Breadcrumbs

COMPONENT SPECS DOCUMENT

Component - Breadcrumb UI

CMS-15 - Breadcrumb component - Sketch UI and move into Design System
DONE

CMS-430 - Breadcrumb component - Bulma Framework and Confluence Documentation
DONE

Auto-generated hierarchal-based breadcrumb. The first breadcrumb is alway the home page that shows first level pages or deeper. This component will always live under the header and span fully across the page.

Phase 1 *

- Breadcrumb will never be more than one line long in any view-port. CSS scrolling will be the solution for mobile users when breadcrumb extends beyond the screenwidth.
- If page is *one* level away from home page, the breadcrumb will not appear on that page.
- Breadcrumb will never show the current page

Phase 2

- Find a visual solution to indicate mobile user that the breadcrumb is scrollable.

Specs

1. Bulma framework will validate the UI (https://bulma.io/documentation/components/breadcrumb/)
    a. Exceptions
        i. Font = 14px = 0.875em
        ii. Top & bottom padding = 16px = 1em
2. Breadcrumb will only be one line, and never stack to two or more lines
3. Breadcrumb link styles will follow the link color from Zoro Design Pattern
4. Breadcrumb will NOT be displayed if home page is the only level higher up
5. Current page will not be displayed within breadcrumb
6. Mobile users only
    a. breadcrumb will be right aligned after each page load so previous path will be more prominent to the user
7. For current page and be within spec for **ARIA-CURRENT,** we use **A** tag without **HREF** is valid markup. We need to support (https://www.w3.org/TR/2016/REC-html51-20161101/textlevel-semantics.html#the-a-element)

UX Research

- Breadcrumb Recommendations
- Breadcrumb Requirements

Breadcrumb HTML

```
<section class="h-breadcrumb section">
  <div class="container">
    <nav class="breadcrumb" aria-label="breadcrumbs">
      <ul>
        <li><a href="#">Home</a></li>
        <li><a href="#">Level 1</a></li>
        <li><a href="#">Level 2</a></li>
      </ul>
    </nav>
  </div>
</section>
```

Breadcrumb SASS

```
.h-breadcrumb
  &.section
      padding: 1rem 1.5rem

  nav
    overflow-x: hidden
    li a
      padding: 0 0.5rem 0 0.5rem
    +mobile
      -webkit-overflow-scrolling: touch
      width: 100%
      ul
        overflow-x: scroll
        flex-wrap: nowrap
```

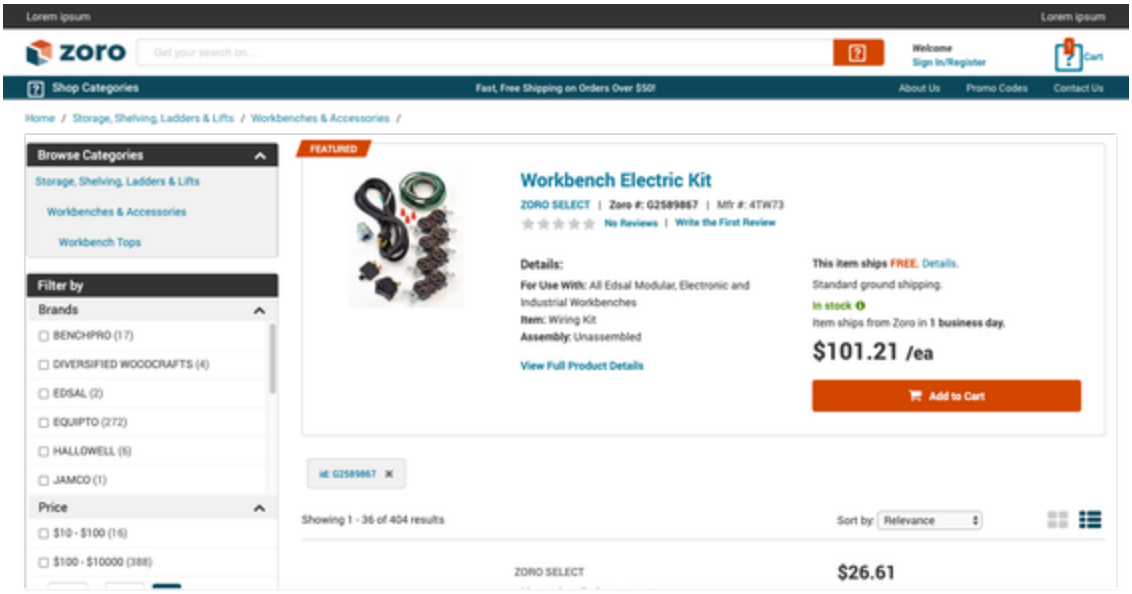
Breadcrumb JS

```
<script>
        const zclBreadcrumbs = document.querySelector('.breadcrumb ul');
        zclBreadcrumbs.scrollLeft = zclBreadcrumbs.scrollWidth
</script>
```

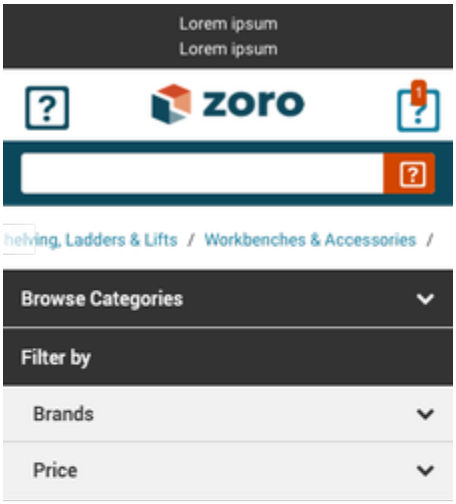
*current phase

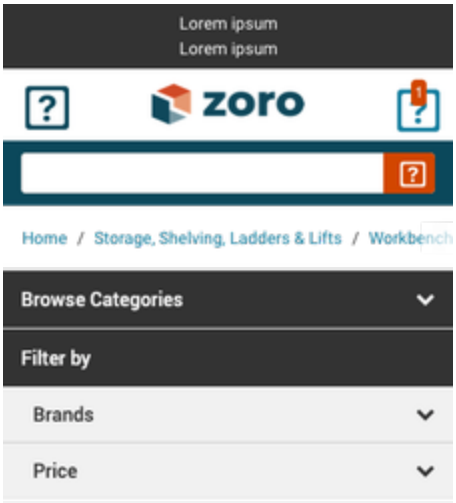
Sketch mockups

Desktop


Lorem ipsum
Lorem ipsum
zoro
Get your search on...
Welcome
Sign In/Register
Cart
Shop Categories
Fast, Free Shipping on Orders Over $50!
About Us
Promo Codes
Contact Us
Home / Storage, Shelving, Ladders & Lifts / Workbenches & Accessories /
Browse Categories
Storage, Shelving, Ladders & Lifts
Workbenches & Accessories
Workbench Tops
Filter by
Brands
BENCHPRO (17)
DIVERSIFIED WOODCRAFTS (4)
EDSAL (2)
EQUIPTO (272)
HALLOWELL (6)
JAMCO (1)
Price
$10 - $100 (16)
$100 - $10000 (388)
FEATURED
Workbench Electric Kit
ZORO SELECT | Zoro #: G2589867 | Mfr #: 4TW73
No Reviews | Write the First Review
Details:
For Use With: All Edsal Modular, Electronic and Industrial Workbenches
Item: Wiring Kit
Assembly: Unassembled
View Full Product Details
This item ships FREE. Details.
Standard ground shipping.
In stock
Item ships from Zoro in 1 business day.
$101.21 /ea
Add to Cart
id: G2589867
Showing 1 - 36 of 404 results
Sort by: Relevance
ZORO SELECT
$26.61

Mobile


Lorem ipsum
Lorem ipsum
zoro
helving, Ladders & Lifts / Workbenches & Accessories /
Browse Categories
Filter by
Brands
Price


Lorem ipsum
Lorem ipsum
zoro
Home / Storage, Shelving, Ladders & Lifts / Workbench
Browse Categories
Filter by
Brands
Price

Card

COMPONENT SPECS DOCUMENT

Card Image Component Specs

Rules for Base, Category, Brand, Article, Promo, Product and Industry Card images

Aspect Ratio [Square, 16:9]

- 16:9, full bleed/no padding - [Base, Brand, Article, Promo, Industry]
- Square image, centered - [Product, Category]

Image Type [Product, Lifestyle, Logo, *image not found*, [full bleed/no padding, centered]]

Centered

- Product image type - [Category, Promo, Industry, Product]
- Logo image type - [Brand]

Full bleed/no padding

- Base image type - [*image not found]*
- Lifestyle image type - [Article]

Physical Export Dimensions [*max image width/height sizes*]

- 702px wide Standard resolution, Standard x 2 is Retina resolution - [Base, Article]
- 670px wide Standard resolution, Standard x 2 is Retina resolution - [Category, Brand, Promo, Product, Industry]

Export Dimensions Notes:

- Based on full width card at 767px viewport when components expand at their most
- Image will scale *proportionally* with component dimensions

File Types

- SVG, JPG, WebP (*optional*)

Accessibility

- Be aware that the chosen image is descriptive of the section it's representing - [Article]

Resolution switching [if PNG or JPG]

- Switch image with <picture> or `srcset` attribute methods
- Retina image gets served by default on Retina unless the monitor is a standard screen

HTML/SCSS Specs

Base Card

HTML (Using Bulma suggested classes and HTML tag styling)

```
<figure class="image">
   <img class="zcl-card__image" src="<img path>">
</figure>
```

SCSS

```
//Let Bulma format .image class, HTML img tag
```

Article Card

SCSS

```
.zcl-card--article
  .zcl-card
    &__image-container
      clip-path: polygon(0 0, 100% 0, 100% 96%, 0 80%)
```

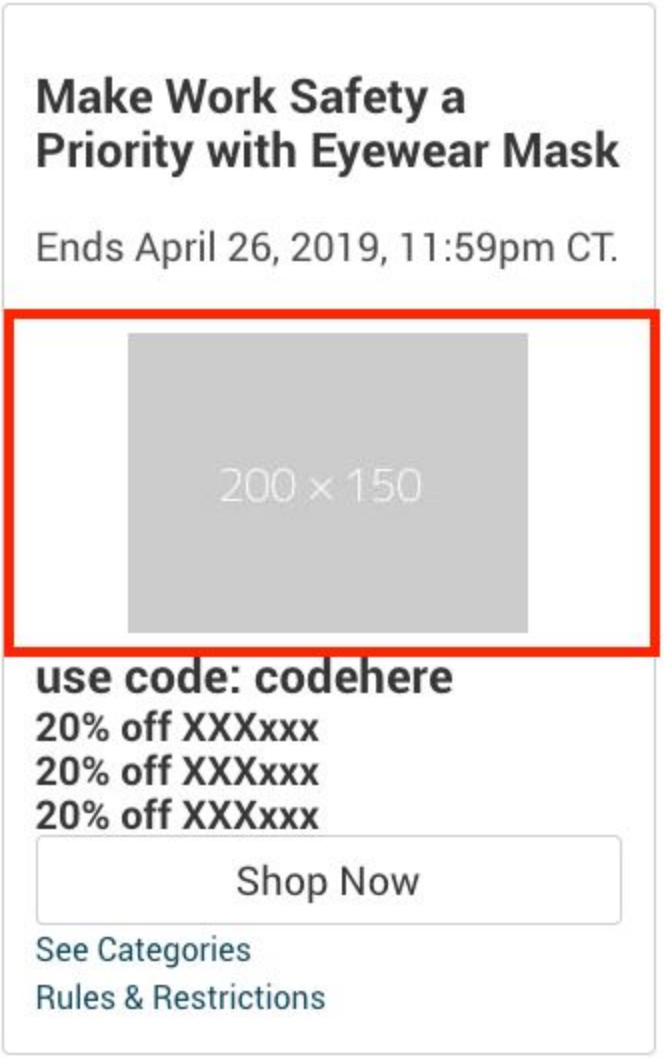
Browser Support

- `clip-path`: https://caniuse.com/#feat=mdn-css_properties_clip-path

[Centered] Image Cards

SCSS

```
.zcl-card
  &__image-container-centered
    display: flex
    align-items: center
    justify-content: center
    width: 100%
    height: 100%
```



HTML Specs

Using Bulma suggested classes and HTML tag styling.

Helper Tools

- `clip-path` maker: https://bennettfeely.com/clippy/
- Generic placeholder images: https://dummyimage.com/
- Full images: https://unsplash.com/

To do notes:

1. Create ticket for creating PSDs for image templates for each variation

https://zorotools.atlassian.net/browse/CMS-653

Specs

- Character Length Limit: **300 characters**
    - Because it allows up to three lines in 375px, and one line in 1400px viewport.
- Caption Container Limit: *Length of copy block*
- Font Size (at 16px base font): **13px**
- Font Style: **None**
- Padding (at 16px base font): **16px top, 8px right, 0px bottom, 8px left**
- HTML Formatting
    - HTML: **No**
    - Bulleted List: **No**
    - Link Text: **No**
- Paragraph count: **One**

Copyright

How do we handle copyrights and restrictions with images we upload to the CMS System?

Figure and Figcaption w/ ARIA

Resource: https://www.scottohara.me/blog/2019/01/21/how-do-you-figure.html

Pseudo Code

HTML

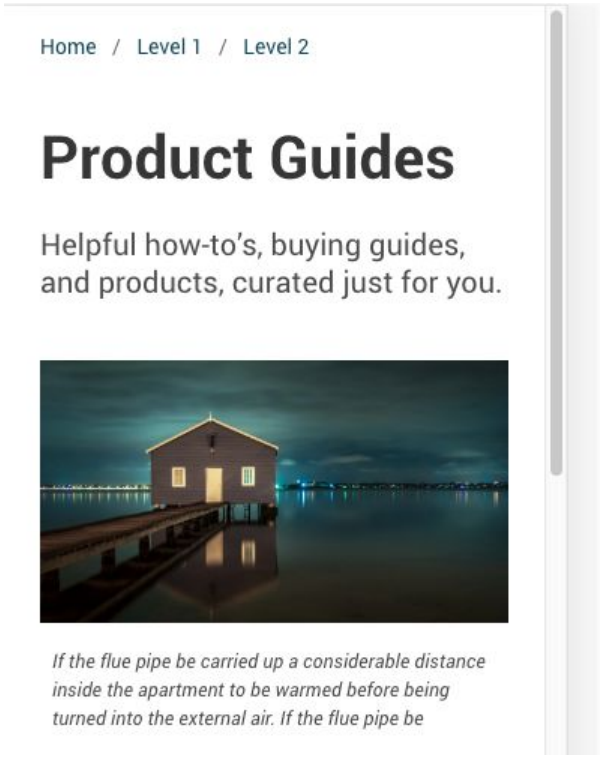
```
<section class="zcl-image section">
  <div class="container">
    <figure class="image">
      <img src="<image path>">
      <figcaption class="figure-caption">
        **caption**
      </figcaption>
    </figure>
  </div>
</section>
```

SCSS

```
.zcl-image {
```

```
  figcaption {
    font-size: 0.813rem;
    font-style: italic;
    padding: 1rem .5rem 0 .5rem;
  }
}
```

Snapshots

375px width	

1400px width	Home / Level 1 / Level 2 # Product Guides Helpful how-to's, buying guides, and products, curated just for you. *If the flue pipe be carried up a considerable distance inside the apartment to be warmed before being turned into the external air. If the flue pipe be*

Group Meeting 7-29-18

Attendees: (Adam, TJ, Nikki, Matt, Melissa, Paul)

Action Items

- Review progress on dev image upload/process ticket
    - https://zorotools.atlassian.net/browse/CMS-669
- Building photoshop docs with guidelines to support best image results/practices for tablet and desktop viewports for Hero BG images, and Brand Logos & Category on 16:9 format
- Look into WebP format as an option, instead of JPG or PNG
- Even with Retina images, 500KB limit should be reasonable
- Review with Nikki and Sketch Card Components, team in agreement that 16:9 is proper format for these components.
- Where should this final documentation live? Confluence? Linking to this doc for lifecycle of documentation.

Green: Notes from 7-29-18 meeting

Hero w/ background image or pattern

Specifications

- **Aspect Ratio (*Square, 16:9, Dynamic*)**
    - Dynamic
- **Image Type**
    - Pattern / Abstract / Lifestyle
        - Pattern predetermined in system already. User chooses a set of patterns.
        - Thinking determined set of abstract patterns in system for user to choose from also.
        - Should we allow lifestyle with the known risk that if not done correctly, can crop undesirably?
            - Home page, article template are a consideration
            - Images can be curated by Margaret (or Brand Team)
            - If we allow users to upload image to system, serious communication with dev and capabilities with the system has to be had.
- **CSS Min/Max display sizes in each viewport (Mobile (375px), Tablet (1024px), Desktop (1920px w/ 1380 container))**
    - Image is always 100% width spanning the size of the browser window in the container

        - Adam: Has concerns about dropping the mobile bg image, might get push back based on the decision.
        - Branding team working on secondary color pallette, we might be able to use for fallback solid bg color instead of bg image
        - Matt: Drop image on mobile. Tablet and Desktop viewports, what are visual considerations for BG image?
- **Physical Export Dimensions**
    - 3840px wide for Retina (2x 1920px), 428px tall for Retina (2x 214px) (at least)
- **Resolutions, if PNG or JPG**
    - **Switch with CSS Background Image Property (consider Zoro and CMS considerations. Example, CMS will generate image variations, Zoro will maybe need CSS media query, etc.)**
        - Retina image gets served by default on Retina and Standard screens
            - Option: Let CMS system export image variants starting with Retina image dimension as sample
                - Note: Check with Alex about this progress...
- **File Type**
    - SVG (pattern), JPG, WebP *(option)*
- ***Inline* HTML Image or *Background* Image?**
    - Background Image
- **Accessibility**
    - Make sure the background image/pattern contrast level is that to pass AA standards with text color above it
    - UI pattern: Color block behind text? Should we keep? Still up for debate.
        - Group Decision: We are leaning toward not showing color block behind text, but being considerate with image pattern/type/content to make sure text passes accessibility.

SASS (pseudo code, meant to be refactored for less DRY)

```
    padding-top: 1.5rem
 // modifier class
 @at-root
//if background image is a full image
   .zcl-hero--bg-image
     position: relative
     &:before
       //background-color: gray
       background-image: url('/img/l1-cutting-background-v2.jpg')
       background-size: cover
       opacity: .4
       content: ""
       display: block
```

```
      position: absolute
      top: 0
      left: 0
      width: 100%
      height: 100%
      z-index: -1
    .zcl-hero
      &__body
        padding-bottom: 8rem
        padding-top: 8rem
 @at-root
//if background image is pattern
   .zcl-hero--bg-pattern
     position: relative
     &:before
       background-image: url('/img/morocco.png')
       background-repeat: repeat
       opacity: .4
       content: ""
       display: block
       position: absolute
       top: 0
       left: 0
       width: 100%
       height: 100%
       z-index: -1
 &__title, &__subtitle
   +desktop
     padding: 0 16rem 0 0

}

//if background image is a pattern
.hero-container {
  background-image: ('background.[svg, jpg, png]');
  background-repeat: repeat:
}
```

Card component image

Specifications

- **Aspect Ratio (*Square, 16:9, Dynamic*)**
    - 16:9 (Article) Center logos, category image to 16:9 format (if CMS User curating))
        - Product Image Components
            - Product, Brand, Category variations
                - Have Card Component support square images, center image
    - Or if Category images coming from a PIM source, and 4:3 ratio is supplied, we add some Flexbox centering to the card to help simulate a 16:9 space. Background colors are usually white for product images.
- **Image Type**
    - **Lifestyle, Abstract**
        - Article
    - **Logo**
        - Brand
    - **Product Image**
        - Category
- **CSS Min/Max display sizes in each viewport (Mobile (375px), Tablet (1024px), Desktop (1920px w/ 1380 container))**
    - Image is always 100% width spanning the size of card component. I.e., component will dictate the width. 767px and under, the component spans browser width, so does the image.
- **Physical Export Dimensions**
    - 704px wide (based on card width at 767px viewport)
- **Resolutions, if PNG or JPG**
    - **Switch with <picture> or `srcset` attribute methods**
        - Retina image gets served by default on Retina and Standard screens
            - Option: Let CMS system export image variants starting with Retina image dimension as sample
- **File Type**
    - SVG, JPG, WebP (*option*) (consider other file format types from vendors)
- ***Inline HTML* Image or *Background* Image?**
    - Inline HTML
- **Accessibility**

    - Article Card: Be aware that the chosen image is descriptive of the section it's representing.

HTML

```
<figure class="image">
   <img class="h-card__image" src="<img path>">
</figure>
```

SCSS

```
//let Bulma do its thing when using the above HTML structure. (.image, img tag structure)
```

Article section image

Specifications

- **Aspect Ratio (*Square, 16:9, Dynamic*)**
    - 16:9
- **CSS Min/Max display sizes in each viewport (Mobile (375px), Tablet (1024px), Desktop (1920px w/ 1380 container))**
    - Image is always 100% width spanning the size of container. I.e., Container will dictate the width. 991px and under, the component spans container width with a styling exception, and at 767px and under the image expands to the width of the browser window in which so does the container.
- **Physical Export Dimensions**
    - **1502px wide**
- **Resolutions, if PNG or JPG**
    - **Switch with <picture> or `srcset` attribute methods**
        - Retina image gets served by default on Retina and Standard screens
            - Option: Let CMS system export image variants starting with Retina image dimension as sample
- **File Type (Feature Image)**
    - JPG, WebP (*optional*)
- ***Inline HTML* Image or *Background* Image?**
    - Inline HTML
- **Accessibility**
    - Be aware that the chosen image is descriptive of the section it's representing.

HTML

```
<section class="h-image section">
  <div class="container">
    <figure class="image">
      <img src="<image path">
    </figure>
  </div>
</section>
```

SCSS

```
//let Bulma do its thing when using the above HTML structure. (.image, img tag structure)
@media screen and (min-width: 1200px)
zcl-image.section figure {
    padding: 0 16rem 0 0;
}
```

Image Sample PDF Mockup:
https://drive.google.com/open?id=1zcm9Olebic0gn2mEQiK229dDDfSBK-C0

Hippo Processing Types

To Dev Team: Experiment with the system capability and report back to UI team what is feasible.

- Automating these functions when image uploaded through Hippo service
    - Any Hippo limitations with the following?
    - Do we allow the user to control some of these functions?
        - Cropping?
        - Resizing?
        - Resolution Scaling?
        - Image Compression?

Questions

Overall

1. To Dev: Do we adopt a number of ways to host different levels of images, like Retina vs Non-Retina, or mobile vs desktop? Explanation: https://brianflove.com/2014/08/07/retina-display-images/
    a. Srcset in image tag?

    b. <picture> tag?
        i. Have some resistance to using Picture over Img Srcset attribute because Picture tag solution uses media query statements that will live inside the DOM. Plus vendor specific CSS? Yuck. Generally, I'd prefer these queries inside CSS only. Img Srcset uses DPR 1 or 2 or 3. 1 for standard screens 2+ for Retina screens. Representing cleaner code also.
2. Refer to Devs first, see if we can automate the process: If users are compressing, which tools do we use?
    a. Preset options available?
    b. Mac and Windows if local

Hero

1. Is the background color Hero a different height than the background image Hero?

Article Image Component

1. Should we parse out two different images automatically when user chooses an Article image?
    a. Images will be the same from Article Card preview image
        i. Hippo image process can do this?
            1. Alex: Yes, to a degree and to which point?

Other considerations for handling image assets

File name

Only use letters, numbers, underscores, and hyphens in file names. Other characters (like question marks, percent signs, and ampersands) may upload incorrectly or cause unexpected behavior in galleries.

Be sure your image name is descriptive enough so you and others know what it is. Be conscious of how you make and name folders. For example, folder structure (Article > Buying Guides), image name `hammers-and-drill.jpg`. Alex's Answer = DAM

Color mode

Save images in RGB color mode.

File size

We recommend using image files of less than 500KB for best results

1. Can we set Hippo constraint?
2. Mentioned by Alex: What is Image Magick? Can/should we use it?
3. What file size is reasonable with Retina format? Is 500KB to small?

Color profile

Save images in the sRGB color profile. If images don't look right on mobile devices, it's probably because they don't have an sRGB color profile.

Component - Article Card

CMS-472 - Card Component - Bulma - Article Card and Confluence Documentation
DONE

A component that usually takes in an image, title, subtitle, summary and call to action defined by a border around it that displays multiple cards side-by-side.

Notes: The Article Card styles are designed to be in Zoro's custom ZCL Grid with parent element being ` .

`

ZCL Elements

- **zcl-card**
  Base card component boundaries
- **zcl-card__image**
  16x9 photo for each Article card, wrapped with an A tag.
- **zcl-card__title**
  Title defined by CMS user that headlines the Article
- **zcl-card__copy-summary**
  Brief summary of the Article
- **zcl-card__links**
  Defining link group that always aligns to the bottom of the card

ELEMENT FLAGS

- **zcl-card--article-hub, zcl-card--article-theme**
  Modifier on Article Card variation from the base card (h-card).

Bulma Elements

- **figure.image**
  Because images can take a few seconds to load (or not at all), use the `.image` container to specify a **precisely sized** container so that your layout isn't broken because of image loading or image error

Specs

1. Card container display method ZCL Grid with **3-up Desktop, 2-up Tablet, 1-up Mobile**
2. Card element display method is **Flexbox / Column**
3. Min and Max width value for base card is **327px**
4. **zcl-card__title**
   a. Character limit is **80**
   b. Box height is set to **4.125rem** or 66px height at 16px base font
5. **zcl-card__copy-summary**
   a. Character limit is **300**
6. Image is a link
7. Heading is a link

Variation Specs

HUB CARD

1. Shows `View All` link

~~THEME CARD~~

1. ~~Link is hidden~~

UX Research

- Article Page / "Content Hub" Requirements

Component HTML

```
<div class="zcl-card">
  <a href="#">
    <figure class="image">
      <img class="zcl-card__image"

src="https://images.unsplash.com/flagged/photo-1554176858-794bdd61dd41?i
xlib=rb-1.2.1&ixid=eyJhcHBfaWQiOjEyMDd9&auto=format&fit=crop&w=2089&q=80
">
    </figure>
  </a>
  <h2 class="zcl-card__title title is-5 is-spaced"><a
href="#">*title*</a>
  </h2>
  <div class="zcl-card__copy-summary"><a href="#"></a>*body copy*</a>
  </div>
</div>
```

Component Style

```
//Base Card w/ Flexbox
.zcl-card
  display: flex
  flex-direction: column
  position: relative
  padding: 1rem
  border: 1px solid $grey-lighter
  border-radius: $radius
  width: 327px
  +tablet
    margin: 0 2rem 2rem 0
  +mobile
    margin: 0 0 2rem 0
    width: 100%
  &__title
    &.title:not(:last-child)
      margin-bottom: 1rem
    a
      color: inherit
      &:hover
        text-decoration: underline
    +tablet
      min-height: 4.125rem
      max-height: 4.125rem
      overflow: hidden
  &__links
    margin-top: auto
  &__title
    margin: 1rem 0 0 0
  &__copy-summary
    margin: 0 0 1rem 0

.zcl-card--article-theme
  .zcl-card
    &__links
      display: none
```

Desktop

Mobile

Hero Banner

COMPONENT SPECS DOCUMENT

Component - Hero

CMS-218 - Copy Block Component Mockup
DONE

Index

hero

An imposing hero banner to showcase something https://bulma.io/documentation/layout/hero/

.title.is-2

https://bulma.io/documentation/elements/title/

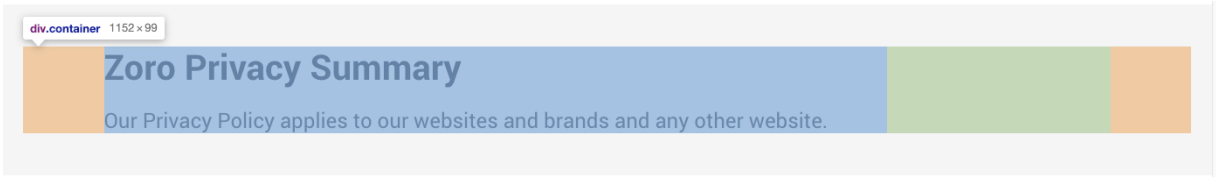
- font-size: 2.5rem (Mobile)
- font-size: 3rem (Desktop override) Typography System

Title

Simple headings to add depth to your page. https://bulma.io/documentation/elements/title/

Requirements

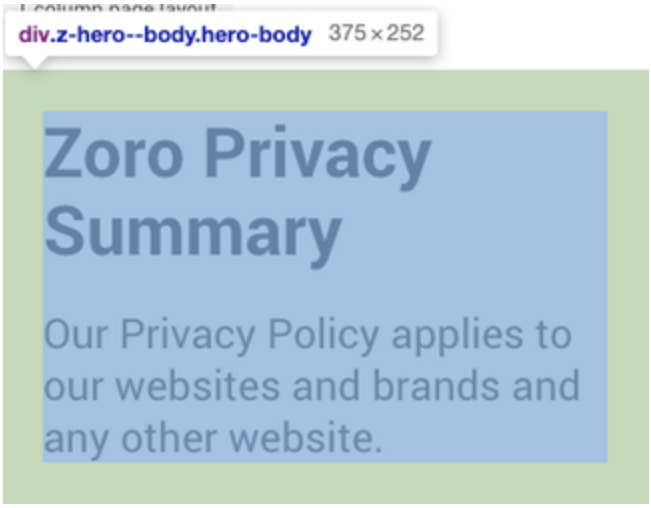
Margin Right

- Modest right padding (green) in Hero container to better alight with copy block content for only Tablet and Desktop
  - 

Top & Bottom Padding

- Top/Bottom padding (green) reduce from 3 rem to 1.5 rem on Mobile
  - Desktop
    -

  - Mobile



Background Color

- White background on Article Template Pages

1-column standards

```
<section class="zcl-hero hero is-light">
  <div class="zcl-hero__body hero-body">
    <div class="zcl-hero__container container">
      <h1 class="zcl-hero__title title is-2 is-spaced">
        *Heading here*
      </h1>
      <p class="zcl-hero__subtitle subtitle is-4">
        *Subtitle here*
      </p>
    </div>
  </div>
</section>
```

CSS

```
.zcl-hero
  &__body
    +mobile
      padding-bottom: 1.5rem
      padding-top: 1.5rem
  &__title, &__subtitle
    +desktop
      padding: 0 16rem 0 0
.zcl-article-page
  .zcl-hero
    background-color: transparent
    &__body
      +tablet
        padding-bottom: 1.5rem
        padding-top: 1.5rem
```

1-column

Grid Layout Solutions

FRAMEWORK SPECS DOCUMENT

Zoro Grid System Layout Solutions

CMS-516 - Card Component - Bulma - Define Grid System options w/ Confluence Doc
DONE

Zoro Grid System is a solution to a problem where we need to layout a data-driven source of components, like Article Cards, for example. Below there are 3 main solutions we have at our disposal, each with their pluses and minuses. ZCL Grid System came from a need, in some scenarios, a Flexbox fallback solution isn't ideal for IE11 users.

⭐ = Current chosen solution for production

Zoro Component Library (ZCL) Grid System ⭐

ZCL Grid System is generated using Bulma's multiline column structure with `gap` or `gapless` options. ZCL Grid System can change to a 1, 2, 3, 4-up structure based on parameters set

Bulma Column Gap Doc: https://bulma.io/documentation/columns/gap/

Pluses

- Use existing Framework column structure so that cells line up
- Customizable to our needs

Minuses

- Takes resources to manage the custom ZCL Grid System
- Might be overkill where CSS Grid / Flexbox can offer more streamlined solutions

CSS Grid System

Pluses

- CSS Grid Layout is the most powerful layout system available in CSS. It is a 2-dimensional system, meaning it can handle both columns and rows, unlike flexbox which is largely a 1-dimensional system. You work with Grid Layout by applying CSS rules both to a parent element (which becomes the Grid Container) and to that element's children (which become Grid Items).
    - Grid is `aware` of the height of the grid cells around it
- Reduced code bloat. Rather than creating extra HTML elements to contain your grid, columns, and rows, your grid *tracks* are created within your stylesheet.
- Improved semantics. Frameworks like Bootstrap often compel developers to venture into *divitis* territory. What's more, grid frameworks don't always use the most semantically sound class names.
- Reduced file sizes. As CSS Grid is native, there is no need to include large libraries like Bootstrap in your projects.
- Speed of development. Once you learn the syntax, prototyping with CSS Grid is fast and efficient.
- Widely supported, https://caniuse.com/#feat=css-grid

Minuses

- Not fully supported for IE11, https://caniuse.com/#feat=css-grid

Notes

Example of a 2-up Tablet view, and 3-up Desktop view using CSS Grid and Flex as a fallback

HTML

```
<!-- Use this grid by calling it -->
<div class="zcl-grid-2-tablet-3-desktop"></div>
```

SASS

```
.zcl-grid-2-tablet-3-desktop
  //IE11 flex hack for grid-like behavior
  display: flex
  flex-wrap: wrap
  flex-direction: row
  //modern browsers
  @supports (display: grid)
    display: grid
    grid-gap: 2rem //Optional. If you don't need Flexbox support, define
gap here. If you do, define padding/margin at component level
    +tablet-only
      grid-template-columns: minmax(auto, 1fr) minmax(auto, 1fr) // 2-up
on tablet, and autosize based on amount of column at current viewport
width
    +desktop
      grid-template-columns: minmax(auto, 1fr) minmax(auto, 1fr)
minmax(auto, 1fr) // 3-up on tablet, and autosize based on amount of
column at current viewport width
```

Flexbox 'Grid' System (Fallback)

Pluses

- Solid support in IE11
- Good for Carousel Components, for example
- Fallback solution for CSS Grid layouts

- Can be laid out in any flow direction (leftwards, rightwards, downwards, or even upwards!)
- Can have display order reversed or rearranged at the style layer (i.e., visual order can be independent of source and speech order)
- Can be laid out linearly along a single (main) axis or wrapped into multiple lines along a secondary (cross) axis
- Can “flex” their sizes to respond to the available space
- Can be aligned with respect to their container or each other
- Can be dynamically collapsed or uncollapsed along the main axis while preserving the container’s cross size.

Minuses

- Not a true Grid solution that is aware of X and Y. But might offer acceptable fallback for IE11.
- Will define padding/margin between each component at the component level