps with not shipping JS at all to the browser

Hydration

- DOM is made interactive
- Event listeners are registered
- Reactive data gets active, etc

Dynamic & Static in this context means hydration or not (javascript)

A guide to Nuxt Server Components
https://roe.dev/blog/nuxt-server-components

- by Daniel Roe

Thank You

Share your feedback, like, subscribe, bell icon., etc!

pinegrow

http://pinegrow.com

Vue Designer

https://vuedesigner.com