

# Best Practices for Responsive Content

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During this workshop, we will discuss and explore options for adapting text, lists, tables, and images for smaller screens, including using built-in Flare features such as responsive layouts. In addition, we will explore options for single sourcing and dynamically adapting content for use on phones, tablets, PCs, and even print targets.

## Overview

- Responsive web design (RWD)
- Responsive web content (RWC)

### RWD and RWC: What's the difference?

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RWD - adapting the **layout and design** to the viewing environment

RWC - adapting the **content** to the viewing environment

### Solutions

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display: none;

print - condition tags

## Responsive Web Design (RWD)

Ethan Marcotte (2010)

### Key question

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"What should it look like?"

### Examples

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- [wikipedia.com](http://wikipedia.com)
- [bostonglobe.com](http://bostonglobe.com)

### RWD challenges

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- Too wide
- Too big
- Too much
- Won't work

### RWD elements

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- Text
- Tables
- Images
- Navigational elements
- Interactive elements
- Positioned elements

## RWD solutions

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- Responsive layouts
- Thumbnails
- Drop-downs, expanding links, togglers (JavaScript)
- jQuery plugins
- Print: condition tags

## RWD text example

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rem measurement unit

Future

CSS calc() function: `html { font-size: calc(1em + 1vw); }`

## RWD image example

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```
img {
  min-height : auto;
  min-width  : 480px; // max width of mobile medium
  max-height : auto;
  max-width  : 100%;
}
```

## RWD table example - CSS

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```
@media (max-width: 47.9375em) {
table {
  display: block;
  width: 100%;
}

table caption { display: block; }

table thead {
  display: none;
  visibility: hidden;
}

table tbody, table tr, table th, table td {
  border: 0;
  display: block;
  text-align: left;
}

table th[data-title]:before,
table td[data-title]:before {
  content: attr(data-title) ": ";
  font-weight: bold;
}

table td:empty { display: none; }
```

See [codepen.io/aarongustafson/pen/ucJGv](https://codepen.io/aarongustafson/pen/ucJGv)

## RWD table example – jQuery

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See [jsbin.com/apane6/14](https://jsbin.com/apane6/14)

# Reponsive Web Content (RWC)

## Key question

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"What should it say?"

## RWC challenges

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- Wrong terminology
- Writing style
- Different icons
- Different step content/order

## RWC elements

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- Text
- Lists
- Tables
- Images

## RWC solution

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Media queries plus one of the following:

- Style classes/IDs
- Condition tags
- Data attributes
- Print – variables

## RWC media queries

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```
/* phone */
@media (max-width: 767px) { ... }

/* tablet */
@media (min-width: 768px) and (max-width: 1279px) { ... }

/* desktop */
@media (min-width: 1280px) { ... }
```

## RWC solution – CSS classes

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Element	Value
div*	block
span, img	inline
h1-h6, p, ol, ul	block
li (list item)**	list-item
table*	table
table row	table-row
table column	table-column

\* plus visibility, height, width, and position

\*\* plus visibility and height

## RWC classes - code

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<span class="desktop">Click</span><span class="phone tablet">Tap</span> OK

```
/* phone */
@media (max-width: 767px) {
  body .phone { display: block; }
  body span.phone { display: inline; }
  body img.phone { display: inline; }
  body li.phone { display: list-item; height: auto; visibility: visible; }
  body table.phone { position: relative; visibility: visible; height: auto; width: auto; }
  body tr.phone { display: table-row; }
}

/* tablet */
@media (min-width: 768px) and (max-width: 1279px) {
  body .tablet { display: block; }
  body span.tablet { display: inline; }
  body img.tablet { display: inline; }
  body li.tablet { display: list-item; height: auto; visibility: visible; }
  body table.tablet { position: relative; visibility: visible; height: auto; width: auto; }
}
body tr.tablet { display: table-row; }
}

/* desktop */
@media (min-width: 1280px) {
  body .desktop { display: block; }
  body span.desktop { display: inline; }
  body img.desktop { display: inline; }
  body li.desktop { display: list-item; height: auto; visibility: visible; }
  body table.desktop { position: relative; visibility: visible; height: auto; width: auto; }
}
body tr.desktop { display: table-row; }
}

.phone, .tablet, .desktop { display: none; }

table.desktop, table.tablet, table.phone { display: table; position: absolute; visibility: hidden; height: 0; width: 0; }

li.phone, li.tablet, li.desktop { display: block; height: 0; visibility: hidden; }
```

## RWC solution - conditions

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<p MadCap:conditions="conditions.PhoneOnly">This paragraph is "PhoneOnly."</p>

```
[data-mc-conditions] { position: relative; }
[data-mc-conditions="conditions.DesktopOnly"] { display: none; }
[data-mc-conditions="conditions.TabletOnly"] { display: none; }
[data-mc-conditions="conditions.PhoneOnly"] { display: none; }

@media (min-width: 1280px) { [data-mc-conditions="conditions.DesktopOnly"] { display: inline-block; } }

@media (min-width: 768px) and (max-width: 1279px) { [data-mc-conditions="conditions.TabletOnly"] { display: inline-block; } }
@media (max-width: 767px) { [data-mc-conditions="conditions.PhoneOnly"] { display: inline-block; } }
```

## RWC solution – data attribute

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```
<p data-rwc="PhoneOnly">This paragraph is "PhoneOnly."</p>
```

```
[data-rwc="DesktopOnly"] { display: none; }  
[data-rwc="TabletOnly"] { display: none; }  
[data-rwc="PhoneOnly"] { display: none; }
```

```
@media (min-width: 1280px) { [data-rwc="DesktopOnly"] { display: inline-block; } }  
@media (min-width: 768px) and (max-width: 1279px) { [data-rwc="TabletOnly"] { display:  
inline-block; } }  
@media (max-width: 767px) { [data-rwc="PhoneOnly"] { display: inline-block; } }
```

## Sample project

I have created a sample project to demonstrate best practices for responsive content. You can download it at:

[bit.ly/MW19DeLoach](http://bit.ly/MW19DeLoach)

## About the presenter

Scott DeLoach is the Founder of ClickStart, where he provides training and consulting for MadCap Flare, embedded user assistance, JavaScript/jQuery, CSS, and HTML5. He has been developing browser-based help systems for 25+ years, and he has received four Best in Show awards for his work from STC.

Scott is a certified Flare and Doc-to-Help instructor, and he is the author of *MadCap Flare: The Definitive Guide*, *CSS to the Point*, and *HTML5 to the Point*. For more information about Scott's books see [www.lulu.com/clickstart](http://www.lulu.com/clickstart).

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