**MMP 350 CSS Week 4**

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## Goals for Week

Setting up server

Brief Overview of media queries and bootstrap, a templating framework

## Setting up servers

Your server accounts have been set up. These accounts have cPanel access, support PHP and MySQL but are limited to one database. As of Feb 20 FTP access is not working remotely but should work fine in class over ethernet. ​ This issue should be resolved shortly.

### Cpanel

To access the cPanel go to [https://wpmmp.bmcc.cuny.edu:2083/](https://wpmmp.bmcc.cuny.edu:2083/" \t "_blank)

### Username

First name initial followed by the first 7 letters of last name (or less if last name is shorter than 7 letters). For example,  John Smith's username would be jsmith.

### Password

emplid, an 8-digit identification number used on CUNYfirst.​

(The id and passwords of students are in the attached file, in case there's confusion).

### Filezilla

In Filezilla the host is [wpmmp.bmcc.cuny.edu](http://wpmmp.bmcc.cuny.edu" \t "_blank) and the port is 22.

To set up a session go to File Site Manage (figure 1)

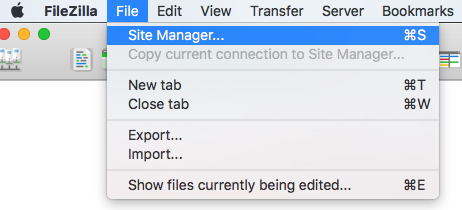


Figure 1: Launching the Site Manager in Filezilla

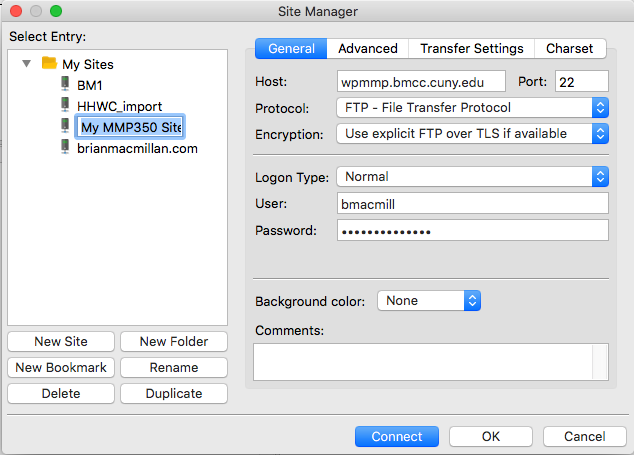


Figure 2: Session settings to FTP to your webserver

### Accessing Your Programs

The url will be in the format of: [http://wpmmp.bmcc.cuny.edu/~username/foldername/filename](http://wpmmp.bmcc.cuny.edu/%7Eusername/foldername/filename" \t "_blank)

Please use the same username and password for FTP, database, and WordPress. If you forget your WordPress​ login info there's no email reset of password.

## Media Queries

### Overview

A **media query** consists of an optional media type (for example screen, printer) and zero or more expressions that limit the style sheets' scope based on properties such as width, height, and color. Media queries allow designers to separate content from presentation.

### Example 1

@media screen and (device-aspect-ratio: 16/9), screen and (device-aspect-ratio: 16/10) {

.container div {width:100%}

}

Q: What media type is used in example 1?

### Example 2: Color

@media all and (min-color-index:256) { ... }

Q: What does the 256 refer to in example 2?

### Example 3: Orientation

Q: What does the following media query do?

@media all and (orientation: portrait) { ... }

Q: What does the following media query do?

@media all and (orientation: landscape) { ... }

## Exercise

### Step 1

Create a file called media\_query\_example.html and add the following code to it.

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>MMP 350 Media Query Example</title>

</head>

<style>

.main div{display:inline-block;}

</style>

<body>

<section class="main container-fluid">

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 1</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 2</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 3</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 4</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 5</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 6</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 7</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 8</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 9</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 10</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 11</div>

<div class="col-xs-12 col-md-4 col-sm-6 alexandra">Project 12</div>

</section>

</body>

</html>

View the results in a browser

### Step 2

Add the following code to your <style> section:

<style>

.main div{display:inline-block;}

@media screen and (min-width: 1000px) {

.main div {

border: 1px solid orange;

}

}

@media screen and (min-width: 600px) {

.main div {

border: 1px solid red;

}

}

@media screen and (min-width: 300px) {

.main div {

border: 1px solid green;

}

}

</style>

Q: Notice how the divs only have a green border when you resize the screen. Why?

A: Every screen width of 300px and greater meets the condition for the last media query, so this is the one that displays.

### Step 3

Replace the contents of your style section with the following and then save and refresh your page.

<style>

.main div{display:inline-block;}

@media screen and (min-width: 1000px) {

.main div {

border: 1px solid orange;

}

}

@media screen and (min-width: 600px) and (max-width:999px) {

.main div {

border: 1px solid red;

}

}

@media screen and (min-width: 400px) and (max-width:599px) {

.main div {

border: 1px solid green;

}

}

</style>

Q: Resize your page. Now the borders of the divs change color. What has happened?

A: By setting min and max widths, the implementation of the query styles has been specifically contrained.

### Step 4: Relying on document flow

Now replace the style section with the following code.

<style>

.main div{display:inline-block;}

@media screen and (min-width: 400px) {

.main div {

border: 1px solid green;

}

}

@media screen and (min-width: 600px) {

.main div {

border: 1px solid red;

}

}

@media screen and (min-width: 1000px) {

.main div {

border: 1px solid orange;

}

}

Q: Notice that the borders change color correctly. Why?

A: Because the min-width directives are organized from smallest to largest.

Q: How would you use max-width to implement the above logic?

## Exercise 2: Bootstrap

Now lets use the bootstrap framework to do something similar.

### Step 1

Create a document called bootstrap\_example.html and add the following code to it:

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>MMP 350 Bootstrap Example</title>

</head>

<style>

.main div{display:inline-block;}

</style>

<body>

<header class="container">

<h2>MMP 350 Week 4 Grid Example</h2>

<p></p>

<span class="dropdown">

<button class="btn btn-default dropdown-toggle" type="button" data-toggle="dropdown">Students

<span class="caret"></span></button>

<ul id="ul-coursework" class="dropdown-menu">

<li><a href="#">Alexander Melo</a></li>

<li><a href="#">Anderson Gomez</a></li>

<li><a href="#">Asia Simmons</a></li>

<li><a href="#">Brendan Montenegro</a></li>

<li><a href="#">Isaiah Serrano</a></li>

<li><a href="#">Channing Creager</a></li>

<li><a href="#">Chriscel Halili</a></li>

<li><a href="#">Courtney Lindsey</a></li>

<li><a href="#">Gabriella Sanchez</a></li>

<li><a href="#">Jaron Scotland</a></li>

<li><a href="#">Jennifer Grullon</a></li>

<li><a href="#">Joel Singh</a></li>

</ul>

</span>

<span class="dropdown">

<button class="btn btn-default dropdown-toggle" data-icon="carat-r" data-role="button" type="button" data-toggle="dropdown">Projects

<span class="caret"></span></button>

<ul id="ul-projects" class="dropdown-menu">

<li><a href="#">Menu Item </a></li>

<li><a href="#">Menu Item </a></li>

<li><a href="#">Menu Item </a></li>

</ul>

</span>

</header>

<section class="main container-fluid">

<div class="col-sm-6">Project 1</div>

<div class="col-sm-6">Project 2</div>

<div class="col-sm-6">Project 3</div>

<div class="col-sm-6">Project 4</div>

<div class="col-sm-6">Project 5</div>

<div class="col-sm-6">Project 6</div>

<div class="col-sm-6">Project 7</div>

<div class="col-sm-6">Project 8</div>

<div class="col-sm-6">Project 9</div>

<div class="col-sm-6">Project 10</div>

<div class="col-sm-6">Project 11</div>

<div class="col-sm-6">Project 12</div>

</section>

</body>

</html>

Resize the results in your browser. What you see if normal html document flow.

### Step 2: Add references to bootstrap

Add references to boostrap and jquery to the head section of your document:

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>MMP 350 Bootstrap Example</title>

<meta charset="utf-8">

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>

</head>

Q:When you save, refresh and resize your screen, what happens?

A: The lists have turned into drop down menus and the divs have adopted the bootstrap responsive design style for the sm class.

## Exercise 3: The Bootstrap Grid in Detail

### Step 1

Create a document called bootstrap\_grid.html with the following code from the bootstrap examples. Save and view the document at different browser widths. Pay attention to the class settings and text.

<!DOCTYPE html>

<html>

<head>

<meta name="viewport" content="width=device-width, initial-scale=1">

<title>MMP 350 Bootstrap Example</title>

<meta charset="utf-8">

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.1.1/jquery.min.js"></script>

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>

</head>

</head>

<style>

.main div{display:inline-block;}

.main div{border:1px solid red;}

</style>

<body>

<div class="container">

<div class="page-header">

<h1>Bootstrap grid examples</h1>

<p class="lead">Basic grid layouts to get you familiar with building within the Bootstrap grid system.</p>

</div>

<h3>Three equal columns</h3>

<p>Get three equal-width columns <strong>starting at desktops and scaling to large desktops</strong>. On mobile devices, tablets and below, the columns will automatically stack.</p>

<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>

<h3>Three unequal columns</h3>

<p>Get three columns <strong>starting at desktops and scaling to large desktops</strong> of various widths. Remember, grid columns should add up to twelve for a single horizontal block. More than that, and columns start stacking no matter the viewport.</p>

<div class="row">

<div class="col-md-3">.col-md-3</div>

<div class="col-md-6">.col-md-6</div>

<div class="col-md-3">.col-md-3</div>

</div>

<h3>Two columns</h3>

<p>Get two columns <strong>starting at desktops and scaling to large desktops</strong>.</p>

<div class="row">

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

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

</div>

<h3>Full width, single column</h3>

<p class="text-warning">No grid classes are necessary for full-width elements.</p>

<hr>

<h3>Two columns with two nested columns</h3>

<p>Per the documentation, nesting is easy—just put a row of columns within an existing column. This gives you two columns <strong>starting at desktops and scaling to large desktops</strong>, with another two (equal widths) within the larger column.</p>

<p>At mobile device sizes, tablets and down, these columns and their nested columns will stack.</p>

<div class="row">

<div class="col-md-8">

.col-md-8

<div class="row">

<div class="col-md-6">.col-md-6</div>

<div class="col-md-6">.col-md-6</div>

</div>

</div>

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

</div>

<hr>

<h3>Mixed: mobile and desktop</h3>

<p>The Bootstrap 3 grid system has four tiers of classes: xs (phones), sm (tablets), md (desktops), and lg (larger desktops). You can use nearly any combination of these classes to create more dynamic and flexible layouts.</p>

<p>Each tier of classes scales up, meaning if you plan on setting the same widths for xs and sm, you only need to specify xs.</p>

<div class="row">

<div class="col-xs-12 col-md-8">.col-xs-12 .col-md-8</div>

<div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>

</div>

<div class="row">

<div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>

<div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>

<div class="col-xs-6 col-md-4">.col-xs-6 .col-md-4</div>

</div>

<div class="row">

<div class="col-xs-6">.col-xs-6</div>

<div class="col-xs-6">.col-xs-6</div>

</div>

<hr>

<h3>Mixed: mobile, tablet, and desktop</h3>

<p></p>

<div class="row">

<div class="col-xs-12 col-sm-6 col-lg-8">.col-xs-12 .col-sm-6 .col-lg-8</div>

<div class="col-xs-6 col-lg-4">.col-xs-6 .col-lg-4</div>

</div>

<div class="row">

<div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>

<div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>

<div class="col-xs-6 col-sm-4">.col-xs-6 .col-sm-4</div>

</div>

<hr>

<h3>Column clearing</h3>

<p><a href="http://getbootstrap.com/css/#grid-responsive-resets">Clear floats</a> at specific breakpoints to prevent awkward wrapping with uneven content.</p>

<div class="row">

<div class="col-xs-6 col-sm-3">

.col-xs-6 .col-sm-3

<br>

Resize your viewport or check it out on your phone for an example.

</div>

<div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3</div>

<!-- Add the extra clearfix for only the required viewport -->

<div class="clearfix visible-xs"></div>

<div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3</div>

<div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3</div>

</div>

<hr>

<h3>Offset, push, and pull resets</h3>

<p>Reset offsets, pushes, and pulls at specific breakpoints.</p>

<div class="row">

<div class="col-sm-5 col-md-6">.col-sm-5 .col-md-6</div>

<div class="col-sm-5 col-sm-offset-2 col-md-6 col-md-offset-0">.col-sm-5 .col-sm-offset-2 .col-md-6 .col-md-offset-0</div>

</div>

<div class="row">

<div class="col-sm-6 col-md-5 col-lg-6">.col-sm-6 .col-md-5 .col-lg-6</div>

<div class="col-sm-6 col-md-5 col-md-offset-2 col-lg-6 col-lg-offset-0">.col-sm-6 .col-md-5 .col-md-offset-2 .col-lg-6 .col-lg-offset-0</div>

</div>

</div> <!-- /container -->

</body>

</html>

## Exercise 4

Go to <http://getbootstrap.com/> and download the Source code version. Copy the version to your webserver and investigate the example found in docs/examples.

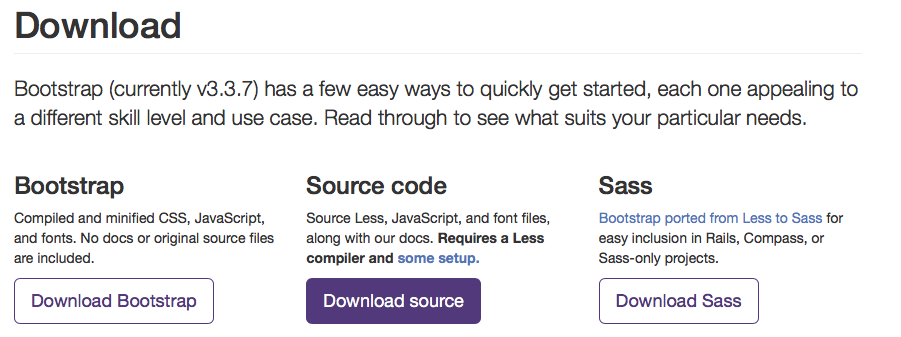


Figure: The download page at getbootstrap.com