

HTML, CSS, & Javascript

HTML: content

```
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<h1> 9.S93 IRP 2013: Baby webcam -- adapting developmental research methods for online testing</h1>
<ul>
<li>Instructors: Kim Scott (kimscott@mit.edu, 46-4005) & Laura Schulz</li>
<li>Meeting dates: MWF Jan 7, 9, 11, 14, 16, 18; by appointment during second two weeks of IAP</li>
<li>Meeting time: 10-11:30AM</li>
<li>Location: 46-4062</li>
<li>Prereq: some programming experience or psychological coursework recommended</li>
<li>Level: U 3 units Graded P/D/F (OR see Susan Lanza to treat this as a UROP)</li>
</ul>
```

CSS: appearance

```
form label[for] {
  font-weight: bold;
  font-size: larger;
}
```

Javascript: behavior (we'll use JQuery)

```
// Using condition arrays, make a list of the movies to play for this subject
var movieList = new Array(4);
for (var iTest=0; iTest<4; iTest++){
  var thisSide = (sides.charAt(iTest) == 'R');
  var thisVers = (versionCondition.charAt(iTest) == '1');
  movieList[iTest] = movieReference[iTest][2 * thisSide + thisVers];
}
```

Linking them all together

Use the HTML “script” tag to include CSS and Javascript:

```
<!DOCTYPE html>
<html>
<head>
  <link rel="stylesheet" type="text/css" href="talkingfaces.css"></link>
  <script src="main.js" type="text/javascript"></script>
</head>

<body>
  [webpage goes here]
</body>
</html>
```

Anatomy of an experiment

- [All download/extract sandbox]
- After user submits a consent form (or when opening sandbox.html), the function “main” is called
 - Gets a reference to a “div” element on the page
 - Gets some information about your experiment—
package.json (or written directly into sandbox.html)
- Technically, entire experiment is written in Javascript...
 - But we can programmatically insert HTML

sandbox.html

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="static/css/styles.css"></link>
    <link rel="stylesheet/less" type="text/css" href="bootstrap/less/bootstrap.less"></link>
    <link rel="stylesheet" type="text/css" href="talkingfaces.css"></link>
    <script src="static/js/less-1.3.0.min.js" type="text/javascript"></script>
    <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.1/jquery.min.js"></script>
    <script src="static/js/bootstrap.min.js" type="text/javascript"></script>
    <script src="bootbox/bootbox.min.js" type="text/javascript"></script>
    <script src="index_sandbox.js" type="text/javascript"></script>
    <script src="commonHtml.js" type="text/javascript"></script>
    <script src="main.js" type="text/javascript"></script>
    <script type="text/javascript">
      $(document).ready(function () {
        main("#maindiv", {"name": "Talking Faces",
          "id": "speech_match",
          "date": "11/7/12",
          "desc": "For infants between 6 and 12 months old.",
          "img": "myimage.png",
          "path": "ex/ex03/",
          "scripts": ["commonHtml.js", "main.js"],
          "css": ["talkingfaces.css"]});
      });
    </script>
  </head>
  <body>
    <div id="maindiv"> </div>
  </body>
</html>
```

sandbox.html

```
<!DOCTYPE html>
<html>
  <head>
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    <link rel="stylesheet/less" type="text/css" href="bootstrap/less/bootstrap.less"></link>
    <link rel="stylesheet" type="text/css" href="talkingfaces.css"></link>
    <script src="static/js/less-1.3.0.min.js" type="text/javascript"></script>
    <script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.1/jquery.min.js"></script>
    <script src="static/js/bootstrap.min.js" type="text/javascript"></script>
    <script src="bootbox/bootbox.min.js" type="text/javascript"></script>
    <script src="index_sandbox.js" type="text/javascript"></script>
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          "img": "myimage.png",
          "path": "ex/ex03/",
          "scripts": ["commonHtml.js", "main.js"],
          "css": ["talkingfaces.css"]}
        });
      });
    </script>
  </head>
  <body>
    <div id="maindiv"> </div>
  </body>
</html>
```

Do now:

- Copy and rename sandbox.html (to e.g. sandbox_phonemes.html)
- Copy and rename main.js (and change green text above)
- Copy and rename talkingfaces.css (and change blue text above)
- Make your own ex[n] directory and change orange text
- Choose your own experiment name and ID

For your project...

- Use basic HTML (and edit CSS if needed) to write each block of your experiment
- *Edit* javascript to determine flow of your experiment
 - Starting point based on how complex your experiment is and how comfortable you are programming

Today

- Familiarity with HTML
 - HTML reading if needed
 - Write your “instructions” page in HTML
- Familiarity with JS syntax and capabilities
 - Codecademy -> Javascript -> 1, 2, 3, 5, 6, 7
 - Everyone should get through 1 and 2
 - If you have prior programming experience, feel free to skip through earlier exercises
- Next time: Control flow for an experiment, using JQuery, inserting videos, event handlers.