

Responsive Web Design(RWD) in RiSE – What is Possible?

Presented by:

Association Technology Solutions



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- Serving iMIS community since 1995
- Full-service Authorized iMIS Solutions Provider (AiSP)
- Application development to extend the functionality of iMIS
- 2015 Authorized iMIS Solution Provider (AiSP) of the Year

Hosted by



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What is RWD?

- Responsive web design (RWD) is an approach to web design that provides an optimal viewing and interaction experience across a wide range of devices (from desktop computer monitors to mobile phones).
- RWD works by using:
 - CSS3 media queries (**breakpoints**)
 - fluid layout (**relative size units**)
 - flexible images (**max-widths**)
 - And proportion-based grid system (**bootstrap**)



What's a Breakpoint?

- Breakpoints are the point at which your site's content will respond with the best possible layout for a given screen-size.
- Leveraging the cascading nature of CSS, breakpoints are case statements in your CSS that allow you to override previously defined style rules and/or write new ones.
- They are the heart of RWD.

What's a Breakpoint?

With Breakpoints



Without Breakpoints

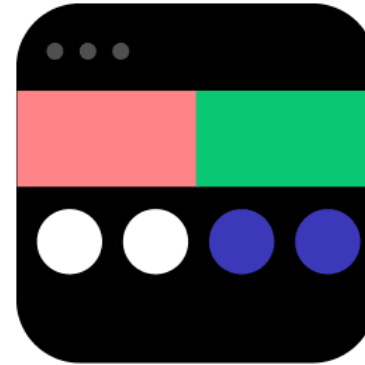


Image C/O <http://blog.froont.com/9-basic-principles-of-responsive-web-design/>

Responsive vs. Adaptive Breakpoints

RESPONSIVE

`@media (min-width) {CSS RULES}`

- Min-width: greater than
- Max-width: less than

ADAPTIVE

`@media (width) {CSS RULES}`

Preset widths

- 1024px: Tablet Landscape
- 768px: Tablet Portrait, etc..

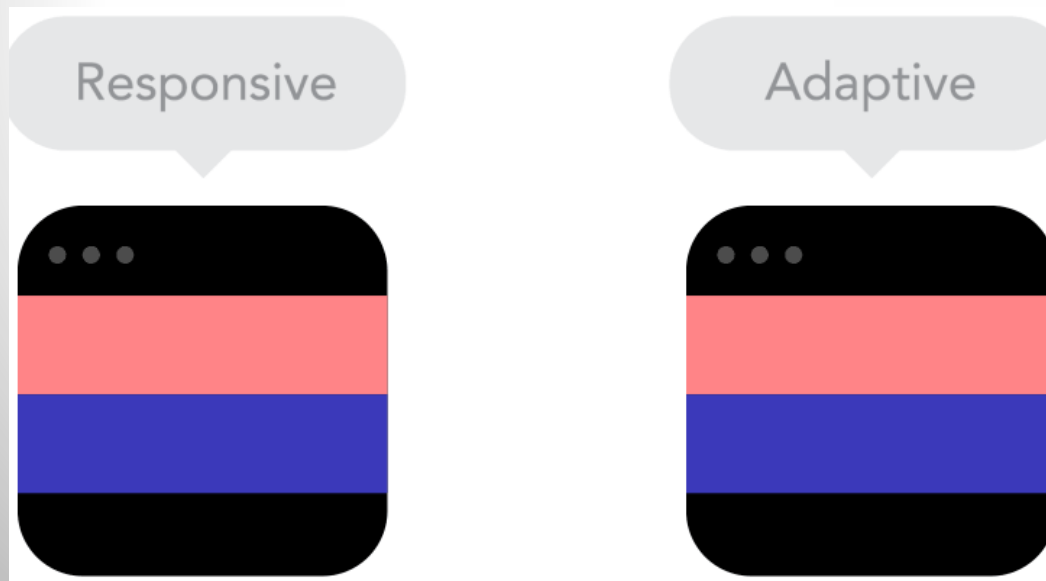


Image C/O <http://blog.froont.com/9-basic-principles-of-responsive-web-design/>

Relative Size Units

- Ensures fluid layout
- Static units(px) will break RWD.
- Relative units(%) will re-size based on available space.
- Let Bootstrap do the layout heavy lifting.

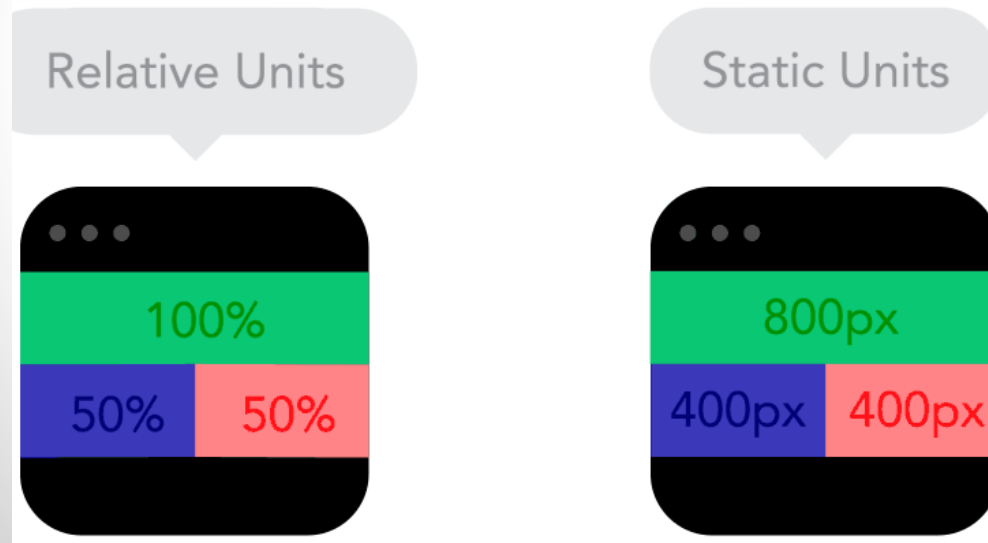


Image C/O <http://blog.froont.com/9-basic-principles-of-responsive-web-design/>

Relative Size Units



Image C/O <http://blog.froont.com/9-basic-principles-of-responsive-web-design/>

Flexible Images

min/max height and width

- No inline widths on images!
- Retain control of image display with min/max height and width.
- Can re-define for each breakpoint.
- Use `max-width:100%`!important on `img ...` to ensure images will not blow out display.

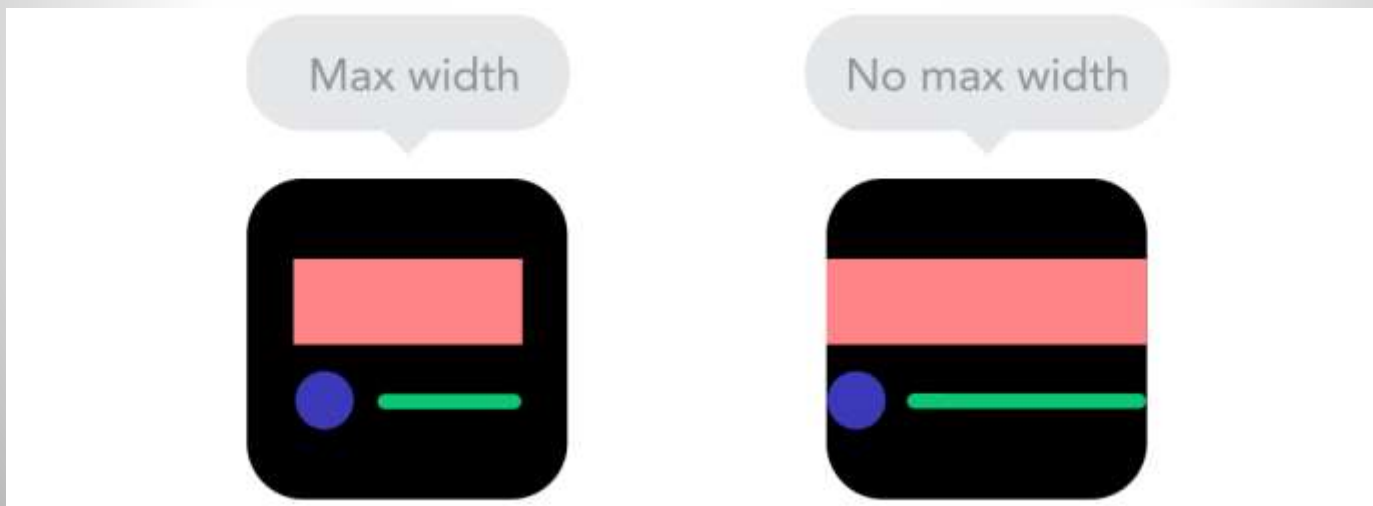
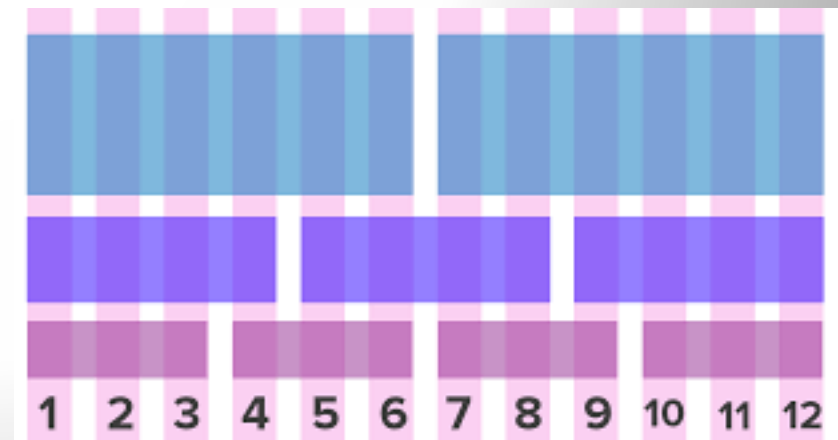


Image C/O <http://blog.froont.com/9-basic-principles-of-responsive-web-design/>

Grid System Shift in RiSE

- Grid System = Wireframe
 - Defines layout
 - Library brings in default responsive behavior
- Pre 20.1.1 used YUI(Yahoo User Interface) library as its grid-system. As of August of 2014 YUI is no longer being maintained.
- Was replaced with Twitter Bootstrap in later versions
- Easy way to check? View page source and search for YUI.
- Used in:
 - Masterpage mark-up
 - App_Theme Css
 - Page Layouts



What is Bootstrap

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap is what makes RiSE responsive.
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins.
- **PLEASE NOTE:** Only support for basic layout is included in RiSE out of the box. If you want to use Bootstrap for other UI components you must include the base CSS and javascript.
- For more information see: getbootstrap.com

Putting it all Together...

What is Possible?

Work Smart! Not Hard!...BUILD MOMENTUM

- Start with out of the box cities_responsive.master and theme of your choice.
 - Plain vanilla
 - Pretty straightforward wireframe
 - Edit to customize to your needs
- Use Browser tools to inspect mark-up and computed CSS. Shows you what CSS is applied as well as CSS that is being overwritten.
- Update what you can, Override what you can't
 - App_themes/zzCustom.css
- Understand the nesting and know where to go for what.
 - For global layout (header, footer), edit masterpage.aspx
 - For page level content layout – Page Layout
 - For global and page level typographic style (h1, h2, p, li), edit the App_theme CSS or write your own in zzCustom.css

Putting it all Together...

What is Possible?

- Every page is a blank canvas
 - Can select different page layouts to fit the content
 - Create your own custom ones.
 - Embed content for use on similar pages.
 - Add class to body tag to override styles and differentiate
- Use jQuery to move content into the sidebar:
`jQuery('#ste_container_ciSidebarRelocate').appendTo('.SideBarRelocatePlaceholder');`
- Need more UI Tools in your toolbox? Start with Bootstrap Components
 - <http://getbootstrap.com/components/>
- Use breakpoints to address display issues and optimize user experience.
 - Toggle content on or off
 - Change how elements appear (formatting)
 - Change how elements behave (layout)
- Be creative! Focus on the end user experience. Don't be afraid to experiment to see what works!

<http://getbootstrap.com/components>

Components

Over a dozen reusable components built to provide iconography, dropdowns, input groups, navigation, alerts, and much more.

```
var  
  backend =  
    'syncano.io';  
$.get(backend).  
  .done();  
syncano
```

Syncano is a serverless application platform to easily build powerful apps. [API via Carbon](#)

Glyphicons

Available glyphs

Includes over 250 glyphs in font format from the Glyphicon Holdings set. Glyphicons Holdings are normally not available for free, but their creator has made them available for Bootstrap free of cost. As a thank you, we only ask that you include a link back to Glyphicons whenever possible.

 glyphicon glyphicon-asterisk	 glyphicon glyphicon-plus	 glyphicon glyphicon-euro	 glyphicon glyphicon-eur	 glyphicon glyphicon-minus	 glyphicon glyphicon-cloud	 glyphicon glyphicon-envelope	 glyphicon glyphicon-pencil
 glyphicon glyphicon-glass	 glyphicon glyphicon-music	 glyphicon glyphicon-search	 glyphicon glyphicon-heart	 glyphicon glyphicon-star	 glyphicon glyphicon-star-empty	 glyphicon glyphicon-user	 glyphicon glyphicon-film
 glyphicon glyphicon-list-large	 glyphicon glyphicon-list	 glyphicon glyphicon-list-alt	 glyphicon glyphicon-ok	 glyphicon glyphicon-remove	 glyphicon glyphicon-zoom-in	 glyphicon glyphicon-zoom-out	 glyphicon glyphicon-off
 glyphicon glyphicon-signal	 glyphicon glyphicon-cog	 glyphicon glyphicon-trash	 glyphicon glyphicon-home	 glyphicon glyphicon-file	 glyphicon glyphicon-time	 glyphicon glyphicon-read	 glyphicon glyphicon-download-alt
 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock	 glyphicon glyphicon-lock

- Glyphicons
- Dropdowns
- Button groups
- Button dropdowns
- Input groups
- Navs
- Navbar
- Breadcrumbs
- Pagination
- Labels
- Badges
- JavaScript
- Page header
- Thumbnails
- Alerts
- Progress bars
- Media object
- List group
- Panel
- Responsive embed
- Wells
- Back to top
- Previous theme

Button groups

Group a series of buttons together on a single line with the button group. Add on optional JavaScript radio and checkbox style behavior with [our buttons plugin](#).

Tooltips & popovers in button groups require special setting

When using tooltips or popovers on elements within a `.btn-group`, you'll have to specify the option `container: 'body'` to avoid unwanted side effects (such as the element growing wider and/or losing its rounded corners when the tooltip or popover is triggered).

Ensure correct `role` and provide a label

In order for assistive technologies – such as screen readers – to convey that a series of buttons is grouped, an appropriate `role` attribute needs to be provided. For button groups, this would be `role="group"`, while toolbars should have a `role="toolbar"`.

One exception are groups which only contain a single control (for instance the [justified button groups](#) with `<button>` elements) or a dropdown.

In addition, groups and toolbars should be given an explicit label, as most assistive technologies will otherwise not announce them, despite the presence of the correct `role` attribute. In the examples provided here, we use `aria-label`, but alternatives such as `aria-labelledby` can also be used.

Basic example

Wrap a series of buttons with `.btn` in `.btn-group`.

EXAMPLE

Left Middle Right

```
<div class="btn-group" role="group" aria-label="...">
  <button type="button" class="btn btn-default">Left</button>
  <button type="button" class="btn btn-default">Middle</button>
  <button type="button" class="btn btn-default">Right</button>
</div>
```

Copy

Button toolbar

Combine sets of `<div class="btn-group">` into a `<div class="btn-toolbar">` for more complex components.

Glyphicons

Dropdowns

Button groups

Basic example

Button toolbar

Sizing

Nesting

Vertical variation

Justified button groups

Button dropdowns

Input groups

Navs

Navbar

Breadcrumbs

Pagination

Labels

Badges

Jumbotron

Page header

Thumbnails

Alerts

Progress bars

Media object

List group

Panels

Responsive embed

Wells

Back to top

Preview theme

Button dropdowns

Use any button to trigger a dropdown menu by placing it within a `.btn-group` and providing the proper menu markup.

Plugin dependency

Button dropdowns require the [dropdown plugin](#) to be included in your version of Bootstrap.

Single button dropdowns

Turn a button into a dropdown toggle with some basic markup changes.

EXAMPLE



```
<!-- Single button -->
<div class="btn-group">
  <button type="button" class="btn btn-default dropdown-toggle" data-toggle="dropdown" aria-haspopup="true"
aria-expanded="false">
    Action <span class="caret"></span>
  </button>
  <ul class="dropdown-menu">
    <li><a href="#">Action</a></li>
    <li><a href="#">Another action</a></li>
    <li><a href="#">Something else here</a></li>
    <li role="separator" class="divider"></li>
    <li><a href="#">Separated link</a></li>
  </ul>
</div>
```

Copy

Split button dropdowns

Similarly, create split button dropdowns with the same markup changes, only with a separate button.

EXAMPLE



[Glyphicons](#)

[Dropdowns](#)

[Button groups](#)

[Button dropdowns](#)

[Single button dropdowns](#)

[Split button dropdowns](#)

[Sizing](#)

[Dropup variation](#)

[Input groups](#)

[Navs](#)

[Navbar](#)

[Breadcrumbs](#)

[Pagination](#)

[Labels](#)

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[Jumbotron](#)

[Page header](#)

[Thumbnails](#)

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Questions & Answers



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Questions & Answers



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Question:

Does anything special need to be done when creating graphics in order to make them more flexible?

Questions & Answers



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Question:

Is Bootstrap a replacement for Joomla?

Questions & Answers



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Question:

Are there any costs associated with programming libraries?

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*video recordings and
downloadable presentation slides*

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