

FRONT-END WORKFLOW AUTOMATION

YEOMAN, GRUNT & BOWER

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Ljubljana Spring JavaScript Meetup
April 2, 2014

WHY?

NEW PROJECT

- download jQuery
- download jQuery UI
- download Bootstrap
- download AngularJS
- directory structure?

DEVELOPMENT?

```
coffee -o src -cw dest
```

```
mywatchcmd "lessc styles.less > styles.css"
```

```
...
```

PRODUCTION?

```
coffee -o src -cw dest
```

```
lessc styles.less > styles.css
```

```
uglifyjs vendor.js
```

```
...
```

YEOMAN

THE WEB'S SCAFFOLDING TOOL FOR MODERN WEBAPPS



YEOMAN

YO

yo scaffolds out a new application, writing your Grunt configuration and pulling in relevant Grunt tasks and Bower dependencies that you might need for your build.

GENERATORS

Project templates

- npm install generator-webapp
 - yo webapp
- npm install generator-angular
 - yo angular
 - yo angular:controller MyCtrl
 - yo angular:directive tabs
 - yo angular:route login
- npm search yeoman-generator

GRUNT



GRUNT

Grunt is used to build, preview and test your project, thanks to help from tasks curated by the Yeoman team and grunt-contrib.

SAMPLE TASKS

- test
- build
- serve

PLUGINS

- connect
- jshint
- mocha
- imagemin, svgmin, htmlmin
- compass
- karma

BOWER



Bower is used for dependency management, so that you no longer have to manually download and manage your scripts.

BOWER.JSON

```
{  
  "name": "myproject",  
  "version": "0.1.0",  
  "dependencies": {  
    "jquery": "~1.11.0",  
    "bootstrap-sass-official": "~3.1.0"  
  },  
  "devDependencies": {  
    "mocha": "1.14.0"  
  }  
}
```

INSTALL NEW PACKAGE

- `bower install underscore`
- `bower install jqueryui#1.10.4`
- `bower search calendar`

LIGHTNING-FAST SCAFFOLDING

Easily scaffold new projects with customizable templates (e.g HTML5 Boilerplate, Bootstrap), RequireJS and more.

GREAT BUILD PROCESS

Not only do you get minification and concatenation; It also optimizes all your image files, HTML, compiles your CoffeeScript and Compass files, if you're using AMD, it will pass those modules through r.js so you don't have to.

AUTOMATICALLY COMPILE COFFEESCRIPT & COMPASS

LiveReload watch process automatically compiles source files and refreshes your browser whenever a change is made so you don't have to.

AUTOMATICALLY LINT YOUR SCRIPTS

All your scripts are automatically run against JSHint to ensure they're following language best-practices.

BUILT-IN PREVIEW SERVER

No more having to fire up your own HTTP Server. It's built-in one can be fired with just one command.

AWESOME IMAGE OPTIMIZATION

It optimizes all your images using OptiPNG and JPEGTran so your users can spend less time downloading assets and more time using your app.

KILLER PACKAGE MANAGEMENT

Need a dependency? It's just a keystroke away. It allows you to easily search for new packages via the command-line (e.g. ``bower search jquery``), install them and keep them updated without needing to open your browser.

PHANTOMJS UNIT TESTING

Easily run your unit tests in headless WebKit via PhantomJS. When you create a new application, it also includes some test scaffolding for your app.

GET STARTED

```
npm install -g yo grunt-cli bower
```

GENERATORS

```
npm install -g generator-webapp
```

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


INSTALL DEPENDENCIES

```
bower install underscore
```

```
bower install angular-ui
```

DEVELOP

```
grunt serve
```

RUN TESTS

```
grunt test
```

BUILD

```
grunt build
```

QUESTIONS?