



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 [drupal.org](https://drupal.org/project/packagist) Packagist
- Download modules, themes and libraries
- Apply complex version constraints to dependencies
- Apply patches with [cweagans/composer-patches](https://github.com/cweagans/composer-patches)
- Parallel downloading with [hirak/prestissimo](https://github.com/hirak/prestissimo)

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 caniuse.com
- 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:

*DOWNSTREAM=git@my.git.repo 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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