

FE101

Even more jQuery

Final Project

Your final project is to build the front end for a web application. It does not have to be functional as far as back-end data processing, but should incorporate all that you've learned in the class thus far.

You're welcome to partner with a student from ROR101 on the final project.

Final projects will be presented on the last day of class!

<http://www.teaching-materials.org/jquery2/>

Exercise: Creating an image gallery

- Create an HTML page with a series of small thumbnail images, and a placeholder for one large image
- When the user clicks on the thumbnail, the large image should fade to be a big copy of the thumbnail image

Using a lightbox library

A lightbox is an image overlayed on the page in a modal dialog.

Fancybox is a lightbox library built using jQuery:

<http://fancyapps.com/fancybox/>

Building Navigation Menus

CSS Selectors

- Use a selector to tell the browser which element you'd like to style
- A selector can be any HTML tag, a class, an ID, or a combination of these elements.

Selectors

- Example selectors

`td, p, b, div, span`

- To select classes, use a dot. IDs are selected with a #

`.title, .section1, #personsName, #content`

Advanced Selection

`div, p`

selects all div elements *and* all p elements

`ul.nav li`

selects all li elements inside the ul with the class nav

`ul.nav > li`

selects all li elements that are direct children of ul elements

Advanced Selection

`[href]`

selects all elements with an href attribute

`[href=http://google.com]`

selects all elements with an href set to <http://google.com>

`[href~=http://]`

selects all elements with an href that starts with http://

Advanced Selection

A pseudo-class is an advanced CSS selector typically meant to select for functionality instead of semantics.

```
a:visited{color:orange; }
```

```
a:hover{color:orange; }
```

```
a:active{color:orange; }
```

```
input:focus{color:orange; }
```

**Let's build this navigation
menu!**

Navigation menu semantics

Navigation menus are almost always structured with unordered lists. With HTML5, we've also introduced the `<nav>` element to wrap the whole nav.

```
<nav>
```

```
  <ul>
```

```
    <li><a href="#">Home</a></li>
```

```
    <li><a href="#">About Us</a></li>
```

```
  </ul>
```

Sub-menus

To create a menu with drop down elements, we need to have a top level, a second level, and so on:

```
<nav>
  <ul>
    <li><a href="#">Home</a></li>
    <li><a href="#">Blog</a>
      <ul>
        <li><a href="#">5 Reasons to Learn to
Code</a></li>
        <li><a href="#">10 Things to Do</a></li>
```

Step 1:

Selectively show the sub-menus

How do we select only sub menus?

Step 1:

Selectively show the sub-menus

How do we select only sub menus?

```
nav ul ul {  
    display: none;  
}
```


Step 1:

Selectively show the sub-menus

How do we select only sub menus when their parent `` is selected?

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Selectively show the sub-menus

How do we select only sub menus when their parent `` is selected?

```
nav ul li:hover ul{  
    display: block;  
}
```

Exercise

Build the menu that we have so far - when a menu item with sub-menu items is hovered over, make sure those sub-menu items show

Inlining menu items

Now that we have the basic hover/drop-down functionality working, let's make this into a typical horizontal drop-down menu

Float each nav item left, and display the entire ul with inline-table:

```
nav ul{ display: inline-table; }  
nav ul li{  
    float: left;
```

Remove default style

Make sure to set `list-style: none;` on the main `` so we can remove the normal bullets

Dropdown items look misaligned



Why are they misaligned?

Remember that `` tags have `padding-left: 40px;` by default because lists are usually indented!

When I hover over, items move

When you hover over a dropdown item, the item to the right of it moves

In order to prevent this, take it completely out of the flow of the page, just set `position: relative;` on the containing `` for this sub-menu.

Have fun!

Spend some time styling your dropdown menu. Feeling a lack of inspiration? Here's a list of websites with dropdown menus:

<http://sixrevisions.com/design-showcase-inspiration/50-examples-of-drop-down-navigation-menus-in-web-designs/>

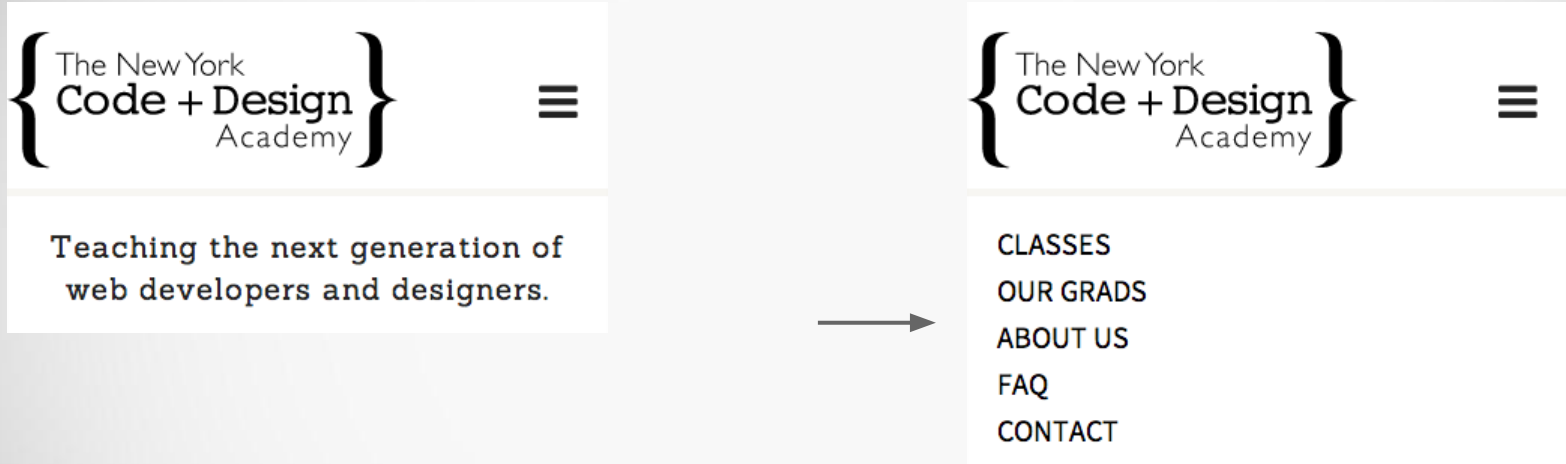
5 Minute Break

Getting Mobile Friendly

A mobile-friendly menu typically doesn't have a drop-down element due to lack of space.

Instead, a menu icon is placed for the user to click on that reveals links, usually to top-level content

Getting Mobile Friendly



On click, the menu icon reveals the menu items

Back to breakpoints

Some of this will be accomplished using breakpoints

We want all devices under the optimal width to display our normal navigation menu to use this mobile-friendly substitute!

Horizontal — **vertical**

On a mobile device, a vertical menu make more sense than a horizontal menu

```
@media (max-width: 420px) {  
  nav ul li {  
    float: none;  
  }  
}
```

Hidden until click

We also want to hide menu items until people click on our menu icon

```
@media (max-width: 420px) {  
  nav ul {  
    display: none;  
  }  
}
```

Necessary JavaScript

When people click on our menu icon, we need to display the menu:

```
$(document).ready(function() {  
    $(".menu-icon").click(function() {  
        $("nav ul").slideToggle();  
    })  
})
```

Can you find a bug?

Make your browser window small and toggle the menu - then make it big again. What happened?

A JavaScript “breakpoint”

```
$(window).resize(function() {  
    var w = $(window).width();  
    if(w > 420 && menu.is(':hidden')) {  
        menu.removeAttr('style');  
    }  
}) ;
```

Exercise

Work to make both of the menus you created in the last exercise mobile friendly.