Interface Design Activity 2

Due Oct. 23

This activity is meant to give you an opportunity to examine design precepts as well as to give you practice with development technologies (HTML, CSS, JavaScript/jQuery).

1. Review chapter 2, *Our Vision is Optimized to See Structure* in the *Designing with the Mind in Mind* book.

2. Review the IOS Human Interface Guidelines (UI Design Basics) - sections *Designing for IOS to Interactivity and Feedback*.

3. Based on your reading, create a web application for previewing images. A web app is a website optimized for mobile devices. It is not installed on the device.

4. The digital experiences you are targeting are phones and tablets. To target these, you might use the following:

   @media only screen and (min-width: 768px) { /* tablets */}

   @media only screen and (max-width: 767px) { /* phones */}

5. The app should contain three pages (Home, Contact, and Image Preview) and it should work in the following ways
   - The landing/home page provides a title and a brief description and two links (a link to the image preview page and a link to Contact page).
   - The Contact page should provide address info, etc. and a link to the home page.
   - The image preview page should contain: a) a large area to preview an image; b) a footer with copyright and date; c) a horizontal slider of thumbnail images. The thumbnails should slide horizontally. When users touch a thumbnail, that image should appear in the large preview area. (see Figure 1).
6. To create the horizontal scrollbar, you can use the iscroll.js plugin (Spinelli, 2012), which I provided. In addition, add the following to your page:

```html
<script type="application/javascript" src="iscroll.js"></script>
<script type="application/javascript">
    var myScroll;

    function loaded() {
        myScroll = new iScroll('control-wrapper', {hScrollbar:false});
    }

    document.addEventListener('touchmove', function (e) { e.preventDefault(); }, false);

    document.addEventListener('DOMContentLoaded', loaded, false);

</script>
```

The basic structure of the scrollbar and thumbnails is shown below. The code below only contains two images. As you add thumbnail images, you will need to add additional list items `<li>` and `<li>`. The scrollbar plugin requires an outer wrapper, which in this case I named `control-`
wrapper (see below). Notice in the above JavaScript control-wraper is used for the iscroll plugin.

```html
<div id="control-wrapper">
  <nav id="control">
    <ul>
      <li>
        <a href="#">
          <img src="images/thumbs/tA1.jpg" title="A1.jpg"/>
        </a>
      </li>
      <li>
        <a href="#">
          <img src="images/thumbs/tA2.jpg" title="A2.jpg"/>
        </a>
      </li>
    </ul>
  </nav>
</div>
```

7. Write a short summary (no more than 1 page) of how you incorporated the principles in the readings into your design.
8. We will work on this in class so that everyone feels comfortable with getting it to work.
9. I provided images and all the scripts on the class website.
10. The page structure and jQuery I used are presented below.
jQuery

<script type="application/javascript">

$('document').ready(function() {

$('#large-image-preview').html("<img src='images/A1.png'>");

$('li a').click(function(e) {
    e.preventDefault();
    var img_title="images/"+$('img', this).attr('title');

    $('#large-image-preview').html('<img src='+img_title+'>');
    $('#photo-description').text(img_description);

});

});

</script>