Yeoman - The workflow Tool

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Introduction

Yeoman is an open source project leaded by the Chrome Developers relation team with Paul Irish in the head. As they said in Yeoman's website, is not just a tool but a complete workflow with Yeoman (scaffolding tool), Grunt (building tool) and Bower (package management).

Yeoman itself is a collection of three tools: Yo, Grunt, and Bower. Combined together these tools provide everything a developer needs to get started on a project:

- 1. <u>yo</u> the scaffolding tool from Yeoman and using the numerous generators available. It is maintained by the Yeoman project and offers web application scaffolding, utilizing scaffolding templates we refer to as generators.
- 2. <u>bower</u> the package management tool for the web. It helps to manage the dependencies needed for your application so you don't have to download them manually and automatically search and download the necessary scripts.
- 3. <u>grunt</u> the task runner is a tool that can automate things like compiling Stylus files or optimizing images. This is used to run the tasks that will help you preview, test, and build the app

Yeoman & AngularJS

Yeoman and AngularJS are a powerful combination. Yeoman provides a lot of cool features to scaffold your AngularJS application.

Installing Yeoman

To install the Yeoman suite of tools you will need to have npm and <u>Git</u> already installed on your system. If this is not the case you can install npm by downloading the appropriate version of <u>Node.js</u> for your system. The Node package manager (npm) is included with the install of Node.js. Git can be downloaded from the <u>project website</u>.

When the installer completes, let's config Git to use http:// instead of git:// using command line:

```
1 git config --global url."<a href="https://".insteadOf git://" https://".insteadOf git://" https://".insteadOf git://" https://".insteadOf git://" https://" https://
```

Once you have npm up and running you can install the Yeoman tools using the following command.

```
1 npm install-g yo
```

This will install Yo as well as Grunt and Bower if they are not already on your system.

Next, let's install the AngularJS generator using the following command:

```
1 npm install-g generator-angular
```

Some of the most popular generators are listed below. You can find a full list of the official generators by browsing the list of repositories on the https://github.com/yeoman.

- Web App (generator-webapp)
- <u>Backbone</u> (generator-backbone)
- <u>Ember.js</u> (generator-ember)
- Angular.js (generator-angular)
- <u>jQuery</u> (generator-jquery)

Now, let's create our project directory and create the skeleton for our project. Enter the following command in the terminal:

```
1 # create a directory for your new project
2 mkdir my-project && cd my-project
3 # and then run
4 yo webapp
```

It's now going to start asking a series of questions, answer Y for all except the question if you want to include common libraries like Twiter Bootstrap or AngularJS Resource, "Would you like to use Sass (with Compass)?". Answer N for this one.

* The reason we say no here is because for now we will use Stylus.

If you open up your project folder you'll see that Yo has created a number of files and folders to get you started

Directory structure and the meaning of files and folders are as follows:

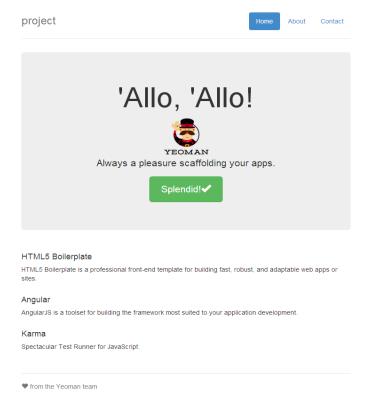
- node_modules Node.js modules for various Grunt tasks, usually you don't have to do anything
 about this folder
- test this contains folders for the files like karma tests
- **src** source files, development is done here
 - o **images** with yeoman.png image
 - o scripts with app.js and controllers/main.js with a default AngularJS application
 - bower_components this contains folders for the various vendor libraries such as AngularJS, Angular Animate, JQuery and Bootstrap and 3rd party libraries managed via Bower,
 - styles with bootstrap.css and main.css
 - o views HTML partials like head.html, scripts.html, etc.
 - o .buildignore
 - o .htaccess
 - 404.html this is the 404 error page that will show up, when the user types in a wrong URL or the Angular app couldn't find the page mentioned in the URL
 - o bower.json Bower dependencies in the project
 - o favicon.ico this is the icon that will show up in the browser tab of your app.
 - o index.html this will be the home page for your app.
 - robot.txt this is the file where you set rules for the search engine robots or crawlers, telling them what pages they can index and which sections of the app should not be indexed.
- Gruntfile.js Grunt file with various automation tasks defined in it
- package.json npm packages dependencies
- .yo-rc.json Yeoman generator configuration file
- .bowerrc configuration file for Bower
- .editorconfig EditorConfig configuration file to achieve consistent coding
- .gitattributes Git configuration file to force Unix line ending in all text files
- .gitignore default Git ignore files and folders
- .jshitrc <u>JSHint</u> configuration

Running your app

The generated Gruntfile includes a task that will set up a simple web server so that you can preview your app. You can start this by executing the following command in your Terminal.

```
1 grunt serve
2 # or
3 grunt server
```

Once the server has started, grunt will launch the web app in your default browser. You can also access the app by going to http://127.0.0.1:9000



The basic application created with the angular generator.

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