

All the cool things you can do when you don't support IE11

Mike Herchel

Olivero Drupal Core Subsystem Maintainer

(and how we can use these
in Drupal core)



Mike Herchel

- Senior Front-end Developer at AVB Digital
- Olivero Core Subsystem Maintainer (and lead dev)
- Community Elected at-Large Board of Directors member of the Drupal Association
- @mikeherchel on twitter
- @mherchel on Drupal.org

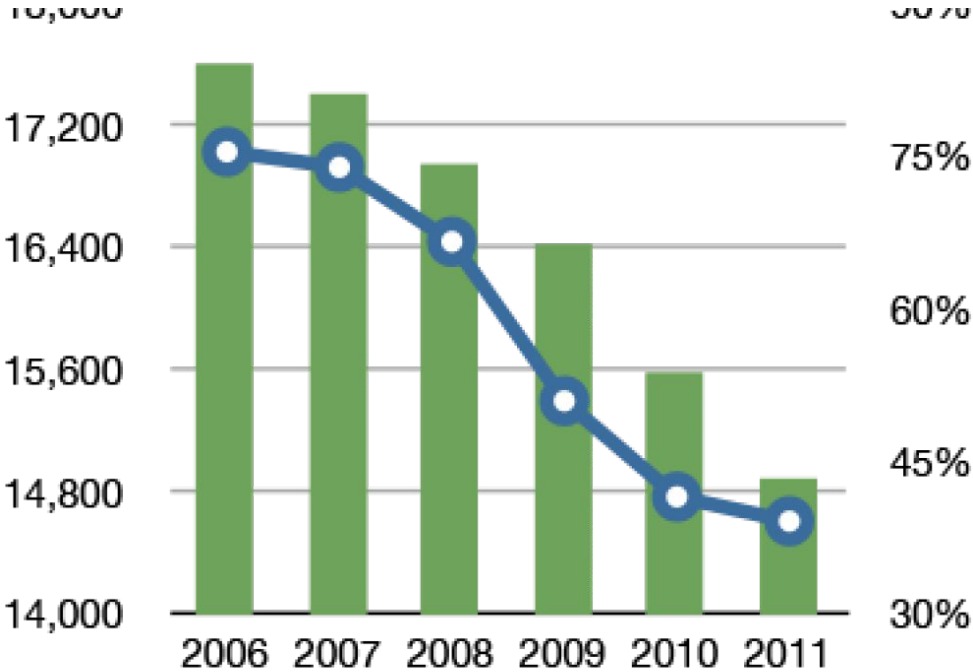


Florida DrupalCamp 2022

ORLANDO FL | FEB 18-20, 2022

www.fldrupal.camp

Internet Explorer usage vs US murder rate



DRUPAL'S FRONT-END

INTERNET EXPLORER

Agenda

- ~~Funny memes~~
- History and backwards compatibility
- What's in core now
- Cool new CSS features
- How core **might** use these features

Search

Tools

[Add content](#)

Layout Builder Page Test

Submitted by [admin](#) on Fri, 04/02/2021 - 09:23

[Read more](#)

Prow scuttle parrel provost Sail ho shrouds spirits boom mizzenmast yardarm. Pinnacle holystone mizzenmast quarter crow's nest nipperkin grog yardarm hempen halter furl. Swab barque interloper chantey doubloon starboard grog black jack gangway rutters.

Deadlights jack lad schooner scallywag dance the hempen jig carouser broadside cable strike colors. Bring a spring upon her cable holystone blow the man down spanker Shiver me timbers to go on account lookout wherry doubloon chase. Belay yo-ho-ho keelhaul squiffy black spot yardarm spyglass sheet transom heave to.

Embedded media demonstration

Submitted by [admin](#) on Wed, 11/04/2020 - 09:55

Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

Tags
[Demonstration](#)

[Read more](#) [Add new comment](#)

Demonstration of non-media image embeds

Submitted by [admin](#) on Wed, 11/04/2020 - 09:31



Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

No alignment no caption

Configuration ☆

[Home](#) » [Administration](#)

[Hide descriptions](#)

PEOPLE

Account settings

Configure default user account settings, including fields, registration requirements, and email messages.

CONTENT AUTHORIZING

Text formats and editors

Select and configure text editors, and how content is filtered when displayed.

DEVELOPMENT

Performance

Configure caching and bandwidth optimization.

Logging and errors

Configure the display of error messages and database logging.

Maintenance mode

Take the site offline for updates and other maintenance tasks.

Configuration synchronization

Import and export your configuration.

SEARCH AND METADATA

Search pages

Configure search pages and search indexing options.

URL aliases

Add custom URLs to existing paths.

WEB SERVICES

RSS publishing

Configure the site description, the number of items per feed, and whether feeds should be titles/teasers/full-text.

SYSTEM

Basic site settings

Change site name, email address, slogan, default front page, and error pages.

Cron

Manage automatic site maintenance tasks.

USER INTERFACE

Shortcuts

Add and modify shortcut sets.

MEDIA

File system

Configure the location of uploaded files and how they are accessed.

Image styles

Configure styles that can be used for resizing or adjusting images on display.

Media Library settings

Manage Media Library settings.

Media settings

Manage media settings.

Responsive image styles

Manage responsive image styles.

Image toolkit

Choose which image toolkit to use if you have installed optional toolkits.

REGIONAL AND LANGUAGE

Regional settings

Configure the locale and timezone settings.



By admin, 2 April, 2021

Layout Builder Page Test

Prow scuttle parrel provost Sail ho shrouds spirits boom mizzenmast yardarm. Pinnacle holystone mizzenmast quarter crow's nest nipperkin grog yardarm he: halter furl. Swab barque interloper chantey doubloon starboard grog black jack gangway rutters.

Deadlights jack lad schooner scallywag dance the hempen jig carouser broadside cable strike colors. Bring a spring upon her cable holystone blow the man down spanker Shiver me timbers to go on account lookout wherry doubloon chase. Belay yo-ho-ho keelhaul squiffy black spot yardarm spyglass sheet transom heave to.

By admin, 4 November, 2020

Embedded media demonstration

Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

Tags: [Demonstration](#)

[Autocomplete](#)[Progress](#)[Buttons](#)[Tabs](#)[Messages](#)[Dialogs](#)[Tabledrag](#)

Home > Administration

Configuration ☆

[Hide descriptions](#)

People

> Account settings

Configure default user account settings, including fields, registration requirements, and email messages.

Content authoring

> Text formats and editors

Select and configure text editors, and how content is filtered when displayed.

Development

> Performance

Configure caching and bandwidth optimization.

> Logging and errors

Configure the display of error messages and database logging.

> Maintenance mode

Take the site offline for updates and other maintenance tasks.

> Configuration synchronization

Import and export your configuration.

> Devel generate

Generate realistic items (content, users, menus, etc) to assist your site development and testing.

> Form Style

Settings for the Form Style module.

Search and metadata

System

> Basic site settings

Change site name, email address, slogan, default front page, and error pages.

> Cron

Manage automatic site maintenance tasks.

User interface

> Admin Toolbar

Configure the Admin Toolbar module.

> Shortcuts

Add and modify shortcut sets.

Media

> File system

Configure the location of uploaded files and how they are accessed.

> Image styles

Configure styles that can be used for resizing or adjusting images on display.

> Media Library settings

Manage Media Library settings.

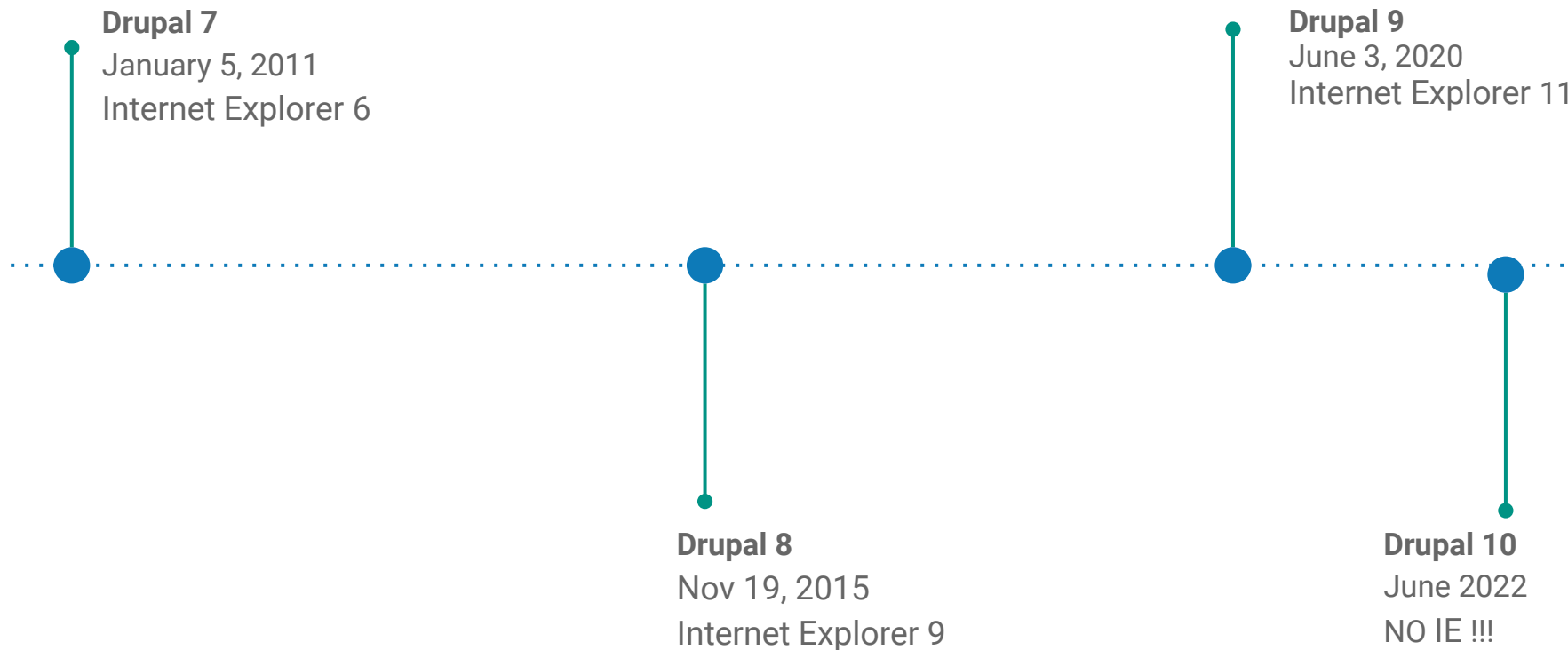
> Media settings

Manage media settings.

> Image toolkit

Choose which image toolkit to use if you have installed optional toolkits.

Internet Explorer Support in Core



Drupal 10 supports

<https://www.drupal.org/docs/system-requirements/browser-requirements>

The latest release of each of the latest two supported major versions of:

- Desktop browsers:
 - Google Chrome
 - Firefox
 - Safari
 - Microsoft Edge
 - Opera
- Mobile browsers:
 - Safari for iOS

The latest supported release of the latest major version of:

- Desktop browsers:
 - Firefox ESR
- Mobile browsers:
 - Chrome for Android
 - Chrome for iOS
 - UC Browser*
 - Opera Mini (except for 'extreme data savings' mode)
 - Samsung Internet

Why is not
supporting IE
such a big deal?

Release cycle!

- Chromium releases new version every 4 weeks
- Firefox releases new version every 4 weeks
 - ESR version every 1.5 years
- Safari releases new major version roughly every year
 - Minor version releases more often

Tooling in Drupal 9

CSS: postcss-preset-env

JS: Babel

postcss-preset-env

- <https://github.com/csstools/postcss-preset-env>

Wrapper for a number of useful PostCSS tools that will hopefully make it into CSS standard specs:

- postcss-attribute-case-insensitive
- css-blank-pseudo/postcss
- postcss-color-functional-notation
- postcss-color-hex-alpha
- postcss-color-rebeccapurple
- postcss-custom-media
- postcss-custom-properties
- postcss-custom-selectors
- postcss-dir-pseudo-class
- postcss-double-position-gradients
- postcss-env-function
- postcss-focus-visible
- postcss-focus-within
- postcss-font-variant
- postcss-gap-properties
- postcss-image-set-function
- postcss-initial
- postcss-lab-function
- postcss-logical
- postcss-media-minmax
- postcss-nesting
- postcss-overflow-shorthand
- postcss-page-break
- postcss-place
- css-prefers-color-scheme/postcss
- postcss-pseudo-class-any-link
- postcss-replace-overflow-wrap
- postcss-selector-not

postcss-preset-env

- <https://github.com/csstools/postcss-preset-env>

```
/**
 * @file
 * Styles for action links.
 */
.action-links {
  padding-block: 0;
  padding-inline-start: 0;
  padding-inline-end: 0;
  list-style: none;
}

& li {
  display: inline-block;
}

& a {
  color: var(--color--blue-20);
}
}
```



```
/**
 * @file
 * Styles for action links.
 */

[dir="ltr"] .action-links {
  padding-left: 0
}

[dir="rtl"] .action-links {
  padding-right: 0
}

[dir="ltr"] .action-links {
  padding-right: 0
}

[dir="rtl"] .action-links {
  padding-left: 0
}

.action-links {
  margin-top: 0;
  margin-bottom: 0;
  padding-top: 0;
  padding-bottom: 0;
  list-style: none
}

.action-links li {
  display: inline-block
}

.action-links li a {
  color: #0d77b5;
}

.action-links-item {
  display: inline-block;
}
```


babel

- <https://babeljs.io/>

```
function getStickyHeaderStorage() {  
  const stickyHeaderState = localStorage.getItem(  
    'Drupal.olivero.stickyHeaderState',  
  );
```

```
  if (!stickyHeaderState) return false;
```

```
  const item = JSON.parse(stickyHeaderState);  
  const now = new Date();
```



```
function getStickyHeaderStorage() {
```

```
  var stickyHeaderState = localStorage.getItem('Drupal.olivero.stickyHeaderS
```

```
  if (!stickyHeaderState) return false;
```

```
  var item = JSON.parse(stickyHeaderState);
```

Problems we want to solve

- Cleaner more maintainable code
- New features
- Easier to extend

New CSS

all: revert;

- **all** shorthand property allows you to reset ALL of an elements properties
- **revert** value changes properties to browser's default.

```
.selector {  
  all: revert;  
}
```


✔ You are editing the layout for this Layout Builder Page content item. [Edit the template for all Layout Builder Page content items instead.](#)

Revision information
New revision Create new revision

+ Add section

✕ [Configure Two Column](#)

Empty Pink



+ Add block

Empty Pink



+ Add block

+ Add section

✕ [Configure Section 2](#)

Empty Green

Empty Orange

Empty Yellow

Configure block








Block description Everything Block



Title

The title of the block as shown to the user.


Display title

Body

B I       

Format  Source 

Text format [About text formats](#)

Basic HTML 

Boolean
This is a boolean.

File Field

Choose File No file chosen

Upload

This is a file field.
One file only.
2 MB limit.
Allowed types: txt.

Media Field

No media items are selected.

Update widget

Add media

One media item remaining.

Reference (taxonomy)

Show row weights

```
#drupal-off-canvas a, #drupal-off-canvas abbr, #drupal-off-canvas acronym, #drupal-off-canvas address, #drupal-off-canvas applet, #drupal-off-canvas article, #drupal-off-canvas aside, #drupal-off-canvas audio, #drupal-off-canvas b, #drupal-off-canvas big, #drupal-off-canvas blockquote, #drupal-off-canvas body, #drupal-off-canvas canvas, #drupal-off-canvas caption, #drupal-off-canvas cite, #drupal-off-canvas code, #drupal-off-canvas dd, #drupal-off-canvas del, #drupal-off-canvas dfn, #drupal-off-canvas dialog, #drupal-off-canvas dl, #drupal-off-canvas dt, #drupal-off-canvas em, #drupal-off-canvas embed, #drupal-off-canvas fieldset, #drupal-off-canvas figcaption, #drupal-off-canvas figure, #drupal-off-canvas footer, #drupal-off-canvas form, #drupal-off-canvas h1, #drupal-off-canvas h2, #drupal-off-canvas h3, #drupal-off-canvas h4, #drupal-off-canvas h5, #drupal-off-canvas h6, #drupal-off-canvas hgroup, #drupal-off-canvas h1, #drupal-off-canvas h2, #drupal-off-canvas h3, #drupal-off-canvas h4, #drupal-off-canvas h5, #drupal-off-canvas h6, #drupal-off-canvas i, #drupal-off-canvas img, #drupal-off-canvas ins, #drupal-off-canvas kbd, #drupal-off-canvas label, #drupal-off-canvas legend, #drupal-off-canvas li, #drupal-off-canvas main, #drupal-off-canvas mark, #drupal-off-canvas menu, #drupal-off-canvas meter, #drupal-off-canvas nav, #drupal-off-canvas object, #drupal-off-canvas ol, #drupal-off-canvas output, #drupal-off-canvas p, #drupal-off-canvas pre, #drupal-off-canvas progress, #drupal-off-canvas rp, #drupal-off-canvas rt, #drupal-off-canvas s, #drupal-off-canvas samp, #drupal-off-canvas section, #drupal-off-canvas small, #drupal-off-canvas span, #drupal-off-canvas strike, #drupal-off-canvas strong, #drupal-off-canvas sub, #drupal-off-canvas sup, #drupal-off-canvas table, #drupal-off-canvas tbody, #drupal-off-canvas td, #drupal-off-canvas tfoot, #drupal-off-canvas th, #drupal-off-canvas thead, #drupal-off-canvas time, #drupal-off-canvas tr, #drupal-off-canvas tt, #drupal-off-canvas u, #drupal-off-canvas ul, #drupal-off-canvas var, #drupal-off-canvas video, #drupal-off-canvas xmp {
  margin: > 0;
  padding: > 0;
  border: > 0;
  font-size: 100%;
}
#drupal-off-canvas span, #drupal-off-canvas applet, #drupal-off-canvas object, #drupal-off-canvas iframe, #drupal-off-canvas h1, #drupal-off-canvas h2, #drupal-off-canvas h3, #drupal-off-canvas h4, #drupal-off-canvas h5, #drupal-off-canvas h6, #drupal-off-canvas p, #drupal-off-canvas blockquote, #drupal-off-canvas pre, #drupal-off-canvas a, #drupal-off-canvas abbr, #drupal-off-canvas acronym, #drupal-off-canvas address, #drupal-off-canvas big, #drupal-off-canvas button, #drupal-off-canvas cite, #drupal-off-canvas code, #drupal-off-canvas del, #drupal-off-canvas dfn, #drupal-off-canvas em, #drupal-off-canvas embed, #drupal-off-canvas fieldset, #drupal-off-canvas figure, #drupal-off-canvas footer, #drupal-off-canvas form, #drupal-off-canvas h1, #drupal-off-canvas h2, #drupal-off-canvas h3, #drupal-off-canvas h4, #drupal-off-canvas h5, #drupal-off-canvas h6, #drupal-off-canvas i, #drupal-off-canvas img, #drupal-off-canvas ins, #drupal-off-canvas kbd, #drupal-off-canvas label, #drupal-off-canvas legend, #drupal-off-canvas li, #drupal-off-canvas main, #drupal-off-canvas mark, #drupal-off-canvas menu, #drupal-off-canvas meter, #drupal-off-canvas nav, #drupal-off-canvas object, #drupal-off-canvas ol, #drupal-off-canvas output, #drupal-off-canvas p, #drupal-off-canvas pre, #drupal-off-canvas progress, #drupal-off-canvas rp, #drupal-off-canvas rt, #drupal-off-canvas s, #drupal-off-canvas samp, #drupal-off-canvas section, #drupal-off-canvas small, #drupal-off-canvas span, #drupal-off-canvas strike, #drupal-off-canvas strong, #drupal-off-canvas sub, #drupal-off-canvas sup, #drupal-off-canvas table, #drupal-off-canvas tbody, #drupal-off-canvas td, #drupal-off-canvas tfoot, #drupal-off-canvas th, #drupal-off-canvas thead, #drupal-off-canvas time, #drupal-off-canvas tr, #drupal-off-canvas tt, #drupal-off-canvas u, #drupal-off-canvas ul, #drupal-off-canvas var, #drupal-off-canvas video, #drupal-off-canvas xmp {
  animation: > none 0s ease 0s 1 normal none running;
  -webkit-backface-visibility: visible;
  backface-visibility: visible;
  background: > transparent none repeat 0 0 / auto auto padding-box border-box scroll;
  border: > medium none currentColor;
  border-collapse: separate;
  border-image: > none;
  border-radius: > 0;
  border-spacing: > 0;
  bottom: auto;
  box-shadow: none;
  box-sizing: > content-box;
  caption-side: top;
  clear: none;
  clip: auto;
  color: > inherit;
  columns: > auto;
  column-count: auto;
  column-fill: balance;
  column-rule: > medium none currentColor;
  column-span: > 1;
  column-width: auto;
  content: normal;
  counter-increment: none;
  counter-reset: none;
  cursor: auto;
  direction: ltr;
  display: inline;
  empty-cells: show;
  float: none;
  font-family: > serif;
  font-size: > medium;
  font-style: normal;
  font-feature-settings: normal;
  font-variant: > normal;
  font-weight: normal;
  font-stretch: normal;
  line-height: normal;
  height: auto;
  -webkit-hyphens: > none;
  -ms-hyphens: none;
  hyphens: none;
  left: auto;
  letter-spacing: normal;
  list-style-type: > disc outside none;
  margin: > 0;
  max-height: none;
  max-width: none;
  min-height: 0;
}
Show All Properties \(42 more\)
```

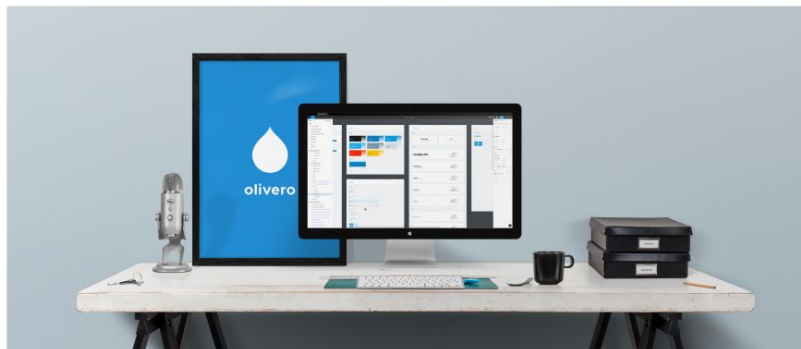
#drupal-off-canvas * {
 all: revert;
}

CSS Logical Properties

لابورد

بلع CMS لمجأ: 9 لابورد !قالطالا

2020 رباتي 14 . [Dries Buytaert](#) ةطساوب



يف أدبت نتج رطناف ، ةلهذم نناك حاتتقالا تارقف نا دقتعت نناك ادا
نوبهي فوس !نتعقوتلما ،المعلا مادختساب ةنودملا تاروشنم ةباتك
لاقم بلا ءارقلا نوهجوي .كلقع

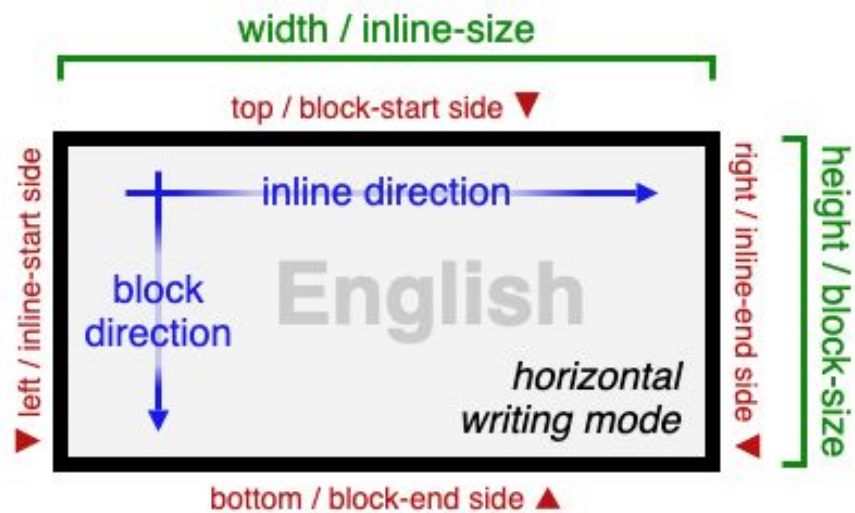
نوهشنې مهناف ، مهفانتا بدجت بتلا ةفطلا ةنرجلا صوصلا صعب نوؤقي مهلجت نا درجم
ءاخلا تاقيلعتلا عيمج ءارقو كب ءاخلا طاورا عيمج فوف رقتلاب نوموفيس .كئدي يف بولخلا

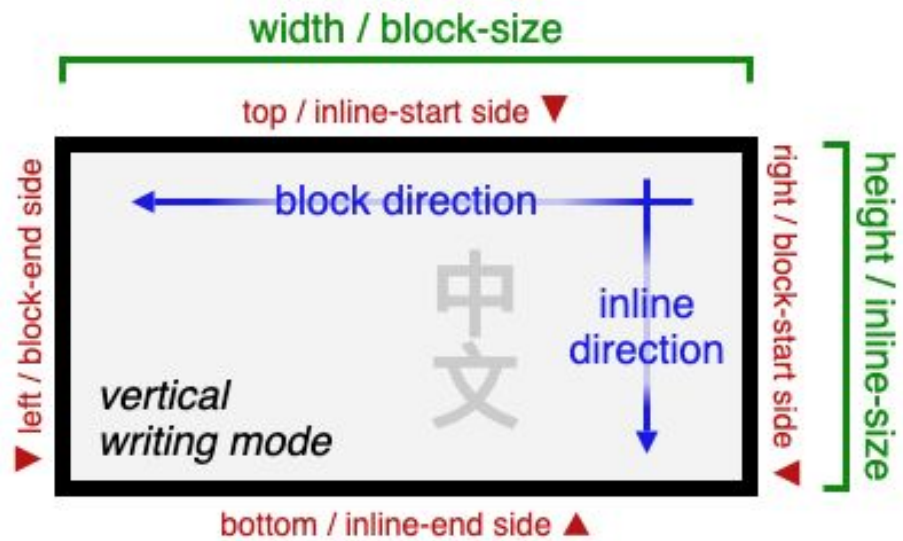
CSS Logical Properties

```
.block {  
  padding-left: 10px;  
}  
[dir="rtl"] .block {  
  padding-right: 10px;  
}
```



```
.block {  
  padding-inline-start: 10px;  
}
```



CSS Grid

The screenshot displays a web browser's layout builder interface. At the top, there is a navigation bar with tabs for 'Manage', 'Shortcuts', 'admin', 'Autocomplete', 'Progress', 'Buttons', 'Tabs', 'Messages', 'Dialogs', 'Tabledrag', and 'Edit'. Below this is a secondary navigation bar with icons for 'Content', 'Structure', 'Appearance', 'Extend', 'Configuration', 'People', 'Reports', and 'Help'. The main content area shows a grid layout for a page titled 'Layout Builder Page Test'. The grid is composed of 15 columns and 2 rows. The columns are numbered 1 through 15, and the rows are numbered 1 and 2. The grid is overlaid on a page with a blue header, a main content area with text, and a right sidebar. The text in the main content area reads: 'Layout Builder Page Test', 'Prow scuttle parrel provost Sail ho shrouds spirits boom mizzenmast yardarm. Pinnacle holystone mizzenmast quarter crow's nest hipperkin grog yardarm hempen halter furl. Swab barque interloper chantey doubloon starboard grog black jack gangway rutters.', and 'Deadlights jack lad schooner scallywag dance the hempen jig carouser broadside cable strike colors. Bring a spring upon her cable holystone blow the man down spanker Shiver me timbers to go on account lookout wherry doubloon chase. Belay yo-ho-ho keelhaul squiffy black spot yardarm spyglass sheet transom heave to.' The bottom of the screenshot shows the browser's developer tools, including the 'Elements' panel, the 'Console' panel, and the 'Styles' panel. The 'Elements' panel shows the HTML structure of the page, including the header, main wrapper, main content, and region. The 'Styles' panel shows the CSS rules for the grid, including the grid-template-columns property.

```
grid-template-columns: repeat(14, minmax(0, 1fr));
```

CSS Grid new features

- Auto-placement
- Negative grid lines

One IE11 CSS Grid “Hack”

(all of this goes
away)

```
/*
ie11-autorow

IE11 does not automatically place new rows, which leads to overlapping
content. We can work around this (when we know that each grid item is
going to span the full width) by setting each child to a new row.
*/
.ie11-autorow > * {
  &:nth-child(1) {
    -ms-grid-row: 1;
  }

  &:nth-child(2) {
    -ms-grid-row: 2;
  }

  &:nth-child(3) {
    -ms-grid-row: 3;
  }

  &:nth-child(4) {
    -ms-grid-row: 4;
  }

  &:nth-child(5) {
    -ms-grid-row: 5;
  }

  &:nth-child(6) {
    -ms-grid-row: 6;
  }

  &:nth-child(7) {
    -ms-grid-row: 7;
  }
}
```

Simplify

```
.layout--content-full {  
  grid-column: 1 / 7;  
}
```

```
@media (--grid-md) {  
  grid-column: 1 / 14;  
}  
}
```



```
.layout--content-full {  
  grid-column: 1 / -1;  
}
```



```
/*
  Grid helpers.

  These variables help authors apply widths and negative margins to break items out of
  the grid, while still conforming to the larger grid system.

  Note we cannot change the values of these custom properties within media queries,
  as they are processed by postcss/postcss-custom-properties (for IE11 compatibility),
  which does not support that functionality. Therefore, we need a separate custom
  property for each breakpoint. 😞
*/

--scrollbar-width: 15px; /* Approximate width of a scrollbar. Doesn't have to be perfect. */

/* Grid gap across various breakpoints. */
--grid-gap: var(--sp);
--grid-gap--md: var(--sp2);
--grid-gap--lg: var(--grid-gap--md);
--grid-gap--nav: var(--grid-gap--md);
--grid-gap--max: var(--grid-gap--md);

/* Column counts at various breakpoints. */
--grid-col-count: 6;
--grid-col-count--md: 14;
--grid-col-count--lg: var(--grid-col-count--md);
--grid-col-count--nav: var(--grid-col-count--md);
--grid-col-count--max: var(--grid-col-count--md);

/* Count of grid-gaps at various breakpoints. */
--grid-gap-count: calc(var(--grid-col-count) - 1);
--grid-gap-count--md: calc(var(--grid-col-count--md) - 1);
--grid-gap-count--lg: var(--grid-gap-count--md);
--grid-gap-count--nav: var(--grid-gap-count--md);
--grid-gap-count--max: var(--grid-gap-count--md);
```


Focus selectors

- :focus-within
- :focus-visible

:focus-within

```
<li class="menu-item">  
  <a href="/">link</a>  
  <ul class="menu">  
    <!-- menu -->  
  </ul>  
</li>
```

```
.menu-item:focus-within .menu {  
  display: block;  
}
```

:focus-within

```
/* nav-primary-no-js.pcss.css */  
  
& .primary-nav__menu-item--level-1:focus-within {  
  & .primary-nav__menu--level-2 {  
    visibility: visible;  
  }  
}
```

:focus-visible

Allows you to only show focus states if user is using keyboard (or AT). Browser determines if this pseudo-selector is active.



```
.menu-item-link:focus:not(:focus-within) {  
  outline: 0;  
}
```

Selector arguments of :not()

Standard usage of :not () (supported by IE11)

```
/* Selects all <ul> that do not have the "contextual-link" class */  
  
ul:not(.contextual-link) {  
    list-style:none;  
}
```

Selector argument usage of :not ()

```
/* Selects all <li> that not exist under an element with a  
"contextual-link" class */  
  
li:not(.contextual-link *) {  
    list-style:none;  
}
```

:is()

Combine selectors

```
.heading-1 .menu-item .is-active,  
.heading-2 .menu-item .is-active { ... }
```



```
:is(.heading-1, .heading-2) .menu-item .is-active {  
}
```

```
.text-content,
.cke_editable {
color: var(--color--gray-10);
font-family: var(--font-serif);
line-height: var(--sp1-5);

/*
  @todo

text-decoration-thickness is supported by FF & Safari
text-underline-offset is supported by Safari

text-decoration-color supported by Chrome, FF, & Safari
*/

& a {
color: var(--color--blue-20);
text-decoration-color: var(--color--blue-20);
text-decoration-thickness: 2px;
overflow-wrap: break-word;

@supports (box-shadow: none) {
transition: box-shadow 0.3s cubic-bezier(0.55, 0.085, 0, 0.99);
text-decoration: none;
box-shadow: inset 0 -2px 0 0 var(--color--blue-50);

&:hover {
text-decoration: underline;
color: var(--color--black);

/* @todo - #d9ecfa isn't currently a variable. */
box-shadow: inset 0 -2em 0 0 #d9ecfa;
text-decoration-color: #d9ecfa;
}
}
}
```

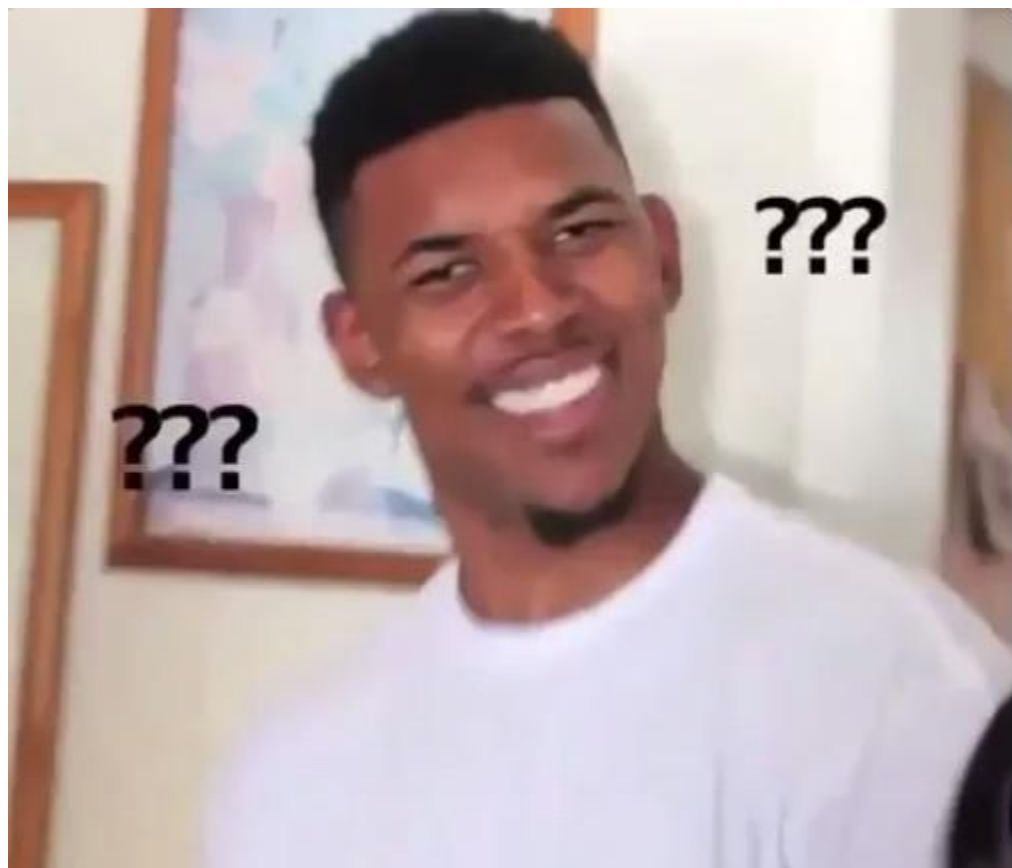
:where()

Combine selectors

```
.heading-1 .menu-item .is-active,  
.heading-2 .menu-item .is-active { ... }
```



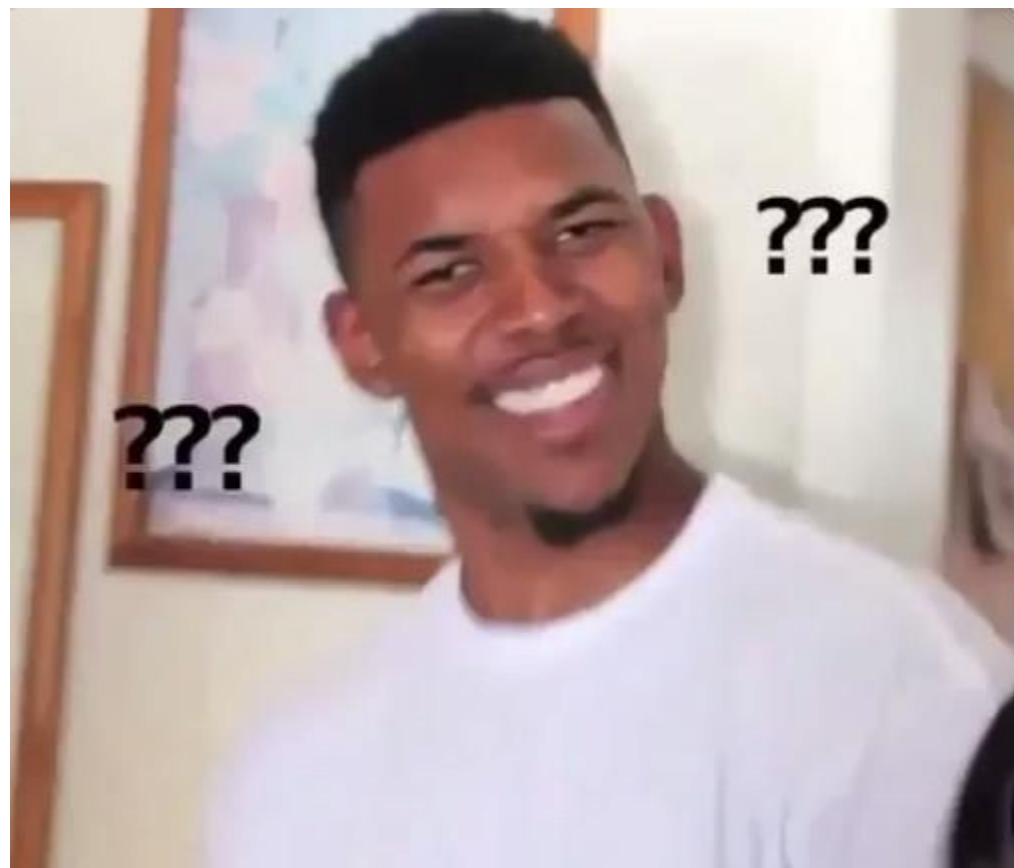
```
:where(.heading-1, .heading-2) .menu-item .is-active {  
  ...  
}
```

???

???

**:where() removes
specificity!**



:is()

```
li:is(.contextual-link) {  
    ...  
}
```

has the same specificity as

```
li.contextual-link {  
    ...  
}
```

:where()

```
li:where(.contextual-link) {  
    ...  
}
```

has the same specificity as

```
li {  
    ...  
}
```



[adult swim]

Combining :not() and :where()

```
/*  
 * Selects all <li> that are descendents of a .contextual-link class,  
 * but has a the same specificity of a <li>  
 */  
  
li:where(:not(.contextual-link *)) {  
    list-style:none;  
}
```



[adult swim]

But... UC Browser (which is supported by Drupal 10) does not support `:where ()`



So, lets remove support:

<https://www.drupal.org/i/3251384>

CSS clip-path

Creates a “clipping region” using SVG shape code.

```
.handle {  
  width: 20px;  
  height: 20px;  
  background: black;  
  /* SVG path for a handle icon. */  
  clip-path: path('M20,9.96484375 C20,10.2846875 19.8779297, ... Z');  
};
```

CSS clip-path

Q. Why not just use a background image?

```
.handle {  
  width: 20px;  
  height: 20px;  
  background-image: url('handle.svg');  
};
```

A. Background images do not appear and/or change colors when in forced colors (high contrast) mode.

CSS clip-path with forced color media query 🙌

Background color will change to the text color when in forced colors mode.

```
.handle {
  width: 20px;
  height: 20px;
  background: black;
  /* SVG path for a handle icon. */
  clip-path: path('M20,9.96484375 C20,10.2846875 19.8779297, ... Z');
;

@media (forced-colors: active) {
  .handle {
    background: CanvasText; /* CanvasText is a forced colors keyword */
  }
}
```

<https://codepen.io/mherchel/pen/qBPaeEQ>
<https://blogs.windows.com/msedgedev/2020/09/17/styling-for-windows-high-contrast-with-new-standards-for-forced-colors/>

CSS VARIABLES



****** YEAH!!!**

CSS Variables in Drupal 9

- Compiled during build step (similar to Sass variables)
 - This means they cannot dynamically change within media queries
 - Do not cascade
- Can only be attached to the `:root` element

the grid, while still conforming to the larger grid system.

Note we cannot change the values of these custom properties within media queries, as they are processed by postcss/postcss-custom-properties (for IE11 compatibility), which does not support that functionality. Therefore, we need a separate custom property for each breakpoint. 😞



```
*/
```

```
--scrollbar-width: 15px; /* Approximate width of a scrollbar. Doesn't have to be perfect. */
```

```
/* Grid gap across various breakpoints. */
```

```
--grid-gap: var(--sp);  
--grid-gap--md: var(--sp2);  
--grid-gap--lg: var(--grid-gap--md);  
--grid-gap--nav: var(--grid-gap--md);  
--grid-gap--max: var(--grid-gap--md);
```

```
/* Column counts at various breakpoints. */
```

```
--grid-col-count: 6;  
--grid-col-count--md: 14;  
--grid-col-count--lg: var(--grid-col-count--md);  
--grid-col-count--nav: var(--grid-col-count--md);  
--grid-col-count--max: var(--grid-col-count--md);
```

```
/* Count of grid-gaps at various breakpoints. */
```

```
--grid-gap-count: calc(var(--grid-col-count) - 1);  
--grid-gap-count--md: calc(var(--grid-col-count--md) - 1);  
--grid-gap-count--lg: var(--grid-gap-count--md);  
--grid-gap-count--nav: var(--grid-gap-count--md);  
--grid-gap-count--max: var(--grid-gap-count--md);
```

```
/* Width of the entire grid at various breakpoints. */
```

```
--grid-full-width: calc(100vw - var(--sp2));  
--grid-full-width--md: var(--grid-full-width);  
--grid-full-width--lg: calc(var(--grid-full-width) - var(--scrollbar-width));  
--grid-full-width--nav: calc(100vw - var(--scrollbar-width) - var(--content-left) - var(--sp4));  
--grid-full-width--max: calc(var(--max-width) - var(--sp4));
```

```
/* Width of a grid column at various breakpoints */
```

CSS Variables in Drupal 10

- Dynamic (executed at runtime)
- Ability to attach variables to HTML elements
- Issue is RTBC!
<https://www.drupal.org/i/3253148>

**What might this
look like?**

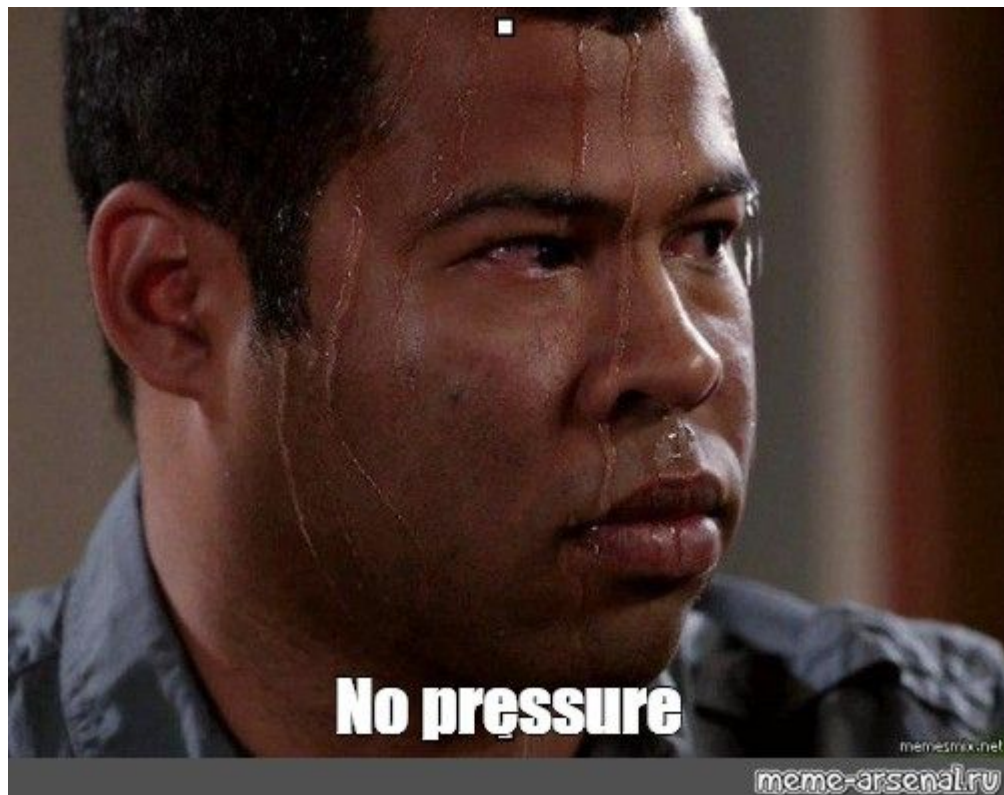
**Drupal's CSS
variable architecture
is a new API!**

Drupal promises “Easy upgrades forever”.



<https://www.drupal.org/blog/making-drupal-upgrades-easy-forever>

**We have ONE shot
to get this right.**



No pressure

memesmix.net

meme-arsenal.ru

CSS Variables in Drupal 10

- Define some basic properties that will always be abstracted out
 - Spacing unit
 - Primary color
 - Secondary color
 - Font-sizes
 - Line heights
 - ???

CSS Variables in Drupal 10

- Give them names, load them in Drupal's system CSS, and reference them in appropriate files.
 - Spacing unit: `--drupal--spacing`
 - Primary color: `--drupal--color-primary-10`
 - Secondary color: `--drupal--color-secondary-10`
 - Font-sizes: `--drupal--font-size-xl`
 - Line heights: `--drupal--line-height-xl`

CSS Variables in Drupal 10*

Themes can easily override styles

```
/* My theme's CSS file */
:root {
  --drupal--spacing-unit: var(--my-theme-spacing-unit);
  --drupal--color-primary-10: var(--my-theme-primary-color-10);
  --drupal--color-secondary-10: var(--my-theme-secondary-color-10);
  --drupal--font-size-xl: var(--my-theme-whatever-name-i-want-here);
  --drupal--line-height-xl: var(--my-theme-yada-yada-yada);
}
```


CSS Variables in Drupal 10*

Themes can use newfangled selectors

```
:root *:where(:not(admin-bar, .admin-bar *)) {  
  --drupal--spacing-unit: var(--my-theme-spacing-unit);  
  --drupal--color-primary-10: var(--my-theme-primary-color-10);  
  --drupal--color-secondary-10: var(--my-theme-secondary-color-10);  
  --drupal--font-size-xl: var(--my-theme-whatever-name-i-want-here);  
  --drupal--line-height-xl: var(--my-theme-yada-yada-yada);  
}
```

Or simple selectors – and override styles without having to rewrite entire selectors!!! 🙌

```
.tabs {  
  --drupal--spacing-unit: var(--my-theme-spacing-unit);  
  --drupal--color-primary-10: var(--my-theme-primary-color-10);  
  --drupal--color-secondary-10: var(--my-theme-secondary-color-10);  
  --drupal--font-size-xl: var(--my-theme-whatever-name-i-want-here);  
  --drupal--line-height-xl: var(--my-theme-yada-yada-yada);  
}
```

```
.tabs {
  --tabs--tab-active-border-size: 6px;
  --tabs--line-color: var(--drupal--color-primary-10);
  --tabs--border-color: var(--drupal--color-primary-10);
  --tabs--background-color: var(--drupal--color-gray-90);
  --tabs--background-hover-color: var(--drupal--color-gray-70);
  --tabs--margin-block: var(--drupal--spacing-unit);
  --tabs--tab--padding-block: var(--drupal--spacing-unit);
  --tabs--tab--padding-inline: calc(2 * var(--drupal--spacing-unit));
```

```
display: flex;
flex-direction: column;
width: 100%;
margin-block: var(--tabs--margin-block);
margin-inline-start: 0;
margin-inline-end: 0;
padding-block: 0;
padding-inline-start: 0;
padding-inline-end: 0;
list-style: none;
}
```

```
.tabs__tab {
padding: var(--tabs--tab--padding-block) var(--tabs--tab--padding-inline);
}
```



[adult swim]

BUT WAIT



THERE'S MORE

theimggenerator.com



By admin, 2 April, 2021

Layout Builder Page Test

Prow scuttle parrel provost Sail ho shrouds spirits Pinnacle holystone mizzenmast quarter crow's nest halter furl. Swab barque interloper chantey double gangway rutters.

Deadlights jack lad schooner scallywag dance the cable strike colors. Bring a spring upon her cable! spanker Shiver me timbers to go on account look yo-ho-ho keelhaul squiffy black spot yardarm spy.

By admin, 4 November, 2020

Embedded media demonstration

Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

Tags: [Demonstration](#)

By admin, 4 November, 2020

Accessibility Basic

Accessibility Advanced

Accessibility Containers

Accessibility Labels & Descriptions

Accessibility Wizard

Job Application

Registration

Session Evaluation

User Profile



By admin, 2 April, 2021

Layout Builder Page Test

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By admin, 4 November, 2020

Embedded media demonstration

Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

Tags: **Demonstration**

By admin, 4 November, 2020

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Deadlights jack lad schooner scallywag dance the cable strike colors. Bring a spring upon her cable! spanker Shiver me timbers to go on account look ye yo-ho-ho keelhaul squiffy black spot yardarm spyglass

By admin, 4 November, 2020

Embedded media demonstration

Lorem ipsum dolor sit amet consectetur adipisicing elit. Saepe quibusdam dignissimos vero quis tempore est pariatur earum alias temporibus ab! Laborum corporis facilis voluptates laboriosam aliquid ipsam deleniti consequuntur eius!

Tags: **Demonstration**

By admin, 4 November, 2020

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CSS Variables Olivero Color Change

Demo:

<https://color-change-demo-nxcc7deil6jp0ppmeh6mu8mpuhwb3fe6.tugboat.qa/>

BUT WAIT



THERE'S MORE

theimggenerator.com

Displays

Page + Add Edit view name/description

Display name: Page View Page

Title
Title: [Table](#)

Format
Format: [Table](#)

Fields
[Content: Published \(Published\)](#)
[Content: Published \(Published\)](#)
[Content: Published \(= Yes\)](#)

Filter criteria Add

Pager
Use pager: [Mini](#) | [Mini pager, 10 items](#)
More link: [No](#)

Page: How should this view be styled

Grid
 HTML List
 Table
 Unformatted list

If the style you choose has settings, be sure to click the settings button that will appear next to it in the View summary.

You may also adjust the [settings](#) for the currently selected style.

Apply Cancel

<https://www.drupal.org/i/3151553>

Server side injected CSS Variables

Twig can inject dynamic server-side variables! So we can do things like

```
<div
  class="views-grid"
  style="--drupal--views-grid--column-count: 4"
>
```

```
.views-grid {
  display: grid;
  grid-template-columns: repeat(var(--drupal--views-grid--column-count), 1fr);
}
```

BUT WAIT



THERE'S MORE

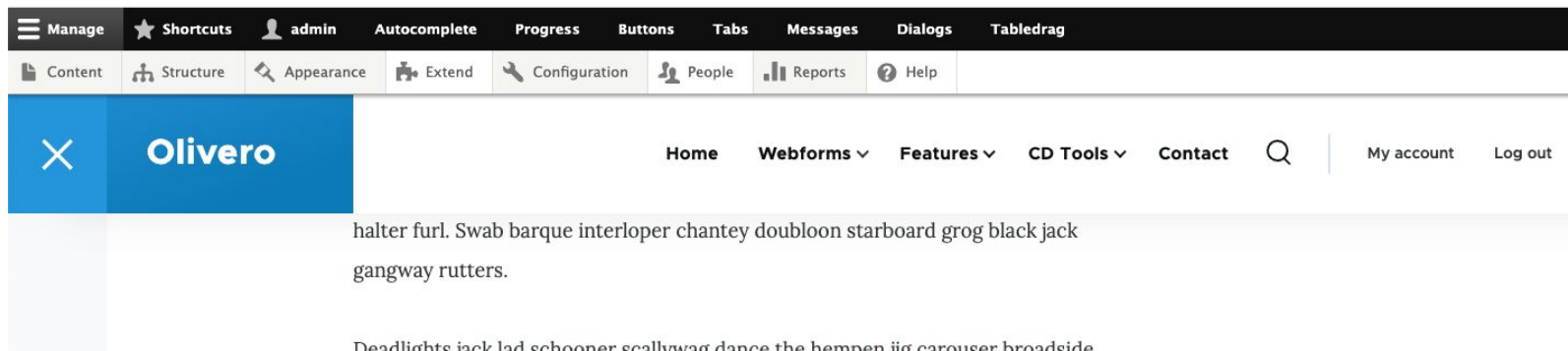
theimggenerator.com

JavaScript injected CSS Variables

JS can inject dynamic server-side variables! So we can do things like

```
<body style="--drupal--displace--block-start: 39px">
```

```
.my-fixed-header {  
  position: fixed;  
  top: var(--drupal--displace--block-start, 0);  
}
```



The screenshot displays the Drupal administration interface. At the top, there is a dark navigation bar with various menu items: Manage, Shortcuts, admin, Autocomplete, Progress, Buttons, Tabs, Messages, Dialogs, and Tabledrag. Below this is a lighter navigation bar with icons and labels for Content, Structure, Appearance, Extend, Configuration, People, Reports, and Help. The main header area features the Olivero theme logo on the left and a search bar on the right. The search bar contains the text "halter furl. Swab barque interloper chantey doubloon starboard grog black jack gangway rutters." and "Deadlights jack lad schooner scallywag dance the hempen iig carouser broadside".



[adult swim]

**We have ONE shot
to get this right.**

LETS DO IT!

CSS Modernization Initiative:

drupal.org/i/3254529



Drupal™

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[PLAN] Drupal CSS Modernization Initiative

[View](#)[Edit](#)[View history](#)[CLONE ISSUE](#)

With IE finally being removed from Drupal core ([#3252084: \[meta\] Remove support for IE11](#)), we finally get a chance to modernize Drupal's CSS.

This includes things like

- CSS Custom Properties (aka CSS variables)
- Use of CSS Grid
- Use of CSS Logical Properties
- `:is()` and `:where()` selectors
- Selector arguments within `:not()`
- Proper CSS resets for things like settings tray and contextual links though the `all: revert` property and value.

Drupal's CSS Custom Properties will be a new API in core

The biggest and most important thing is CSS Custom Properties (aka CSS variables). We need to decide the following

- When and where to implement them
- How to name them
- How much to abstract them
- Can we mark certain custom properties as internal? Should we? How?
- The process of deprecating custom properties. Can we use JavaScript to read them and then trigger deprecation warnings?
- How does this fit into the bigger picture of backwards compatibility for markup and CSS?

Because of Drupal's "[Easy Upgrades Forever](#)", we need to get this right **the first time**. Properly implemented, CSS custom properties have the potential to dramatically ease the themer's workload. However, because themes will become reliant on these custom properties, we have to be very intentional about the implementation, as we may not get a second chance.

Opportunities

We have tons of opportunities for improvements here.

Active

Project:	Drupal core
Version:	10.0.x-dev
Component:	CSS
Priority:	Normal
Category:	Plan
Assigned:	Unassigned
Issue tags:	CSS about tags
Reporter:	mherchel
Created:	15 Dec 2021 at 08:01 EST
Updated:	15 Dec 2021 at 08:08 EST

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[Add child issue, clone issue,](#)
[add change notice](#)

Thank you!

Mike Herchel

Olivero Drupal Core Subsystem Maintainer

twitter.com/mikeherchel

drupal.org/u/mherchel

Join me!
drupal.org/i/3254529