Coding & Cocktails Session 1 Worksheet

Overview

To create the web applications of today, we have to get together the tools we need to build them. HTML, CSS, and JavaScript are the basic building blocks of web pages; in this session you'll learn to get the most out of them using these tools.

Prep Work (pairs nicely with a glass of wine)

1. Install Google Chrome - this is our preferred browser to work in.
2. Create an account on http://www.codecademy.com/
    a. Complete this course on Codecademy: http://www.codecademy.com/courses/web-beginner-en-zmn0b/0/1?content_from=make-an-interactive-website%3Ayour-first-program
3. Create an account on https://github.com/
4. Create a workspace in your home directory called CodingAndCocktails - we'll create folders in here for our different projects.
5. Download a text editor, we recommend Sublime Text 2 - http://www.sublimetext.com/2

Environment Setup - OSX

We're gonna get down and dirty with the command line for this part of the session. Straight up. Shaken, not stirred. Many of our tools run from the command line, so it's important to get comfortable. Here are some basic commands we'll use:

- `PWD` - print working directory, shows you where you are
- `LS` - list files in your current directory
- `MKDIR <name>` - create a new folder
- `CD <folder name>` - change directory
- `NPM install -g <package name>` - install a package from the Node Package Manager registry. -g stands for "global" - so you can access it from anywhere on your computer.
- `Bower install -g <package name>` - install a package from the Bower registry.

1. Install Node :: https://nodejs.org/
    a. Node.js® is a platform built on Chrome's JavaScript runtime for easily building fast, scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.
    b. We're going to use Node Package Manager (npm) to download and manage some of the tools we need.
2. Install Bower :: `npm install -g bower`
    a. Bower works by fetching and installing packages from all over, taking care of hunting, finding, downloading, and saving the stuff you're looking for. Bower keeps track of these packages in a manifest file, bower.json. How you use packages is up to you. Bower provides hooks to facilitate using packages in your tools and workflows.

3. Install Yeoman :: `npm install -g yo`
    a. Yeoman helps you to kickstart new projects, prescribing best practices and tools to help you stay productive. A generator is basically a plugin that can be run with the `yo` command to scaffold complete projects or useful parts.

Environment Setup - Windows

We're gonna get down and dirty with the command line for this part of the session. Straight up. Shaken, not stirred. Many of our tools run from the command line, so it's important to get comfortable. Here are some basic commands we'll use:

- `PWD` - print working directory, shows you where you are
- `DIR` - list files in your current directory
- `MD <name>` - create a new folder
- `CD <folder name>` - change directory
- `NPM install -g <package name>` - install a package from the Node Package Manager registry. -g stands for "global" - so you can access it from anywhere on your computer.
- `Bower install -g <package name>` - install a package from the Bower registry.

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    a. Yeoman helps you to kickstart new projects, prescribing best practices and tools to help you stay productive. A generator is basically a plugin that can be run with the `yo` command to scaffold complete projects or useful parts.
4. Install Ruby - http://rubyinstaller.org/
    a. We'll use ruby gems to do things like compile css.

Playing with Generators

Yeoman is a great tool, because we don't have to do as much setup for projects. We're going to play with the gulp-angular generator.

1. Install the gulp-angular generator :: `npm install -g generator-gulp-angular`
    a. *OSX - you'll like need to run commands as `sudo npm install -g ...`
2. In CodingAndCocktails directory you create, create a new folder called "Session1"

3. In this directory, run the yeoman generator :: `yo gulp-angular CocktailApp`
4. Choose the top options presented by the generator
5. Once the generator is complete, run `gulp serve`
    a. This will create a local server to run your app from, and will launch the app in your browser.
6. This generator creates an Angular app. Angular is a SPA framework built and maintained by Google. Documentation can be found at https://angularjs.org/ . We're going to change pieces and see what happens. The code you'll edit is in the `/src` folder. You may have to look around a bit to figure out where to change things!
    a. Change the Allo, Allo text to '<your name>'s Cocktail Tracker' **hint, check in the app/main/main.html file*
    b. Change the items listed on the homepage to be images and descriptions of your favorite bars/restaurants. **hint, check in the app/main/main.controller.spec.js file*
    c. Add a 'Recipes' link to the menu bar **hint, check in the components/navbar folder*
    d. Add a '/recipes' route to the config modules **hint, check out the app/index.js file*
    e. App a new 'recipes' module **hint, you can copy the main folder structure and files*
    f. Change the listed items to be images and descriptions of your favorite cocktails
7. As a developer, most of the time you'll walk into already existing code and need to be able to figure out how things work, how to make changes, and how to improve them! You may not know the framework, which is why developers are successful when they can learn new things. Libraries will usually have good documentation, and when the documentation fails you, head to http://stackoverflow.com/

Homework

1. Start working on the Learn Angular course - http://www.codecademy.com/en/learn/learn-angularjs