

# Best Practices for Responsive Content

*Scott DeLoach, ClickStart, Miami Beach, USA*

In this tutorial, I will present best practices and real-world examples for responsive web design (RWD) and responsive web content (RWC). We will examine options for adapting text, lists, tables, and images for smaller screens. We will also discuss how to dynamically adapt content for use on phones, tablets, and PCs.

## RWD vs RWC: what's the difference?

- RWD - adapting the layout and design to the viewing environment
- RWC - adapting the content to the viewing environment

## Responsive web design (RWD)

"What should it look like?"

## RWD challenges

### Why?

- Too wide/tall
- Too much content
- Column/table-based layout
- Keyboard/mouse dependent

### What?

- Text
- Images
- Tables
- Hover and other interactive effects
- Layout

## RWD text

```
p { font-size: calc(1rem + 1vw); }
```

## RWD images

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

## RWD tables (CSS)

<https://codepen.io/aarongustafson/pen/ucJGv>

## RWD tables code (jQuery)

<http://jsbin.com/apane6/14>

## RWD hover code

active pseudo class

```
a:active { background: yellow; }
```

Future

```
@media (hover: hover) and (pointer: fine) { a:hover { background: yellow; } }
```

## RWD layout options

- display: table
- flex
- grid

## RWD display:table code

```
<div class="dispTable"><div class="tableRow"><div class="tableCol">content</div></div></div>
```

```
div.dispTable { display: table; } div.tableRow { display:table-row; } div.tableCol { display:table-cell; }
```

## RWD flex code

```
<div class="dispFlex"><div class="box">content</div><div class="box">content</div></div>
```

```
div.dispFlex { display: flex; flex-wrap: nowrap; } div.box { width: 300px; }
```

## RWD grid code

```
<div class="dispGrid"><div class="box">content</div><div class="box">content</div></div>
```

```
div.dispGrid { display: grid; grid-template-columns: repeat(auto-fill, minmax(20rem, 1fr)); grid-column-gap: 1rem; grid-row-gap: 1rem; }
```

## Responsive web content (RWC)

"What should it say?"

## RWC challenges

### Why?

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

### What?

- Text
- Lists
- Tables
- Images

## RWC solutions

Media queries plus one of the following:

- Style classes/IDs
- Data attributes

## RWC solutions: media queries

```
/* phone */ @media (max-width: 767px) { ... }
/* tablet */ @media (min-width: 768px) and (max-width: 1279px) { ... }
/* desktop */ @media (min-width: 1280px) { ... }
```

## RWC solution: style classes code

`<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: data attributes code**

```
<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; } }
```

### **About the presenter**

Scott DeLoach is the Founder of Click**Start**, where he provides training and consulting for MadCap Flare, embedded user assistance, CSS, HTML5, and the design and development of policies and procedures, online help, and knowledge bases. Scott has been developing browser-based help systems for over 20 years, and he has received four Best in Show awards for his work from STC. He is an STC Fellow.

Scott is a certified Flare instructor, and he is the author of MadCap Flare: The Definitive Guide, CSS to the Point, and HTML5 to the Point. For more information, see [www.clickstart.net](http://www.clickstart.net).

**Contact:**  
**[scott@clickstart.net](mailto:scott@clickstart.net)**