



Bootstrap

Adding a responsive CSS Framework to our app
www.getBootstrap.com



Bootstrap

<https://www.w3schools.com/bootstrap4/default.asp>

Why Bootstrap

- Free
 - Most popular
 - Responsive (Desktop to mobile devices)
 - Nice looking styles
 - Pre-defined “components”
- Other choices
 - Material (Google)
 - Foundation

Bootstrap and jQuery go hand-in-hand.

You can have jQuery without Bootstrap, but
you “can’t” have Bootstrap without jQuery.





Responsive?

<https://www.w3schools.com/bootstrap4/default.asp>

Responsive will adapt to the environment.

Mobile First Mind-Set

Mobile First means that's the starting point from which styles are based.

Behavior starts with the smallest device (mobile phone) and works up (desktop)

Behavior? CSS uses "Media Queries" to test the size of the browser window



Grid Layout

https://www.w3schools.com/bootstrap4/bootstrap_grid_system.asp

Grid

https://www.w3schools.com/bootstrap4/trybs_template1.htm

Grid starts with a div that has either one of the two classes: **container** or **container-fluid**.
Then the grid needs a div with a **row** class

01-bs-grid-demo-01.html

```
<div class="container-fluid">  
  <div class="row">  
    ...grid content here  
  </div>  
</div>
```



Grid Layout

https://www.w3schools.com/bootstrap4/bootstrap_grid_stacked_to_horizontal.asp

Small content will appear side by side.

Larger content will be stacked

UNTIL you tell it what to do.

01-bs-grid-demo-02.html

```
<div class="container-fluid">  
  <div class="row">  
    <div class="col">Column 1</div>  
    <div class="col">Column 2</div>  
  </div>  
</div>
```



Grid Layout

Define column widths

- Same size: col
- Custom size: numbers should add up to 12

01-bs-grid-demo-03.html

```
<div class="container-fluid">
  <div class="row">
    <div class="col-4">Column 1</div>
    <div class="col-8">Column 2</div>
  </div>
</div>
```



Grid Layout

Define column widths

- Based on Screen Size

01-bs-grid-demo-04.html

```
<div class="container-fluid">
  <div class="row">
    <div class="col-4 col-md-6">Column 1</div>
    <div class="col-8 col-md-6">Column 2</div>
  </div>
</div>
```




Grid Layout

<https://www.w3schools.com/bootstrap4/default.asp>

Grid

https://www.w3schools.com/bootstrap4/bootstrap_grid_system.asp

Extra Small: col, col-x,

Small: col-sm, col-sm-x,

Medium: col-md, col-md-x

Large: col-lg, col-lg-x

Extra Large: col-xl, col-xl-x

x = number that should add up to 12



Navbar

https://www.w3schools.com/bootstrap4/bootstrap_navbar.asp

Responsive will adapt to the environment.

Navbar

https://www.w3schools.com/bootstrap4/tryit.asp?filename=trybs_navbar_collapse

navbar-expand-sm (xl, lg, md)

https://www.w3schools.com/bootstrap4/bootstrap_navbar.asp

Go through Try it Yourself

02-demo-navbar.html



How to display your data

Small Content

You **can** build it in JavaScript

```
$("#logReport").append("<p>"  
    + "Temp to Convert: " + conversionLog[idx].tempToConvert + " "  
    + "Convert to type: " + conversionLog[idx].type + " "  
    + "</p>");
```



How to display your data

Large Content

You ***can*** use an HTML template. It doesn't get rendered

```
<script type="text/html" id=" periodTemplateList">
  <a idx="{idx}" href="#" class='list-group-item list-group-item-action
weather-detail'>
    <div style="margin-right: 1em;"><img src='{icon}'></div>
    <div>
      <div style="font-weight: bold;">{name}</div>
      <div>{temperature}</div>
      <div>{windSpeed} {windDirection}</div>
      <div>{shortForecast}</div>
    </div>
  </a>
</script>
```



Using HTML Template

Use JavaScript/jQuery to get the contents

```
var templateList = $("#periodTemplateList").html();
```

Then you can treat it as any other HTML element

```
$("#properties-periods-list").append(  
    templateList  
    .replace(/{name}/, period.name)  
    .replace(/{temperature}/, tempToDisplay )  
    .replace(/{windSpeed}/, period.windSpeed)  
);
```



Styles?

<https://www.w3schools.com/bootstrap4/default.asp>

- Colors
- Tables
- Images
- Jumbotron
- Alers
- Buttons
- Button Groups
- Badges
- Progress Bars
- Spinners
- Pagination
- List Groups
- Cards
- Dropdowns
- Collapse
- Navs
- Navbar
- Forms
- Inputs
- Input Groups
- Custom Forms
- Carousel
-



Components?

<https://www.w3schools.com/bootstrap4/default.asp>

- Alert
- Button
- Carousel
- Collapse
- Dropdown
- Modal
- Popover
- Tab
- Toasts
- Tooltip



Customizer

<https://themestr.app/>