AQUENT
GYMNASIUM

JQUERY: BUILDING BLOCKS

Lesson 3

MATERIALS & ASSIGNMENT

THIS LESSON'S CORE CONCEPTS

Plugins

1. jQuery's plugin ecosystem is enormous. If there is something you need help with, odds are that there's a plugin to help you do it. jQuery plugins generally add new methods to jQuery. Vanilla jQuery comes with a method called "height," but not one called "raptorize" (for example). In order to get the "raptorize" method, you need a plugin.

2. Plugins can be very large – jQuery UI includes dozens of widgets and pervasive UI features like drag/drop. Plugins can also be extremely small and focused, such as jQuery Easings, which provides timing functions; kenburns, which creates a simple Ken Burns-style slideshow; and, yes, jQuery Raptorize, which gives you a raptor. Google is the best way to find a plugin. jQuery also maintains a plugin registry at http://plugins.jquery.com/.

3. To include a plugin in your page, download its file (or files), add them to your project, and include the script in a `<script>` tag. (Some plugins may have more complex instructions. Note that the plugin's `<script>` tag must come after jQuery's own script tag, so that jQuery exists when the plugin's code runs.)

Carousels

4. Carousels are interface elements like photo slideshows. They can also contain any kind of content. They typically cycle through a small selection of content. Carousels are great for passive consumption, like a non-interactive (or minimally-interactive) photo slideshow, especially where it's not important that the user consume all the pictures.

5. Carousels are great for browsing of non-hierarchical content, where any item may be equally engaging to the user (see hulu.com). Carousels are great for unfocused, impression-based consumption; many corporate websites have a carousel with brand/values impressions (see wholefoodsmarket.com). Carousels can be good at clear, user-driven navigation (see apple.com/ipod).

6. IT IS VERY EASY TO DO CAROUSELS BADLY. Complex, highly interactive content will feel out of place and inaccessible in a carousel. Carousels that auto-advance while the user is trying to consume their content are extremely frustrating. User studies have shown that users will avoid carousels that are the least bit imperfect. Build your carousels well, and use them with care! (See the reading materials for more tips.)

   Whether they're good or bad, carousels are everywhere, and you're very likely to run into them in your career. This lesson aims to address this common need and illustrate that it is a ten-minute project requirement, not a ten-hour one.

jQuery cycle: the carousel plugin

7. As a testament to the vastness of jQuery's plugin ecosystem: There are many, many carousel plugins available. I prefer cycle, because it's simple to use but powerful, and it hasn't failed me yet. Once you've got a feel for the possibilities with cycle, you are encouraged to explore and form your own opinions. You can download cycle from http://jquery.malsup.com/cycle/.

8. Once you've included cycle in your page via a `<script>` tag, you can select your slideshow element and create a default slideshow with `$(selector).cycle();`

   To customize your slideshow, pass in a hash ({key: value}) of options to the cycle method. For example, to use the "scrollHorz" effect and speed up the transition to 300 milliseconds, you would use: `$(selector).cycle({ fx: 'scrollHorz', speed: 300 });`

   You can also pass commands into the cycle method to control playback. For example, to pause the slideshow, use `$(selector).cycle('pause');` Other commands include "resume", "next", and "prev". (For a full list of commands and options, see the cycle reference, linked in the reading materials.)

   Don't forget to wrap your code in a `$(document).ready()`, so that it doesn't run until the page is ready for it!

FURTHER READING

- Avoiding bad carousels:
  http://uxmovement.com/navigation/big-usability-mistakes-designers-make-on-carousels/
- Full cycle documentation:
  http://jquery.malsup.com/cycle/options.html
- jQuery UI demos:
  http://jqueryui.com/demos/
- The inimitable jQuery Raptorize:
  http://zurb.com/playground/jquery-raptorize

ASSIGNMENTS

1. Quiz
2. Implement pause-on-hover to the photo slideshow.