Hey everybody

btopro

<be

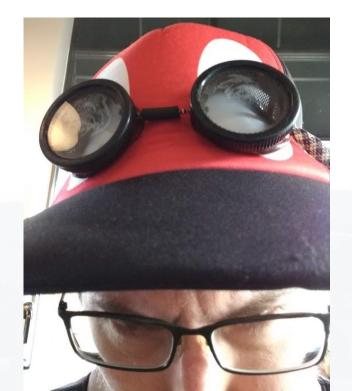
<

here



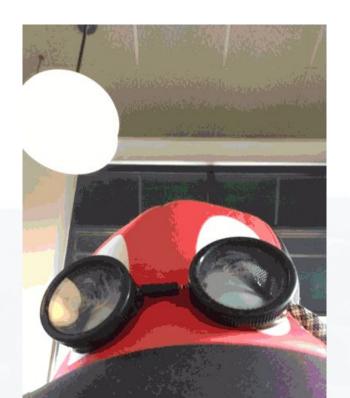
<hax-talk
location="CMSPhilly"
quarantine >

[at]btopro = Developer



- Penn State EdTech developer
 - ELMS:LN / HAX / HAXcms
 - IST 402 Emerging Technologies
 - haxtheweb.org
- Drupal developers ~12 years
 - 100+ contrib / distros on d.o.
- Web component developer ~3 years
 - 200+ npm web component projects
 - 400+ web components our team has made

[at]btopro = Developer Activists



- Our institutions & world deserve more
- Improve education, improve society
- Decentralize powerful monocultures using **open source** as *vehicle of change*
- Embedded in edu to development tech society needs to shift beyond what market norms can produce
- I've found my purpose; I'm honored to get to live it

{"[at]btopro" : new DeveloperActivist() }



typeof DeveloperActivist undefined?

DeveloperActivist()

All code enacts change.

A DeveloperActivist writes code

to enact social change.

let btopro = new DeveloperActivist();

```
let input = "today";
```

btopro.generateSocialImpact(input);

The complexities of modern web publishing have driven the majority of content to be produced on platforms controlled by few





Who have no market reason to engineer





socialmedia://

email has no owner http has no owner html has no owner

standards help ensure equal access and fair markets emerge on top webmentions (protocol)
exists but requires quality

UX in all platforms

implementing in order to be
 more than hobbiest

The web needs a moonshot if we are to ever grow beyond the vendors of 2000

A moonshot to reduce complexity in..

Distribution and Publishing requires fundamentally better Authoring eXperiences

HAX is a moonshot



To change publishing

And our team views W3C standard web components

as the only way to deploy that moonshot

{record scratch}



{Snarky the engineer}



Who even uses those anyway?

You mean that Google thing?



You mean that thing?







You mean that thing?

You mean that ING DIRECT thing?



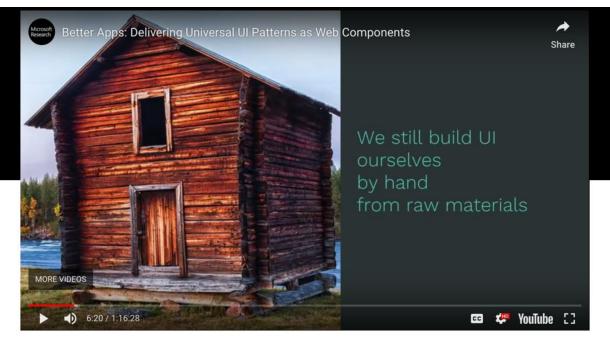






Microsoft Research Better Apps: Delivering Universal UI Patterns as Web Components

Date: March 28, 2019 Speaker: Jan Miksovsky



Microsoft Research Better Apps: Delivering Universal UI Patterns as Web Components

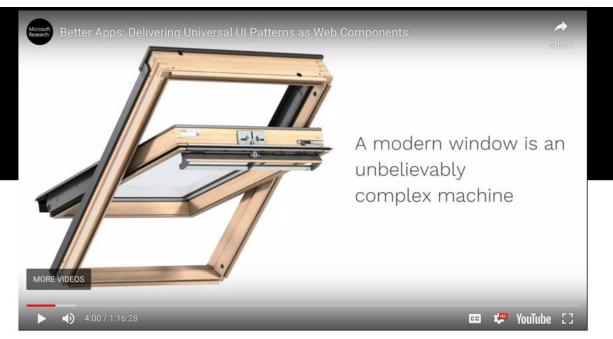
Date: March 28, 2019 Speaker: Jan Miksovsky





Better Apps: Delivering Universal UI Patterns as Web Components

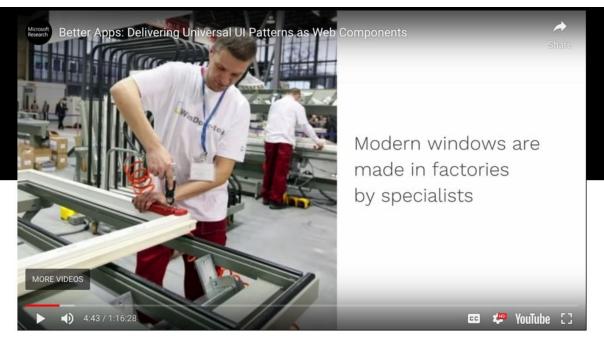
Date: March 28, 2019 Speaker: Jan Miksovsky





Better Apps: Delivering Universal UI Patterns as Web Components

Date: March 28, 2019 Speaker: Jan Miksovsky





ch?v=mtHf7crZZIQ

Better Apps: Delivering Universal UI Patterns as Web Components

Date: March 28, 2019
Speaker: Jan Miksovsky
Affiliation: Component Kitchen



Microsoft Research Better Apps: Delivering Universal UI Patterns as Web Components

Date: March 28, 2019 Speaker: Jan Miksovsky

Web components are a **standard** that work in all browsers

HTML code from 1995 still works

well, maybe not <blink>

That work every where!

Browser support	© CHROME	O OPERA	✓ SAFARI	(i) FIREFOX	C EDGE
●▲ HTML TEMPLATES	✓ STABLE	✓ STABLE			
CUSTOM ELEMENTS	✓ STABLE		✓ STABLE	✓ STABLE	✓ STABLE
SHADOW DOM	✓ STABLE		✓ STABLE	✓ STABLE	✓ STABLE
O ES MODULES	✓ STABLE	✓ STABLE	✓ STABLE	✓ STABLE	✓ STABLE

And libraries can polyfill IE11..

Browser Compatibility

LitElement works in all major browsers (Chrome, Firefox, IE, Edge, Safari, and Opera).













Custom-elements-everywhere.com



Making sure frameworks and custom elements can be BFFs

Whew that sounds great

Snarky loves web components now





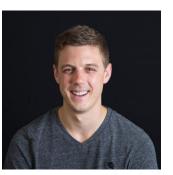


OCT. 7-8 2019 | DUKE UNIVERSITY



My tribe found me





















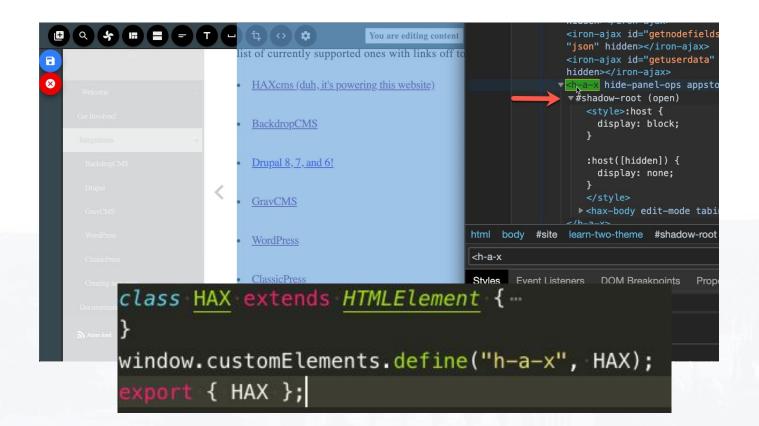
now HAX is OUR moonshot

HAX is OUR moonshot



To shake up the web

The HAX & #HAXTheWeb?



Headless Authorina eXperience

HAX is Headless?

Platform agnostic, a client-side API driven development method decoupled from servers

HAX === moonshot goal

Create a platform agnostic authoring experience that is **second to none** yet plugs into any platform that saves HTML blobs.

100% FCSS









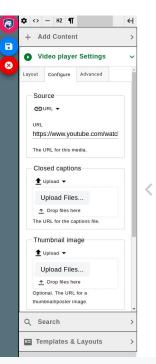




class HAX extends HTMLElement

 $< h - \alpha - x >$

```
// haxProperty definition
141
       static get haxProperties() {
       "canScale": true,
       "canPosition": true,
       "canEditSource": false,
       "qizmo": {
         "title": "Video player",
         "description": "This can present video in a highly accessible manner regardless of source."
         "icon": "av:play-circle-filled",
         "color": "red",
         "groups": ["Video", "Media"],
         "handles": [
             "type": "video",
             "source": "source",
             "title": "caption",
             "caption": "caption",
             "description": "caption",
             "color": "primaryColor"
         1,
         "meta": {
           "author": "LRNWebComponents"
       "settings": {
         "quick": [
             "property": "accentColor",
             "title": "Accent color",
             "description": "Select the accent color for the player.",
             "inputMethod". "colornicker"
```



Labs > W1 Building your digital identity

W1 Building your digital identity

Lab 1

This is a warm up lab that will help set the stage for the platforms we'll use for the rest of the semester. Now, I'm going to kick things off with the following:



- 1. I'll showing you some some different simple screencasting tools
- 2. Coming up with a plan for doing a <u>screencast</u> about how we us **npm** for front end web development
- 3. I'll do a new video live to demonstrate technique for screencasting

```
// haxProperty definition
static get haxProperties() {
"canScale": true,
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 "groups": ["Video", "Media"],
 "handles": [
      "type": "video",
      "source": "source",
      "title": "caption",
      "caption": "caption",
      "description": "caption",
      "color": "primaryColor"
```

Q Search

Templates & Layouts

Labs > W1 Building your digital identity

W1 Building your digital identity

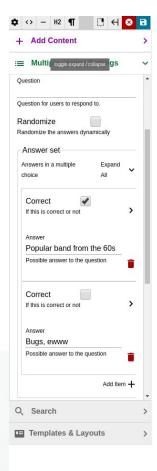
Lab 1

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- 1. I'll showing you some some different simple screencasting tools
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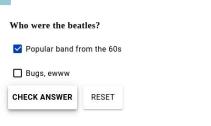




Upon completion of this unit, students wll be able to:

Unit 2: Lesson 6:

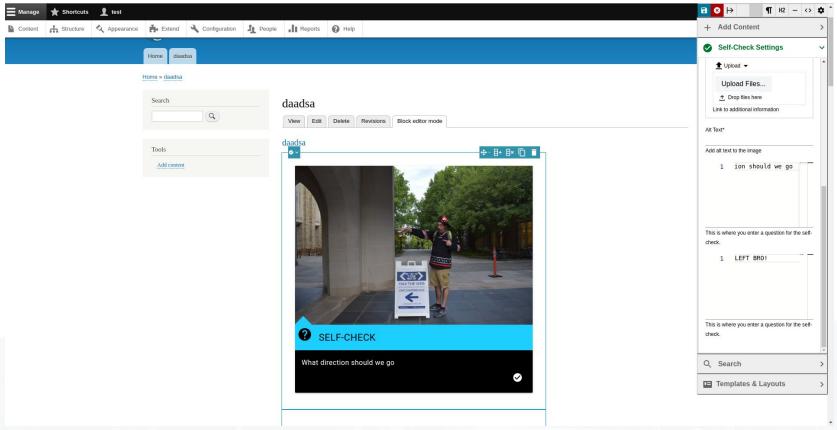
- Discuss the <u>socio</u>-cultural impact of Beatlemania on the United Kingdom in 1963
- Identify those characteristics that define the Beatles' early musical style
- · Describe how the Beatles' music was recorded in 1963
- Recognize significant characteristics of selected Beatles songs of 1963



Unit 2: Lesson 7:

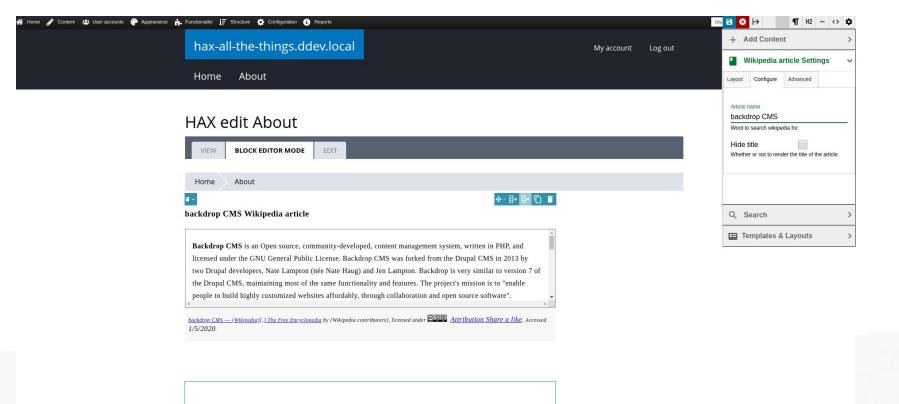
 Identify the musical and cultural forces driving worldwide Beatlemania in 1964



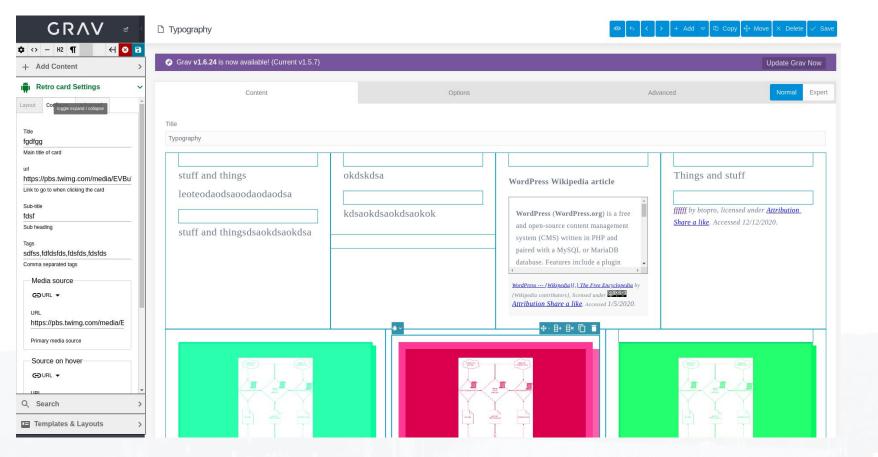


Drupal 7, 8 and 9!

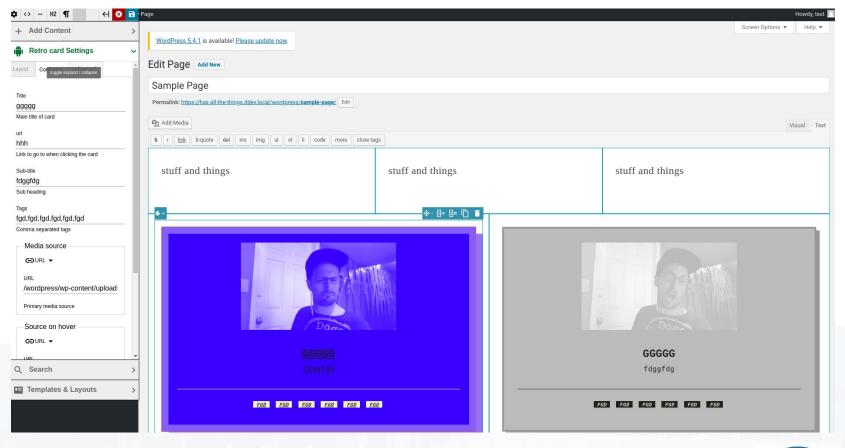
















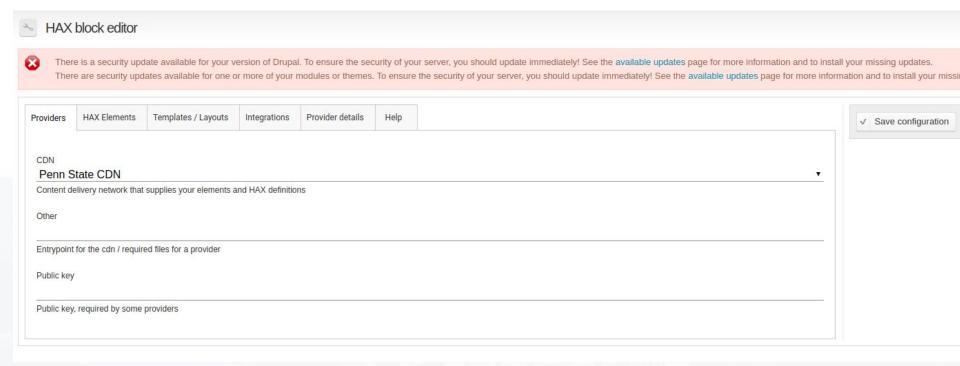
Live Demo

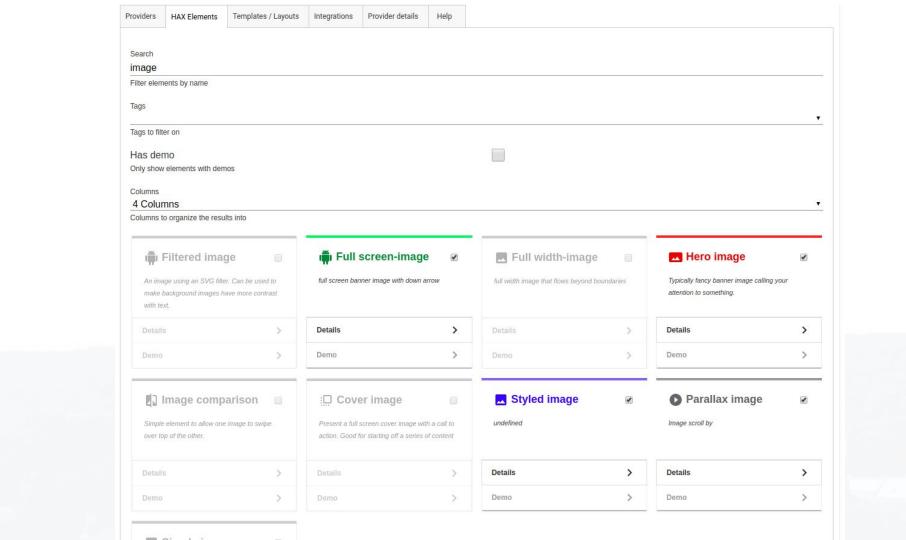


How can we support all these integrations so seamlessly?

unified integration

Identical settings





Web components create bridges between our code echo chambers





Unbundled JS assets empower authors to run HAX with z3r0 confiq

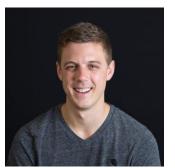




we are a bridge that connects all communities!

We are #HAXTheWeb





















And you can be too!

And share via npm

@lrnwebcomponents/h-a-x

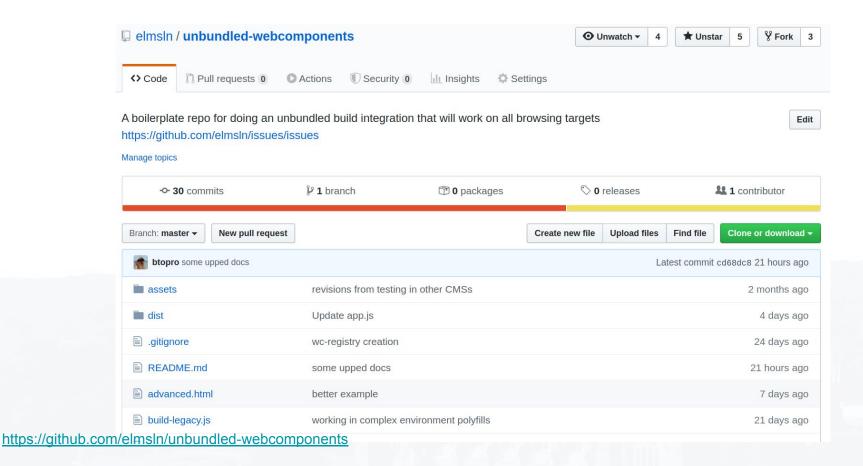
```
2.1.8 • Public • Published 6 days ago
```

Readme 5 Dependencies 0 Dependents 27 Versions <h-a-x> install > npm i @lrnwebcomponents/h-a-x A ± weekly downloads Single tag to transform authoring 41 Usage version license 2.1.8 Apache-2.0 To use this web component in your project you can utilize one of the following styles of syntax. open issues pull requests /* In an existing JS module / web component */ 24 import '@lrnwebcomponents/h-a-x/h-a-x.js'; /* At top of an application with build routine */ repository homepage <script type="module" src="@lrnwebcomponents/h-a-x/h-a-x.js"></script> github github.com /* Alternatives for top of application */ <script type="module"> last publish import '@lrnwebcomponents/h-a-x/h-a-x.js'; 6 days ago // imperative form import {HAX} from '@lrnwebcomponents/h-a-x';

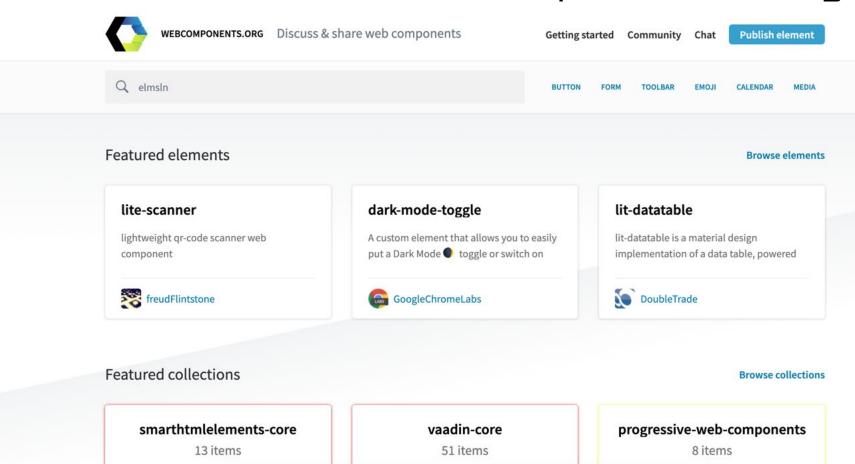
collaborators

// if you don't have a build routine and need to reference directly

And ship unbundled via CDNs



Discover on webcomponents.org



An evolving set of free, open source web

Building blocks for progressive web apps

High Quality Custom Elements Web UI

Learn on open-wc.org





open-wc

Open Web Component Recommendations

Get Started →

Smart Defaults

Awasoma Canarators

Open Source Love

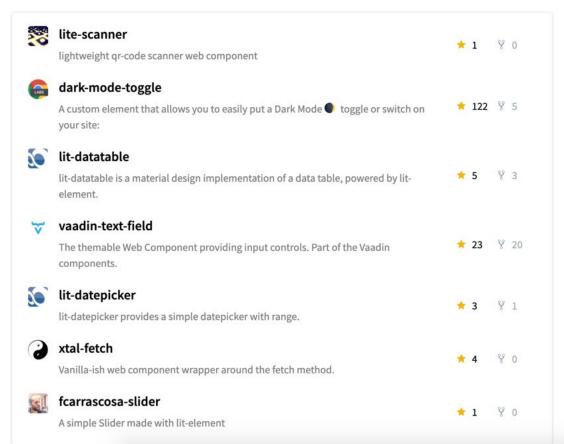
GitHub []

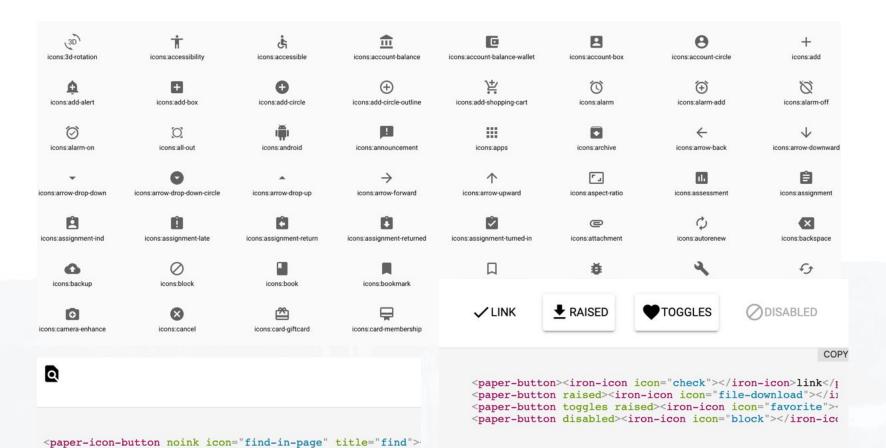
Reusable Web components are the



revolution in how our team builds the web

2178 Elements





<vaadin-upload> is a Web Component for uploading files, part of the Vaadin components.



eu.

Lorem ipsum dolor sit amet, per in nusquam nominavi periculis, sit elit oportere ea.

Detracto suavitate repudiandae no eum. Id adhuc minim soluta nam.Modus commodo minimum eum te, vero utinam assueverit per eu.lisque perfecto dissentiet cum et, sit ut quot mandamus, ut vim tibique splendide instructior.

<app-header reveals>
 <app-toolbar>
 <div main-title>App name</div>
 </app-toolbar>
</app-header>



@polymer/iron-list 3.0.2 \$

Element for a virtual, "infinite" list

<zero-md>

Ridiculously simple markdown displayer - a native web component based on Custom Elements v1 specs to load and display an external MD file.

Instantly create beautiful HTML pages from Markdown. Like it isn't easy enough.

While it's already remarkably trivial to render markdown into HTML (Marked) and syntax-highlight (Prism), <zero-md>does this better, automagically rendering into its own self-contained Shadow DOM container, while encapsulating implementation details into one embarassingly easy-to-use package.

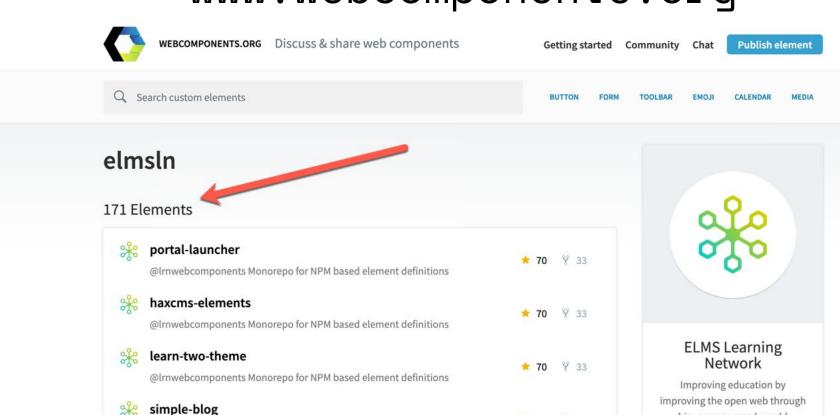
Because web components. All in ~100 lines of code.

ELMS:LN / HAXTheWeb have been on web components





for 3 years.. And love them



@Irnwebcomponents Monorepo for NPM based element definitions

@Irnwebcomponents Monorepo for NPM based element definitions

Irndesign-sidenote

big, open sourced, world

changing ideas.

n elmsln

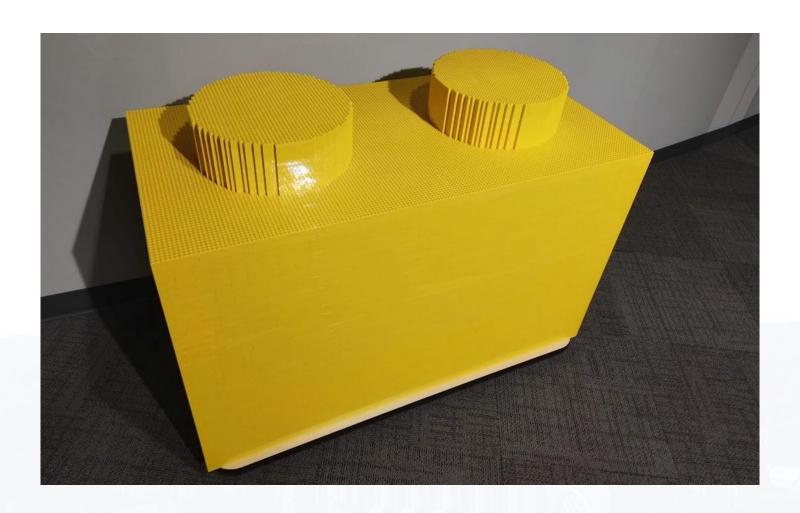
Penn State

¥ 33

¥ 33

† 70

***** 70



stop-note



Confirmation Message

You can write any confirmation message you want here.

More Information >



Title

You can write any message you want here.

<stop-note>

You can write any message you want here.
</stop-note>





@cgldevel



self-check





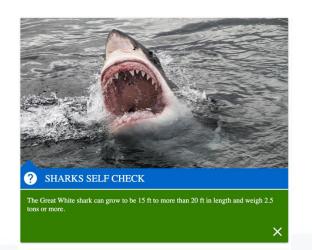
@cgldevel

<self-check accent-color="light-blue" title="Sharks Self Check" image="https://kids.nationalgeographic.com/cc
How large can the average great white shark grow to be?
The Great White shark can grow to be 15 ft to more than 20 ft in length and weigh 2.5 tons or more.
</self-check>





self-check





@cgldevel

<self-check accent-color="light-blue" title="Sharks Self Check" image="https://kids.nationalgeographic.com/cc
How large can the average great white shark grow to be?
The Great White shark can grow to be 15 ft to more than 20 ft in length and weigh 2.5 tons or more.
</self-check>





person-testimonial



I'm looking forward to exploring how we can make HAX as easy as possible to spin up in a variety of environments.

@TIMMMMYBOY

Cofounder, Reclaim Hosting



@cgldevel

<person-testimonial accent-color="orange" dark image="headshot.jpg" name="Btopro" position="Coffee person">
 I at times, enjoy coffee. Those times, are all times.
</person-testimonial>





hax.camp

a

hax-camp

Details

Why attend

Who is coming

Convince your boss

Registration

Schedule

Getting here

Code of conduct

Sponsors

Atom feed RSS feed



hax.camp



PatternFly Elements, and how the components make use of some powerhouse CSS variables! I want to learn more about how to handle browser edge cases.

@KENDALLTOTTEN

Front-end Web Development Manager, redhat.com



I'm excited to show how Web Components are now a standard in mainstream services like Salesforce and how web developers can use Salesforce resources outside of Salesforce.

@KREYNEN

Digital Marketing Developer at University of Colorado



@NIKKIMK

HAX Core contributor

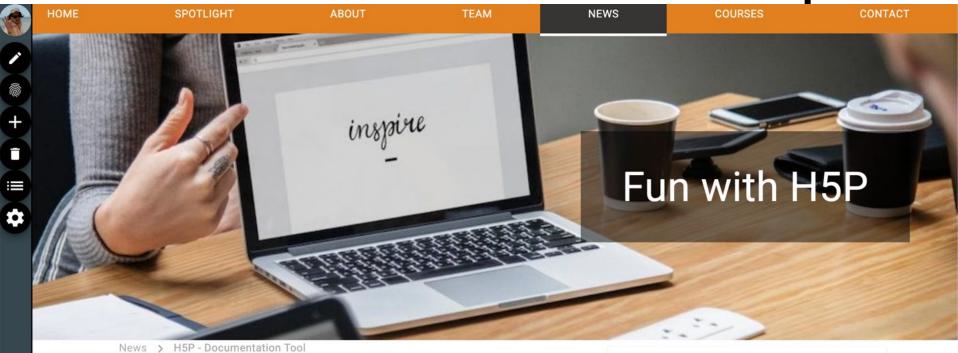


•• I'm looking forward to exploring how we can make HAX as easy as possible to spin up in a variety of environments.

@TIMMMMYBOY

01 1 5 11 11 11

Custom HAXcms theme developer!



H5P - Documentation Tool November 19, 2018



By: Charles Lavera

Recent News



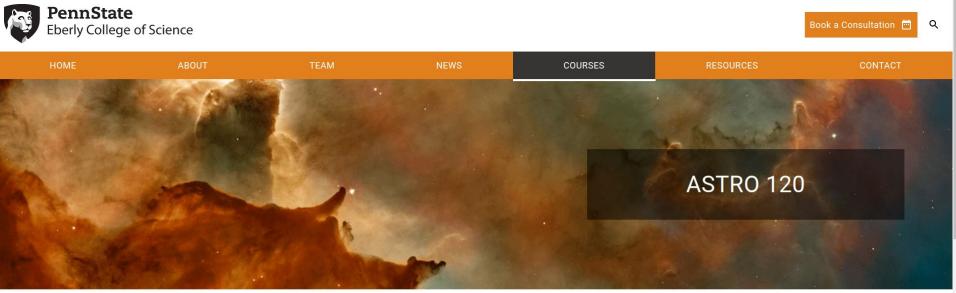
H5P - Documentation Tool



5 Web Accessibility Tips for Developers



odl.science.psu.edu



Courses > Astro 120



Rela	ated Courses
4	ASTRO 001
	ASTRO 011
	ASTRO 120
0	ASTRO 130

^

figure-label



@hey__mp

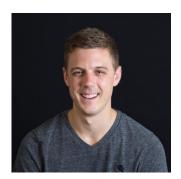
1.3 Microbs under microscope

```
<figure-label title="1.3" description="Microbs under microscope">
  1.3 - Microbs under microscope
</figure-label>
```



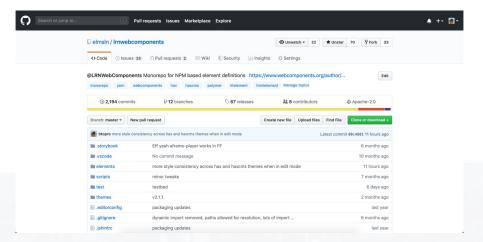


wcfactory tooling



@hey__mp

lelmsIn / WCFactory



HAXTheWeb



a11y-gif-player





@NikkiMK

```
<ally-gif-player style="width: 300px;" alt="IT Crowd: Moss eating popcorn." src="https://m </ally-gif-player>
```





a11y-collapse

What rhymes with orange?

Nothing rhmyes with orange.

@NikkiMK

```
<ally-collapse>
  What rhymes with orange?
  <div>Nothing rhmyes with orange.</div>
</ally-collapse>
```





a11y-tabs

Nearby restaurants \(\Psi \) Shopping \(\overline{\ove

- · Stuff and Things
- · Really Old Books
- · Fast Fashion

```
<ally-tabs id="tabs">
 <ally-tab id="eat" icon="maps:restaurant" label="Nearby restaurants">
   <u1>
    Tasty Burger
    Subs & More
    Lobsterland
   </ally-tab>
 <ally-tab id="shop" icon="maps:store-mall-directory" label="Shopping">
   <u1>
    Stuff and Things
    Really Old Books
    Fast Fashion
   </ally-tab>
</ally-tabs>
```





@NikkiMK



Join us today!

simple-colors

CSS Variables and Classes for pink-6		
Variable or Class Name	Color	With dark Attribute
simple-colors-default-theme-pink-6	default color	inverted color
simple-colors-fixed-theme-pink-6	default color	fixed color
.simple-colors-default-theme-pink-6	default background color	inverted background colo
.simple-colors-fixed-theme-pink-6	default background color	fixed background color
.simple-colors-default-theme-pink-6-text	default text color	inverted text color
.simple-colors-fixed-theme-pink-6-text	default text color	fixed text color
.simple-colors-default-theme-pink-6-border	default border color	inverted border color
.simple-colors-fixed-theme-pink-6-border	default border color	fixed border color

WCAG 2.0 AA Contras	t with pink-6	
Color Name	Regular Text	Large Text*
grey	grey-1 grey-2	grey-1 grey-2
red	red-1	red-1
pink	pink-1	pink-1
purple	purple-1	purple-1
deep-purple	deep-purple-1	deep-purple-1





@NikkiMK



simple-fields

```
<simple-fields id="fields"></simple-fields>
</form>
<script>
  window.onload = function(){
    let fields = document.getElementById('fields');
    let schema = [
        "property": "name",
        "title": "What is your name?",
        "description": "Enter your real name or an alias.",
        "inputMethod": "textfield",
        "required": true
        "property": "alias",
        "title": "This is an alias.",
        "description": "",
        "inputMethod": "boolean"
        "property": "profileImage",
        "title": "Profile Image",
        "description": "Maximum size 400px X 400px.",
        "inputMethod": "haxupload",
        "validationType": "url"
        "property": "biographical",
        "title": "Bigraphical Information",
        "inputMethod": "fieldset",
        "properties": [
            "property": "icon",
            "title": "Pick an icon.",
            "inputMethod": "iconpicker"
```

.	Unload Files	A Dran files have	
1 Upload	Upload Files Upload Files	↑ Drop files here	
GD URL	(400px.		
UploadCamera			
Pick an icon			
Ø			•
Your favorite	e color.		
red	-		
Your sword's			
	s name.		
Needle			
Needle			•
Bio	a tima		•
			19
Bio Once upon			19
Once upon a		your siblings.———	19
Once upon a Write a shor	t bio.	your siblings.	19
Bio Once upon a Write a shor Siblings	t bio. Enter the names of	Access to the second	19
Bio Once upon a Write a shor Siblings	Enter the names of Rob Stark	٥	19
Once upon a Write a shor	Enter the names of Rob Stark Jon Snow	0	19
Bio Once upon	Enter the names of Rob Stark Jon Snow Sansa Stark	0 0	19



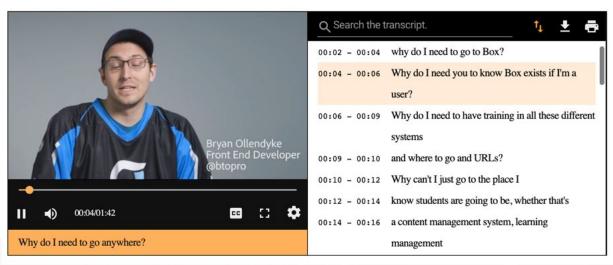


@NikkiMK



Join us today!

video-player





@NikkiMK





editable-table

Caption Is it a sandwich? Food classification chart. A -B -C -D -Orientatio 1 -Food Enclosure Contents Hamburge 🗼 2 one bun, split into two meat, vegetables, cheese, and/or condiments horizontal Insert Row Before one bun meat, vegetables, cheese, and/or condiments vertical Insert Row After meat, vegetables, cheese, and/or condiments Y one bun vertical Delete Row two crusts sealed together .xet meat, vegetables, cheese, and/or condiments horizontal two crusts sealed together 6 -Pie fruit or meat, vegetables, and/or cheese horizontal X 7 -Taco one shell meat, vegetables, cheese, and/or condiments vertical 冊 \blacksquare 用口 Headers and footers Display Sorting and Filtering \$



@NikkiMK





editable-table

```
<editable-table id="food-table" bordered condensed filter responsive sort striped>
  <caption>
    Is it a sandwich? Food classification chart.
   </caption>
   <thead>
    Food
     Enclosure
      Contents
     Orientation
    </thead>
   Hamburger
     one bun, split into two
     meat, vegetables, cheese, and/or condiments
      horizontal
    Hoagie
      one bun
     meat, vegetables, cheese, and/or condiments
      vertical
    Hot Dog
      one bun
     meat, vegetables, cheese, and/or condiments
      vertical
```





@NikkiMK



Join us today!

We are all bridge 😯





















builders with web components

Hang in there

the world

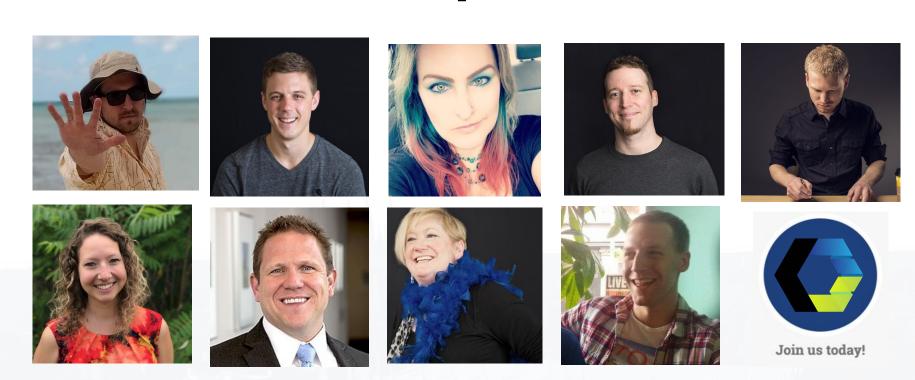
Needs you and we need each other!

hax.camp un-code!



OCT. 7-8 2019 | DUKE UNIVERSITY

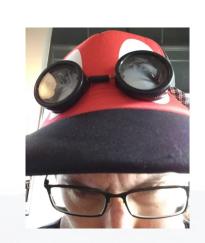
Fri 3-5pm EST



bit.ly/haxslack

Questions?

[at]btopro
HAXTheWeb.org
Hax.camp



< /hax-talk>