

First Class Development Workflow

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https://github.com/LastCallMedia/LCM-Scaffolding

Leveling up your builds in Drupal 8

A case study of a somewhat opinionated development framework.

An example for how you can roll your own scaffolding.



Problem: Starting a (good) Drupal project is too complicated!



Things to consider when setting up a project

- How to pull in Drupal core/projects so they can be updated.
- How to pull in external libraries (front and back end)
- Asset pipeline
- Testing process and tools
- Coding standards



Problem: Every project has a different way of doing things!



Things we don't want to change between projects

- Coding standards
- Top level development tools
- The interface to those tools
- Deployment process



Things we want to be able to change

- Packages (drupal modules, front end frameworks)
- Custom code
- Asset pipelines
- Tests



Solution: Let's build a scaffold!

- Quick to set up
- Capture best practices
- Standard framework of tools
- Standard UI layer
- Compile and minify assets
- Static code checks based on configurable parameters
- Behat and performance testing
- Extensible build process
- Exclude dependency code



The tools we use:



Composer



- Based on <u>drupal.org</u> Packagist
- Download modules, themes and libraries
- Apply complex version constraints to dependencies
- Apply patches with <u>cweagans/composer-patches</u>
- Parallel downloading with <u>hirak/prestissimo</u>

Usage: composer require drupal/ctools





NPM

- Simple installation of build tools
- Huge ecosystem
- Not PHP (no interdependencies with your project)
- Javascript
- Roll your own packages for build functionality

Usage: npm install —save gulp-imagemin



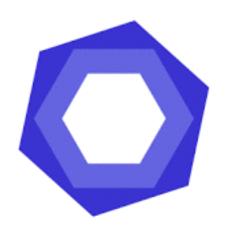
Bower



- Front end package manager for CSS frameworks and JS libraries
- Also not PHP
- Allows easy updates of front end dependencies
- Roll your own package for common brand assets

Usage: bower install —save foundation-sites





ESLint

- Static code checker for JS
- Rules set by Drupal code standards

Usage: eslint themes/custom



Coder/PHPCS

- Static code checker for PHP
- Detects security issues and standards violations
- Use to protect your team from crappy code

Usage: phpcs --standard=vendor/drupal/coder/coder_sniffer/Drupal



Behat

Behat

- BDD for web sites
- Align stakeholders on requirements
- Test JS functionality

Usage: behat



Phantomas



- Front end performance testing
- Run assertions on performance metrics
- Grab screenshots of key pages

Usage: phantomas --url=http://localhost/scaffold





Autoprefixer

- Add browser prefixes to CSS rules
- Smart database of rules from <u>caniuse.com</u>
- Allows your CSS to become leaner over time as browsers advance





SASS

- Everyone's favorite CSS preprocessor
- Many frameworks to choose from
- When used with a framework, allows you to dynamically rebuild the framework with your settings



Other tools

- Minification
- Auto generation of source maps





Gulp

- Javascript task runner
- 100% customizable build tasks
- Hundreds/thousands of possible integrations
- Ties all of the pieces together
- Provides the common interface for developers

Usage: gulp



Scaffold Theme



- Not a base theme!
- Foundation based
- Minimal implementation (messages, tabs, breadcrumbs, pager)



Pattern Library

- Barebones implementation of a style guide
- Idea shamelessly stolen from Pattern Lab
- Dynamic elements, passed through the Drupal theme layer



Artifact Based Build

• Easily build a release artifact from this project and deploy to a downstream repository

Usage:

<u>DOWNSTREAM=git@my.git.repo</u> BRANCH=feature-1 MESSAGE="This is an awesome commit!" scripts/ push-to-downstream.sh



Future possibilities

- Lean "production mode" version
- PHPUnit setup
- Docker support (docker-compose.yml)
- More robust pattern library
- Increased support for an artifact based build (switch to gulp for artifact build/push)
- Image and CSS optimization
- Automatic generation of sprites and/or icon fonts





Cheers!

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