HTML Template

2016.11.16

Logistics

- Please get started with Assignment 6 early!

- Clarification on using using existing templates

- Showcase in final lab(s)

Today

- HTML Templates with Handlebars

- Maybe D3 collision example

Handlebars

HTML templates

- They are extremely helpful if your website has the same layout for many pages

  - e.g.: http://charlottetang.com/

- You can have one HTML file for layout and reuse it for each project rather than having multiple pages for each project

Installation

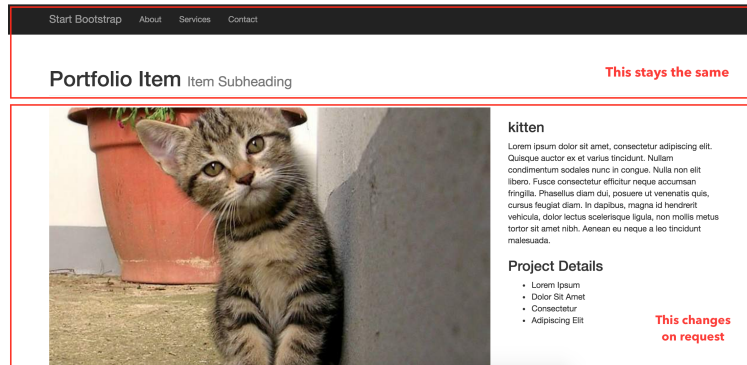http://handlebarsjs.com/

```
<script src="js/handlebars-v4.0.5.js"></script>
```

Demo

Open index.html in the exercise folder

General Flow

HTML:

```
<!-- Some general template code -->
<script id="handlebars-showcase" type="text/x-handlebars-template">
</script>
```

General Flow

HTML:

```html
<!-- Some general template code -->
<script id="handlebars-showcase" type="text/x-handlebars-template">
</script>
```

JavaScript

```javascript
// Retrieve the template data from the HTML.

// Compile the template data into a function

// Create HTML code

// Insert the HTML code into the page
```

HTML

```html
<script id="handlebars-demo" type="text/x-handlebars-template">
    <div class="col-md-8">
        <img class="img-responsive" src={{img}} alt="">
    </div>

    <div class="col-md-4">
        <h3>{{name}}</h3>
        <p>{{description}}</p>
        <h3>Project Details</h3>
        <ul>
            <li>Lorem Ipsum</li>
            <li>Dolor Sit Amet</li>
            <li>Consectetur</li>
            <li>Adipiscing Elit</li>
        </ul>
    </div>
</script>
```

{{description}} means a variable with name description

Content

The variables point to a content source. In this example, the content is stored in the js file:

```
var project = {
    "name": "placehold",
    "id": "0-placehold",
    "thumbnail": "http://placehold.it/500x300",
    "img": "http://placehold.it/750x500",
    "description": "This project was done in collaboration with John Doe and Jane Doe. The pr
    }
```

Connect data with html template

Recall the 4 steps

```
// Retrieve the template data from the HTML.

// Compile the template data into a function

// Create HTML code

// Insert the HTML code into the page
```

Connect data with html template

Recall the 4 steps

```
// Retrieve the template data from the HTML.
var template = $('#handlebars-demo').html();

// Compile the template data into a function

// Create HTML code

// Insert the HTML code into the page
```

Connect data with html template

Recall the 4 steps

```
// Retrieve the template data from the HTML.
var template = $('#handlebars-demo').html();

// Compile the template data into a function
var templateScript = Handlebars.compile(template);

// Create HTML code

// Insert the HTML code into the page
```

Connect data with html template

Recall the 4 steps

```
// Retrieve the template data from the HTML.
var template = $('#handlebars-demo').html();

// Compile the template data into a function
var templateScript = Handlebars.compile(template);

// Create HTML code
var html = templateScript(project);
// see the html code
console.log(html);

// Insert the HTML code into the page
```

Connect data with html template

Recall the 4 steps

```
// Retrieve the template data from the HTML.
var template = $('#handlebars-demo').html();

// Compile the template data into a function
var templateScript = Handlebars.compile(template);

// Create HTML code
var html = templateScript(project);

// Insert the HTML code into the page
$("#description").html(html);
```

Update the content on click

Let's say we now have 2 projects

```
var projects = {
    "projects":[
        {
            "name": "placehold",
            "id": "0-placehold",
            "thumbnail": "http://placehold.it/500x300",
            "img": "http://placehold.it/750x500",
            "description": "This project was done in collaboration with John Doe and Jane Doe
        {
            "name": "kitten",
            "id": "1-kitten",
            "thumbnail": "http://placekitten.com/500/300",
            "img": "http://placekitten.com/750/500",
            "description" : "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque
        ]};
```

Update the content on click

Goal: write function such that whenever a user clicks on one of the Related Project image, the site loads the content of the project.

Update the content on click

```
$("#showcase").on("click", "a", function(evt) {
    evt.preventDefault();

    // Get content by elem id
    var id = ($(this).attr("id")).split("-")[0];
    var content = projects.projects[id]

    // Retrieve the template data from the HTML.
    var template = $('#handlebars-demo').html();

    // Compile the template data into a function
    var templateScript = Handlebars.compile(template);

    // Create HTML code
    var html = templateScript(content);

    // Insert the HTML code into the page
    $("#description").html(html);
});
```

Deployment

For faster user experience, you can precompile the pages. For more information: http://javascriptissexy.com/handlebars-js-tutorial-learn-everything-about-handlebars-js-javascript-templating/