

Grid Systems

What is a grid system?

(as it relates to design)

A framework of intersecting lines meant to be used as a skeleton to arrange different graphic elements

	Vermont Symphony Orchestra	
Winter 2007 Season	Aaron Copland The Tender Land January 2007	Eric Satie Gymnopedie 1, 2 February 2007
	01/12/07 Middlebury College Center for the Arts 8:00 pm	02/03/07 Johnson State College Dibden Center for the Arts 8:00 pm
	01/19/07 Johnson State College Dibden Center for the Arts 8:00 pm	02/10/07 Castleton State College Fine Arts Center 8:00 pm
	01/26/07 Lyndon State College Alexander Twilight Theater 8:00 pm	02/17/07 Middlebury College Center for the Arts 8:00 pm

What is a grid system?

(as it relates to CSS + web design)

- Rather than arbitrarily deciding how large content blocks on a web page should be, have them conform to a set width
- Going further, instead of a set width for each block, decide on a width unit and make certain blocks x number of that unit wide
- Makes for more symmetrical designs and easier to maintain, more easily responsive code

Existing grid system options

[Bootstrap](#)

[Zurb Foundation](#)

[Unsemantic](#)

[Responsive Grid System](#)

Using Bootstrap's grid system

- Bootstrap is a full-featured front end CSS framework
- It is written in LESS, a higher-level version of CSS that gets compiled down to CSS
- To use Bootstrap, you include their library in the `<head>` section of your webpage
- Different features of the library are accessed using class names like `.row` for your elements

Using Bootstrap's Grid System

according to the official docs at getbootstrap.com/css

- Rows must be placed within a .container (fixed-width) or .container-fluid (full-width) for proper alignment and padding.
- Use rows to create horizontal groups of columns.
- Content should be placed within columns, and only columns may be immediate children of rows.

Using Bootstrap's Grid System

according to the official docs at getbootstrap.com/css

- Predefined grid classes like `.row` and `.col-xs-4` are available for quickly making grid layouts.
- Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on `.rows`
- Grid columns are created by specifying the number of twelve available columns you wish to span. For example, three equal columns would use three `.col-xs-4`

Using Bootstrap's Grid System

some sample code

```
<div class="row">
  <div class="col-md-8">.col-md-8</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
</div>
```


Exercise

Create the webpage mocked up in the file bootstrap.png using Bootstrap's fluid grid system

Creating your own grid system

- You could also create your own grid system
- For inspiration, take a look at one of the major frameworks' code!

<https://github.com/twbs/bootstrap>

<https://github.com/nathansmith/unsemantic>