

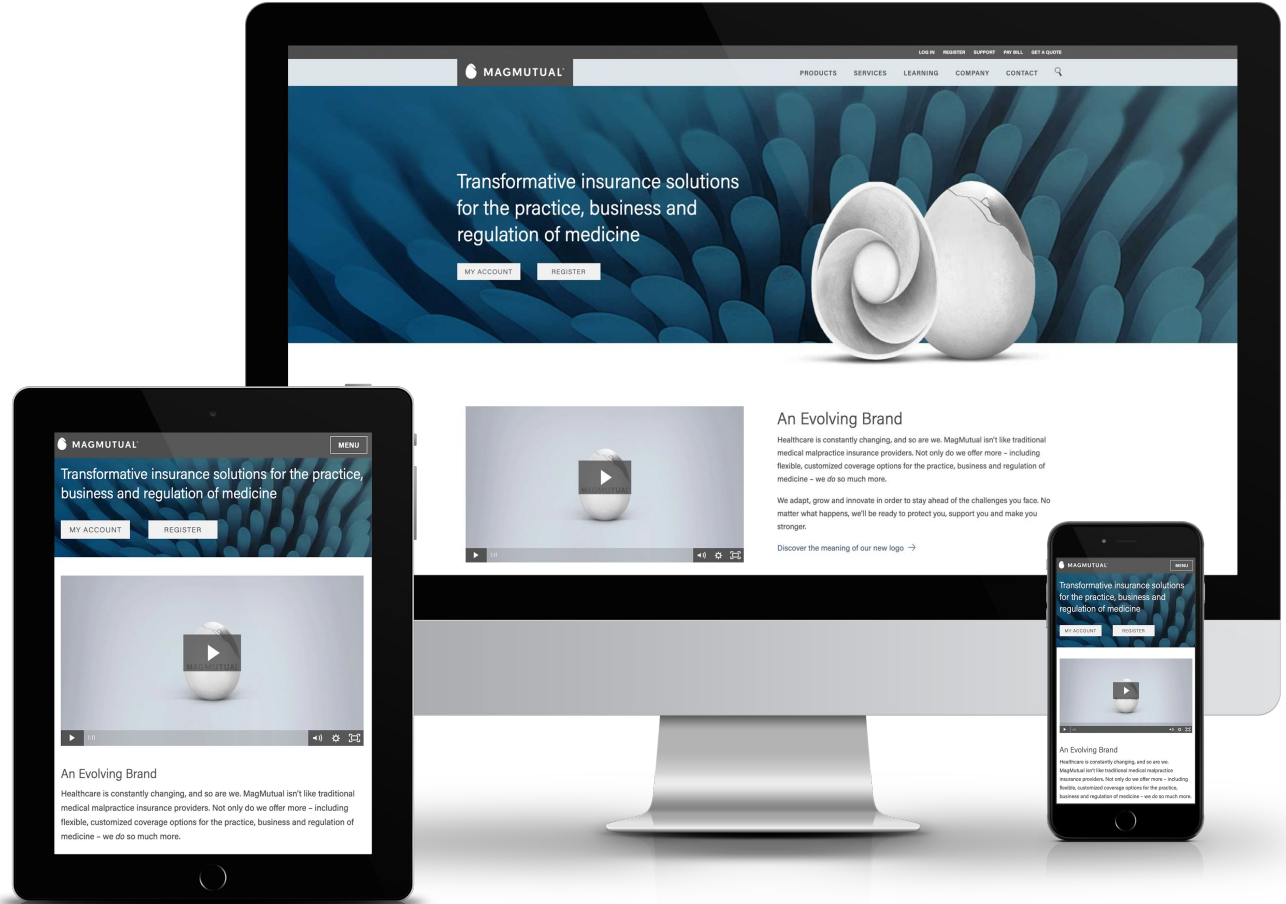


Managing Images in Large Scale Drupal Websites

Demo site is `~/Sites/Docker/drupal8`

Title

Lorem ipsum





Today's Agenda

1. Taking Inventory of Images
2. Planning images usage
3. Art Direction is the exception
4. <picture> tag
5. Image Styles & Responsive Image Styles
6. Demo
7. Q & A

About Mediacurrent



Who We Are

Our people are impelled to constantly improve technology for our clients.



Our Mission

To bring together the most talented team members to provide world-class solutions for the web.






- Over 10 years of Drupal and Front-End Experience
- Trainer and Speaker
- Co-Host of Mediacurrent's Open Waters Podcast

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Head of Learning

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OLYMPUS



USC Libraries



Images and media in general are a critical part of a website. Planning and executing a solid process for handling image styles, responsive image styles and images configurations leads to better images/media management long term.

Properly managing images on your website results in performance improvements among other benefits.

This Session is For

Site Builders

The principles covered in this talk can be implemented in Drupal by experienced site builders. When well executed, these principles improve maintenance and performance.

Developers

Fully understanding how to properly manage images and media on a website is a critical part of being a developer. This knowledge make is possible for knowing what technique to use given the requirements.

Content Managers

Content managers should demand a better user experience when dealing with media. Principles discussed in this talk facilitate a better approach for providing the right images at any time.

Learning Objectives

Objective 1

Learn how to serve the right image at all times and to all devices.

Objective 2

Learn the two ways in which images are served on a website.

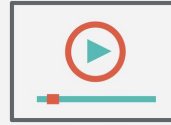
Objective 3

How to effectively manage image styles and responsive image styles.

Taking Inventory of Images



TEXT



VIDEO



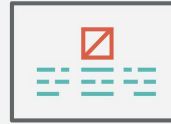
PRESENTATION



TEXT



BLOG



PRESENTATION



MAIN



CATALOG



NEWS



PHOTO GALLERY



NEWS



ANALYTICS



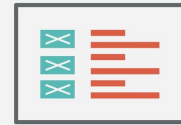
STRUCTURE



ABOUT WORK



USER



MESSAGE



NEWS



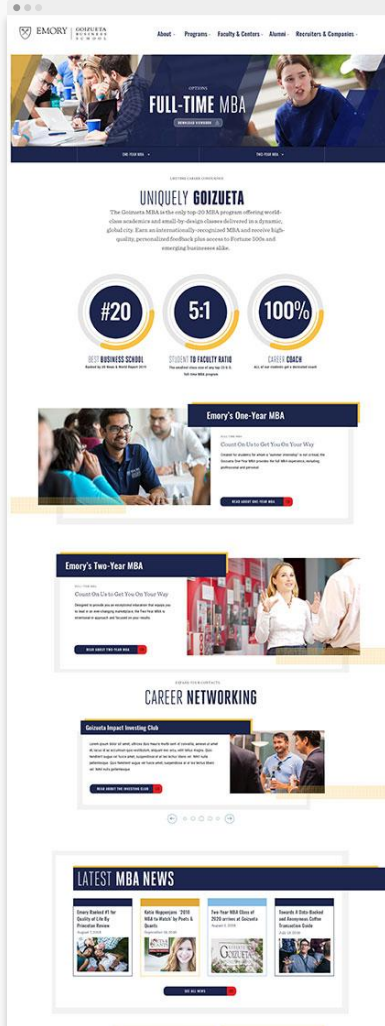
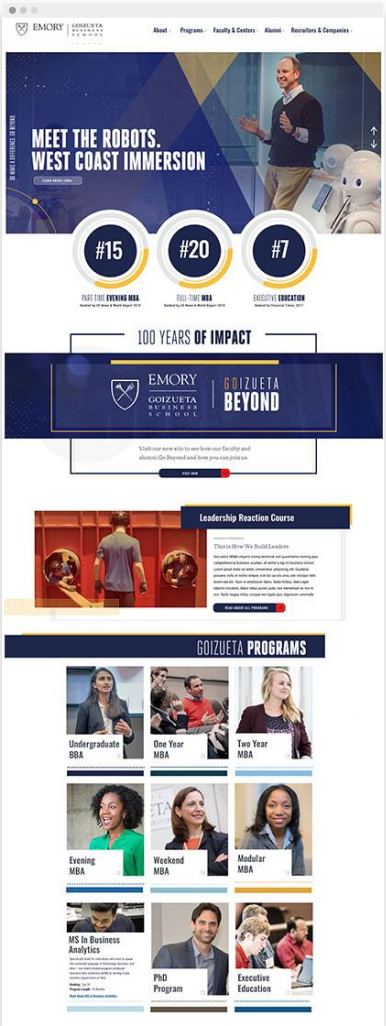
WEB FORM



HOME



PORTFOLIO



The official travel site of the USA

Destinations — Tips — Experiences —

California

San Francisco

Ferry building in San Francisco

1 of 10

Seasonally | Monthly

March - May
6-18 °C

Major Airport: San Francisco (SFO)
State: California

Explore San Francisco's history, culture and modern delights

San Francisco is the kind of quirky place where a top-gating contest might compete for attention with gala balls marking the opening of the symphony, opera and ballet seasons. From Union Square to North Beach to Japanatown, you'll find intriguing neighbourhoods at every turn. The voters of the Best Generation, the winners of the Summer of Love in the late 1960s and the LGBT population have contributed to making the city what it is today.

It's a city of contrasts – old and new, cutting edge and laid-back, urban and pastoral. This is a city in constant evolution.

It's a city of contrasts – old and new, cutting edge and laid-back, urban and pastoral. This is a city in constant evolution.

Add such iconic sights as the Golden Gate Bridge, Fisherman's Wharf, Alcatraz Island and intriguing neighbourhoods as individuals as they are dynamic, and San Francisco becomes capturing, creative and truly unique.

Sightseeing the lions

San Francisco is a place of landmarks and photo opportunities, not the least of which is the Golden Gate Bridge. Crossing the famous suspension bridge that spans San Francisco Bay via bicycle, by car or on foot is a must. There are countless sights that add to San Francisco's allure, especially for first-time visitors:

- Take a ferry to Alcatraz Island, the site of a former federal penitentiary in the middle of the bay.
- Marvel at the winding, hillside Lombard Street lined with flower gardens.
- Stroll Fisherman's Wharf, with its restaurants and attractions.
- Have a picnic facing the colorful Victorian houses near Alamo Square known as "the Painted Ladies."

Chattahoochee River — Whitewater Rafting



[[10496]] by: South Carolina Tourism

Top 10 things to do

Alcatraz

4.5 (10,245) 243 reviews

TripAdvisor Travel Rating

Golden Gate Bridge

4.5 (10,245) 310 reviews

TripAdvisor Travel Rating

Lands End

4.5 (10,245) 18 reviews

TripAdvisor Travel Rating

The official travel site of the USA

Destinations — Tips — Experiences —

South Carolina

Outdoor adventures from mountains to sea

By: Manuela Mezzadri

South Carolina Tourism

From the very first moment, my vacation in South Carolina was an unforgettable adventure.

The Palmetto State is rich in history, beautiful Colonial houses, monuments and plantations. And with its sunny beaches overlooking the Atlantic Ocean, the golf courses, world-renowned national parks and a pleasant climate all year round, it also offers countless opportunities for outdoor activities for its travelers.

Outdoor fun inland...

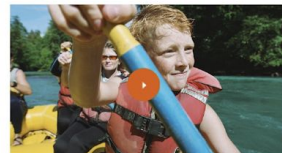
Adventure and water sports abound throughout the state. Thanks to the mild weather, outdoor activities can in fact be enjoyed all year. Rent a boat, go wild on a jet ski, swim or fish in the large lakes set in historic towns and protected areas. A few miles from Columbia, the state capital, we find Lake Murray, which offers beautiful scenery and stunning nature.

Adventure junkies can be carried along by the currents of the Chattooga River while adrenaline rafting. Enjoy the incredible erosion of r&g rapids and sweet waterfalls, surrounded by breathtaking nature.

South Carolina's state parks, including Paris Mountain State Park, are ideal destinations for mountain bike lovers and hikers, with trails and routes of varying levels of difficulty through the woods, lakes and mountains. Or you can discover surprising corners of lush vegetation in a few acres of historic estates like Greenfield.

If you love cars and speed, fasten your seatbelts and get ready for a unique driving experience at the BMW Performance Center in Greer where qualified instructors will help you test and improve your driving skills and make you feel like a professional driver!

Chattahoochee River — Whitewater Rafting



[[10496]] by: South Carolina Tourism

... And on the coast!

My journey continued in the famous towns that wake up the coast. Many water sports for all levels and tastes are available, from stand-up paddle boarding, to fishing on the high seas, to parasailing to kayaking. During my kayak trip, I had a unique and unexpected encounter: I found myself paddling with a pair of curious and playful dolphins. Extraordinary!

More information

- Chattahoochee River
- Lake Murray
- Paris Mountain State Park
- City of Greenville

You may enjoy

- US National Parks

More information

- Myrtle Beach
- Historical Charleston
- Kayaking in South Carolina

The official travel site of the USA

Destinations — Tips — Experiences —

Pacific Northwest

By Julie H. Case

The lush Pacific Northwest

Home to volcanic vistas, an abundance of orchards and vibrant urban areas, a road trip is an ideal way to catch all of the amazing sights for which this region is famous. In the span of just a few days, you can experience everything from wine tasting to whale watching to sightseeing — all while enjoying the freedom of the open road.

Route distance: 17400 km
Suggested time: 4 days



Portland, Oregon

Start your tour of the Pacific Northwest by flying into Portland, Oregon's **International Airport**. Here, rent a car and start exploring this unique U.S. city, which draws art and culture fans in droves. Fuel up with a pastry from **Woodfin Doughnut** in Clatsop and a fair-trade latte from **Stumptown Coffee Roasters** before you explore the city. Head to the **Lin Yu Chinese Garden** to witness an ancient tea ceremony or to the **Portland Art Museum** to see the more than 1200 Japanese works. Don't forget to peruse **Powell's City of Books** (which covers a full city block and holds more than 1.5 million volumes) and the boutique shops in the **Portland District** before you leave. Oregon doesn't have a sales tax, which makes souvenir shopping even more rewarding. On weekends, the city's waterfront park hosts the **Portland Saturday Market**, a massive open-air or craft market where you can purchase everything from clothing to delicious treats.



More information

- Portland International Airport
- Portlandian traditions
- Here

You may enjoy



Essence: Visiting the Columbia Gorge



Explore your ideal journey by interest

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Lifestyle

Food & Drink

Cities & Towns

Outdoors

Culture & History

Entertainment

Trips



Trip - 2 weeks +

The Yellowstone Loop: 11 Stops You Must Make on an Epic Western Road Trip



Trip - 2 weeks +

Craft Beer Trail



Trip - 6 days

Pacific Coast Highway Road Trip



Trip - 1-2 weeks

Southwest Landscapes Trip

Image Styles



Images Styles: Best Practices

- Take full stock of entire site image requirements (if possible)
- Avoid creating image styles before fully understanding the images requirements
- Whenever possible build reusable image styles (no one offs)
- Aspect ratios are your friend
- Use descriptive names but not directly associated to a specific image or pages on the site
- Use multipliers (i.e. 2x)

Images Styles: Naming Conventions

Bad name	Good name
Homepage Article Image homepage_article_image	16:9 Max 720px 16_9_max_720

- Too vague
- Lacks dimensions or aspect ratio info
- Too restrictive

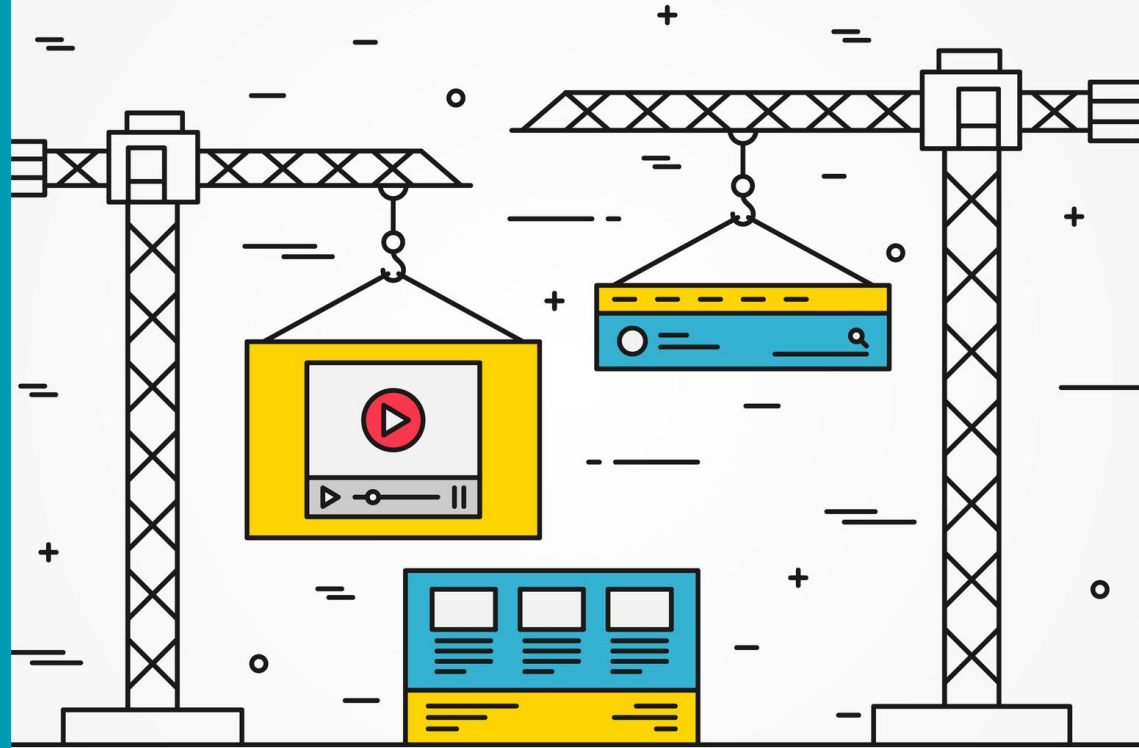
- Can be used across entire site where aspect ratio and dimensions are met
- Not associated with specific page or image
- Reusable

Images Styles: Naming Conventions

Bad name	Good name
Home Image Thumb Wide <code>home_image_thumb_wide</code>	4:3 Max 300px <code>4_3_max_300</code>

- Restricted to only one image type
 - Restricts usage to only homepage
 - Lacks dimensions or aspect ratio info
- Can be used on any image with a 4:3 aspect ratio that meets size requirements
 - Not restricted to homepage
 - Potentially reduces number of image styles

Responsive Image Styles



WEBSITE BUILDER CONCO

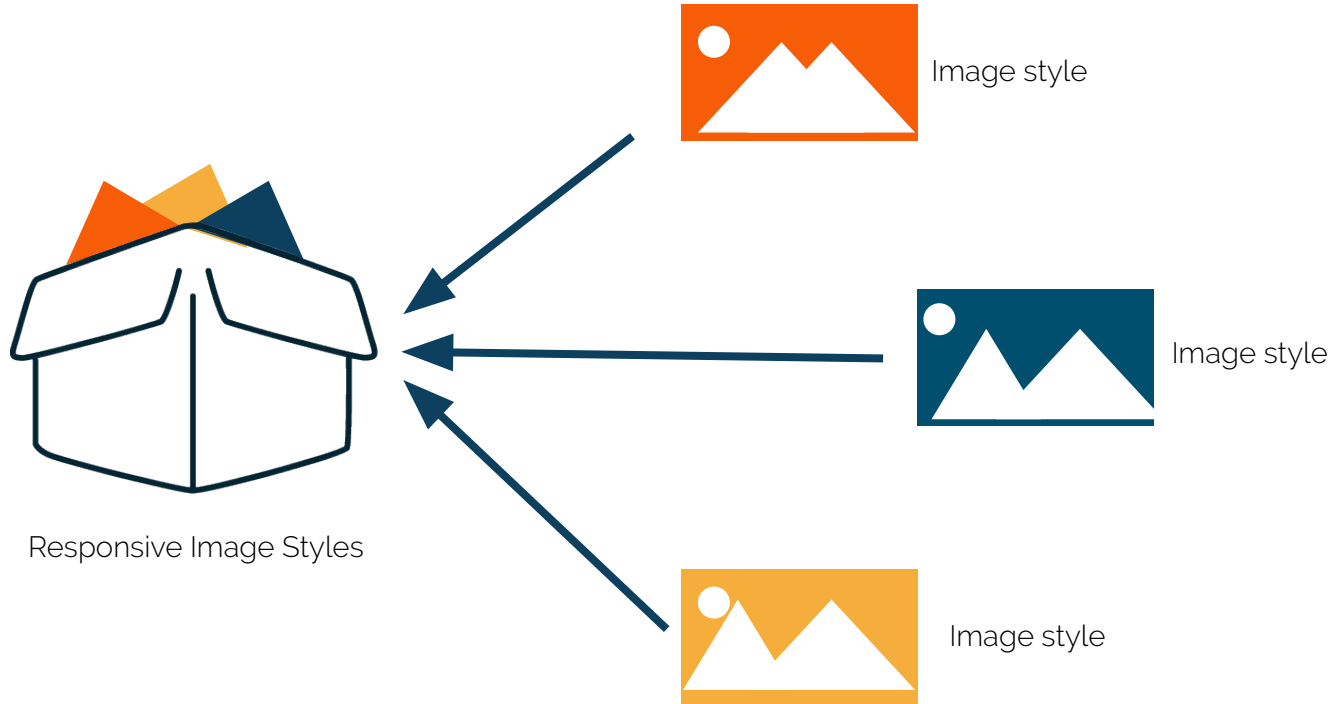
Responsive Images Styles:

Not the same as Image Styles

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- Aspect ratios are your friend
- Use descriptive names but not directly associated to a specific image or pages on the site
- Use multipliers (i.e. 2x)

Responsive Images Styles:

Not the same as Image Styles



Responsive Images Styles:

Naming conventions

- Not as strict as naming image styles
- Image style names should target images types
- RESPONSIVE image styles names should target Use Cases

Example:

- Bad: **Homepage Gallery Images 1600x750**
- Good: **Image Gallery** or **Gallery**

Responsive Images Styles:

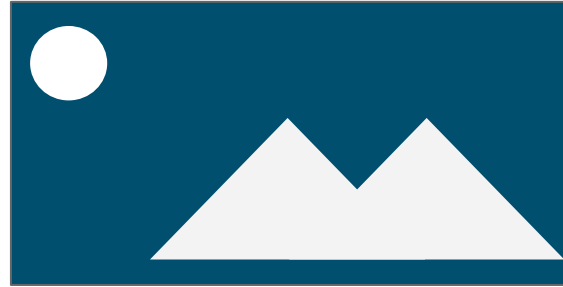
Naming conventions



16:9 Max 460px



16:9 Max 960px



16:9 Max 1400px



Gallery

Art Direction



Art Direction



Art Direction: <picture> Element

```
<picture>
  <source media="(max-width: 720px)" srcset="mobile.jpg, mobile-2x.jpg">
  <source media="(max-width: 1200px)" srcset="tablet.jpg, tablet-2x.jpg">
  <source srcset="desktop.jpg, desktop-2x.jpg">
  
</picture>
```

Art Direction: <picture> Element

```
<picture>
  <source media="(min-width: 1200px)" srcset="desktop.jpg, desktop-2x.jpg">
  <source media="(min-width: 720px)" srcset="tablet.jpg, tablet-2x.jpg">
  <source srcset="mobile.jpg, mobile-2x.jpg">
  
</picture>
```


Identifying the Gap

Variable	Things developers know during development	Things the browser knows when rendering images
Viewport dimensions	NO	YES
Image size relative to viewport	YES	NO
Screen density	NO	YES
Images dimensions	YES	NO

Switch Resolution

(most cases)





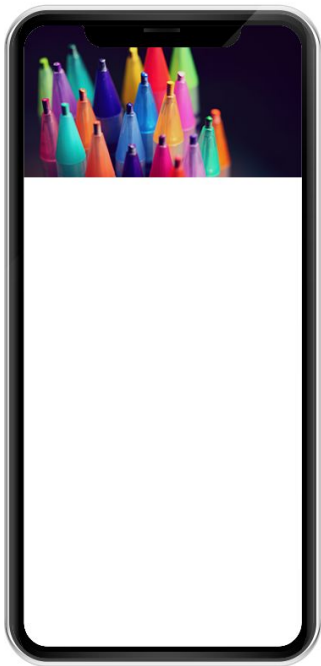
Letting the Browser do the Work

```
<img sizes=" " srcset=" " alt=" " />
```

Letting the Browser do the Work

```
<img sizes="(min-width: 720px) 50vw, 100vw"  
  srcset="small.jpg 720w, medium.jpg 1200w, large.jpg 1900w"  
  alt="Everything is awesome!" />
```

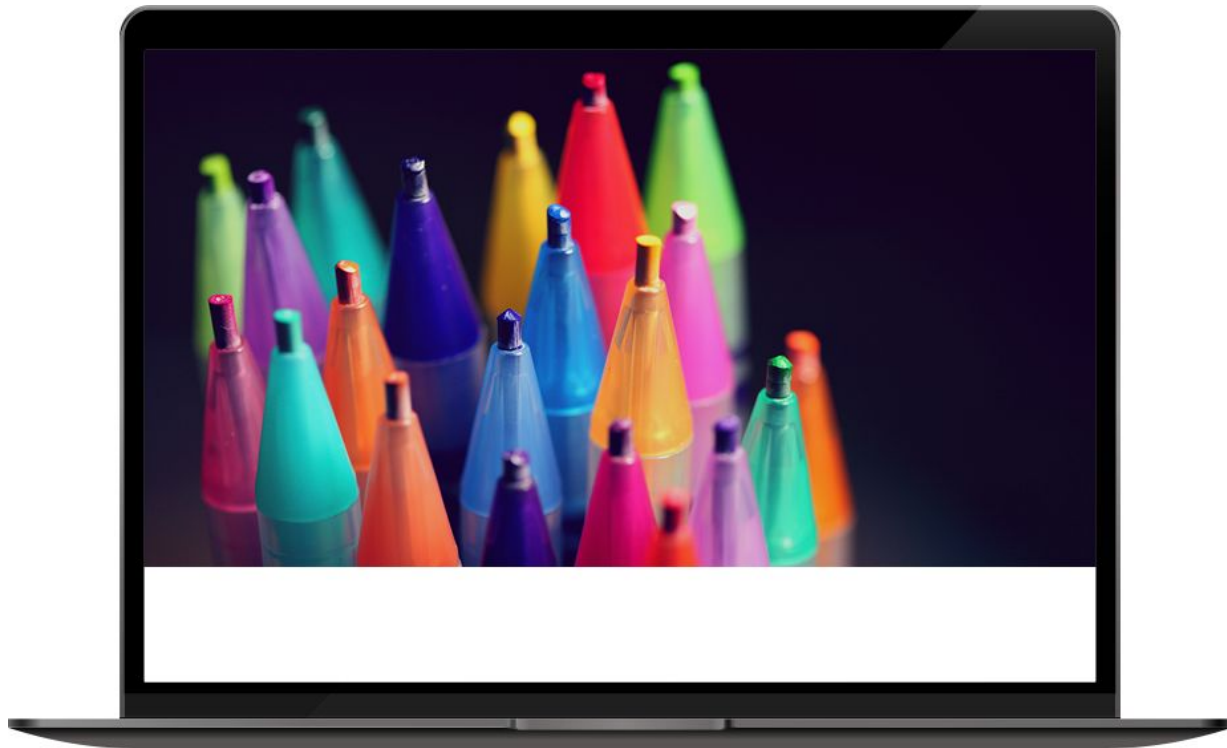
Rendering



Letting the Browser do the Work

```
<img sizes="100vw"  
  srcset="small.jpg 720w, medium.jpg 1200w, large.jpg 1900w"  
  alt="Everything is awesome!" />
```

Rendering



Closing the Gap

Variable	Things developers know during development	Things the browser knows when rendering images
Viewport dimensions	NO	YES
Image size relative to viewport	YES	NO YES! via sizes
Screen density	NO	YES
Images dimensions	YES	NO YES! via srcset

Documenting Image Styles



Name	Machine Name	Aspect Ratio/Dimensions	Usage
Hero Large (1600)	hero_large	Max width 1600px with auto height	This image style can be used on most hero images as well as large banners on desktops.
Hero Large 2x (3200)	hero_large_2x	Max width 3200px with auto height	This is the high resolution (retina version) of image style in previous line.
Hero Medium (1200)	hero_medium	Max width 1200px with auto height	This image style can be used on most hero images as well as large banners on small desktops or tablets.
Hero Medium 2x (2400)	hero_medium_2x	Max width 2400px with auto height	This is the high resolution (retina version) of image style in previous line.
Hero Small (768)	hero_small	Max width 768px with auto height	This image style is to be used on mobile devices for hero and banner images.
Hero Small 2x (1536)	hero_small_2x	Max with 1536px with auto height	This is the high resolution (retina version) of image style in previous line.
Rectangular 768px	rectangular_768px	Max width of 768px with auto height	This image style can be used on content-cards that have a horizontal layout usually rectangular.
Rectangular 2x 1536px	rectangular_1536px	Max width of 1536 with auto height	This is the high resolution (retina version) of image style in previous line.
Rectangular 450px	rectangular_450px	Max width of 450px with auto height	This image style can be used on content-cards that have a horizontal layout usually rectangular.
Rectangular 2x 900px	rectangular_900px	Max width of 900px with auto height	This is the high resolution (retina version) of image style in previous line.

Responsive Image Styles			
Name	Machine Name	Usage	Notes
Hero or Banner	hero_or_banner	To be used on any hero or large banner image	These images only have a width specified. Height is auto calculate image being uploaded.
Square Image	square_image	Any image with aspect ratio of 1:1 (square).	Max width of large image style is 768px with a 2x equivalent of 1536px
Rectangular Auto Height	rectangular	Any horizontal/rectangular image that has no height requirement.	Max width of rectangular image style is 768px with a 2x equivalent of 1536px
Thumb	thumb	Intended use is for product thumbnails	Max width of image is 120px with 2x equivalent.

Resources

Responsive Images 101 - 9 Part Series

<https://cloudfour.com/thinks/responsive-images-101-definitions/>

Srcset and Sizes

<http://ericportis.com/posts/2014/srcset-sizes/>

Responsive Images in Drupal using srcset and sizes

<https://chromatichq.com/blog/responsive-images-drupal-8-using-srcset>

The unexpected power of Viewport unit in CSS

<https://www.lullabot.com/articles/unexpected-power-of-viewport-units-in-css>

Image Widget Crop Module (Video tutorial)

<https://www.youtube.com/watch?v=lvjgMEEAs6s>



Thank you!



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