

Pattern Libraries and Drupal 8

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Questions?

Intro

A pattern library is ...

- Also know as an **interactive comp**, **living style guide**, or **component library**.
- Unlike a regular comp, you can see slideshows, responsive navigation, hover elements, responsive behavior, etc in action.

Why?

- Single source of design truth
- Separate front end work from back end work (pure MVC)
- Makes it easy* to reuse elements
- A chance to work out naming conventions early
- Shorter feedback loop between UI/UX design and implementation
- Almost a requirement for using things like Angular, React, or decoupled Drupal.

Examples

- designsystem.digital.gov
- starbucks.com/static/reference/styleguide
- ux.mailchimp.com/patterns/typography
- viamagazine.com/themes/custom/viamagazine/styleguide/section-base.html
- github.com/marcelosomers/pattern-library-directory

Use Case

- Company with multiple digital assets (universities, franchises)
- Large sites
- Projects with strong branding guidelines
- Any site with the budget

What are the Pros and Cons of Using a Pattern Library?

Developers

- ++ It's kinda fun.
- -- More moving parts, more points of failure.
- -- Drupal Devs need to be more accessibility-minded than usual.

Site Owners

- ++ It's kinda fun
- ++ If used properly, better brand control.
- -- More hours, more \$\$

Designers

- ++ If they're involved in the process, it forces them to think in components.
- ++ Less chance of a one-off element that has to be specially developed.

What are Pattern Builders?

Pattern Builders - Old

- SassDoc
- Fractal

Pattern Builders - New

- Pattern Lab
- KSS Node

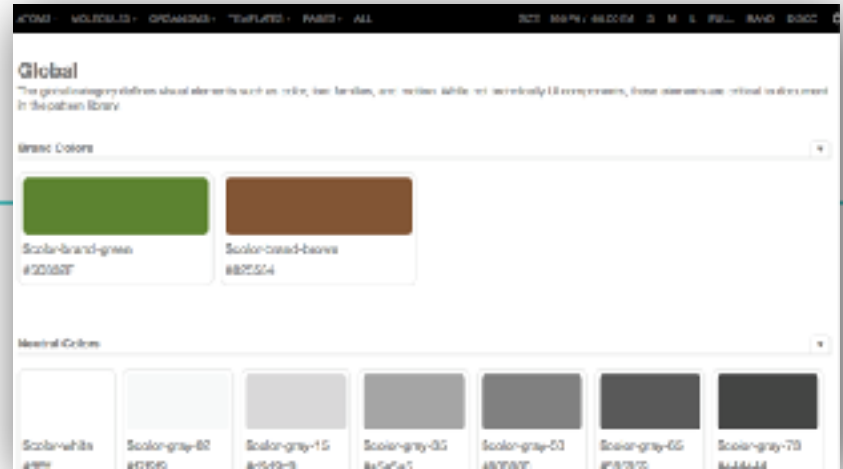
KSS Node

- Organization happens in CSS templates
- Can use twig or html
- Simpler than pattern lab
- Last commit to kss-twig on Apr 4, 2017



Pattern Lab

- Uses folder structure to organize patterns
- Nice UI
- Built-in responsive tools
- Built by Brad Frost, author of *Atomic Design*

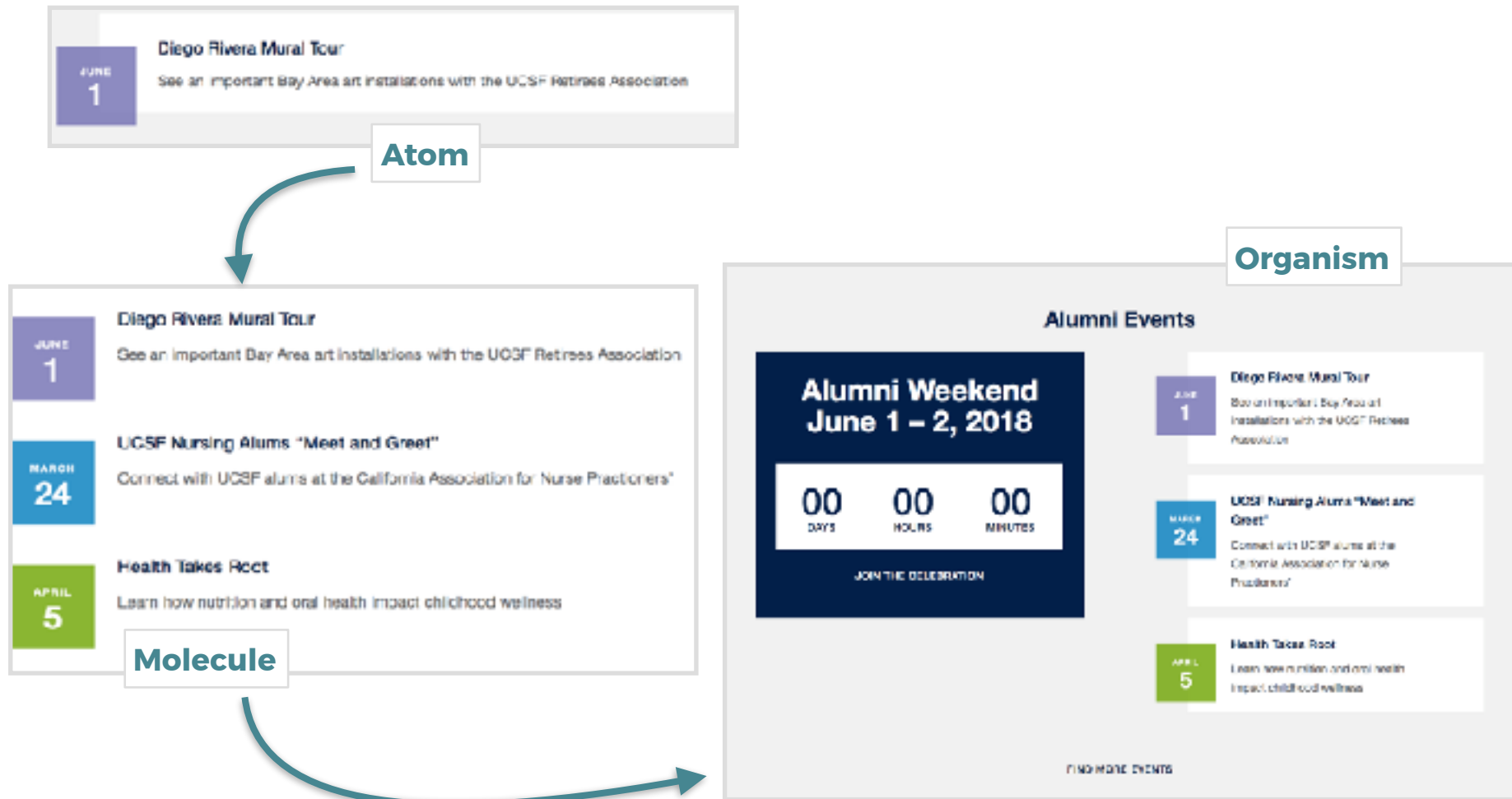


What is Atomic Design?

Atomic Design Components

- atoms
- molecules
- organisms
- templates
- pages
- bradfrost.com/blog/post/atomic-web-design

Atomic Design Components



**What base theme
should I use?**

Drupal + Pattern Library projects

- Bear Skin
- Emulsify
- Gesso
- KSS Bootstrap
- Particle
- Shila
- Theme Generator

Drupal + Pattern Library projects

	developed by	yaml or json	latest commit	on github	sites reported using this theme	gutenberg	bootstrap	drupal-twig-components	plugin-data-transform	plugin-faker	plugin-twig-namespaces	ndd-contributors-twig-extension	beam-twig-extensions	unified-twig-extensions	_twig-components	notes	
Pattern Lab																	
Dear Skin	Zivtech	json	2017-10-16	both	154	y	n	y	y	n	n	n	n	n	y	bower, visual, regression tests	
Emulafy	Four Kitchens	yaml	2019-06-01	both	7	y	n	n	n	n	n	y	y	y	y*	sprite support, Some video documentation	
Gesso	Forum One	json	2017-08-29	both	197	y	n	y	n	y	y	n	n	n	y	bower	
Particle	Phase 5	yaml	2018-06-11	github	n/a	y	y	y	n	n	n	n	n	n	y	webpack, yarnman, works with gray theme?, drupal fund	
Shilo	mskip	json	2018-04-24	github	n/a	y	n	n	n	n	n	n	n	n	n	wrapped into main pattern lab project	
edition-php-twig-standard	Pattern Lab	both	2016-07-06	github	n/a	n	n	n	n	n	n	n	n	n	n	no drupal theme	
edition-php-drupal-standard	Pattern Lab	both	2017-07-12	github	n/a	n	n	y	y	n	n	n	n	n	n	no drupal theme	
KSS																	
KSS Bootstrap	Kalamuna			github			y										
Theme Generator	Media Current			github												yarnman	

~~Drupal~~+Pattern Library projects

- Opinionated
- Can be daunting if you don't understand the underlying technologies
- Lots of moving parts npm, yarn, yeoman, composer, gulp
- Learning curve

How to decide

- What tools do you want to avoid or embrace?
- Likelihood of deprecation.
- Team skills.
- Who's your pattern champion?

**But, what base theme
should I use?**

Pattern Lab - How to start if confident

- Use drupal standard edition
- Any starter kit
- Use plugins as desired
- Whichever approach, prepare for extra work.

All project require

- Drupal's Components module*
- Composer
- Gulp
- These are starter kits, not base themes

*Make sure no other themes or modules are using the same namespace as yours.

Two approaches?

- **Drupal is the source of Truth.**

Use Drupal components module (like Military) and share the twig files with Pattern Lab. Not much extra work for Drupal devs after first implementation.

- **Pattern Lab is the source of Truth.**

Drupal consumes the Pattern Lab files (also using components module) and they are modified for Drupal use. Harder on Drupal Devs.

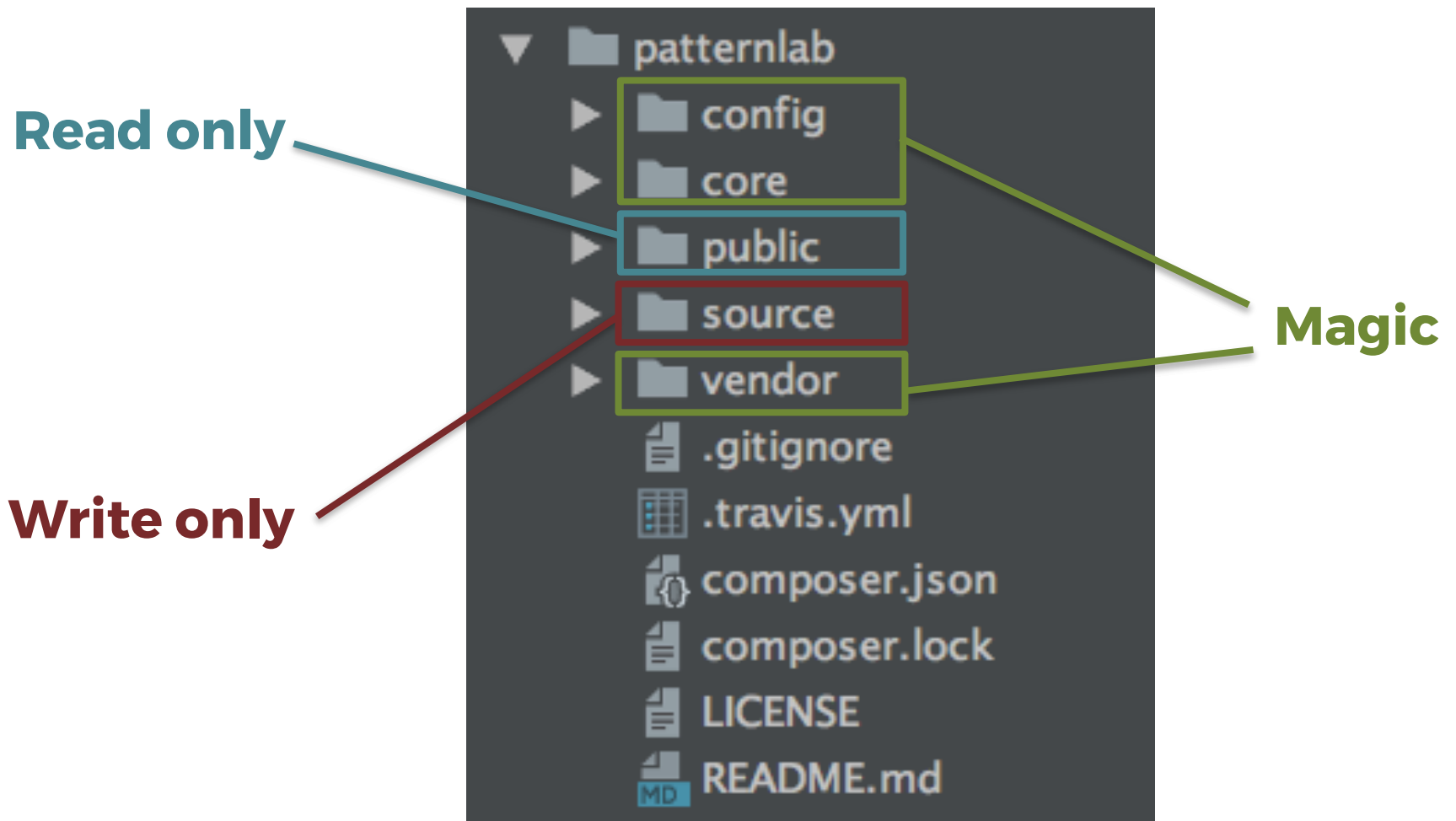
What about X module?

What about UI Patterns module?

- Agnostic about which library you use.
- Can turn over some of the pattern work to site builders.

How does Pattern Lab work?

Pattern Lab



Pattern Lab

- [DEMO]

Pattern Lab

- Editions
 - Node, Gulp, Grunt, Drupal, Mustache, etc.
- StarterKits
- Plugins

**What are the hard problems
working with Drupal?**

Hard Problem #1 - Data

- Creating .json and/or .yaml files (PL accepts both) of dummy data can be tedious.
- Drupal render arrays, view modes, etc.

Hard Problem #2 - Matching markup

- form inputs
- menus

Hard Problem #3 - Feature Parity

- Drupal has functions, filters, and other dev helpers that Pattern Lab does not by default
 - attributes, addClass, removeClass,
 - kint
 - libraries
 - Other macros, filters, functions
- Drupal JS vs vanilla js

Hard Problem #4 - Organization

- You'll want to put some effort in the beginning to consistently reference the pattern library, theme, images, and assets.
- Helper functions like `source()` and `active_theme_directory()` work in drupal, not in pl

Hard Problem #5 - Images

- Image styles
- Responsive images
- SVGs

Pattern Lab Plugins

Pattern Lab plugins 1/3

- [pattern-lab/plugin-drupal-twig-components](#)
 - Part of Pattern Lab Drupal Standard Edition.
Includes Drupal filters and functions we're used to like `t`, `clean_class`, etc,
- [aleksip/plugin-data-transform](#)
 - More flexibility in consuming data.

Pattern Lab plugins 2/3

- [pattern-lab/plugin-php-faker](#)
 - Creates dummy text.
- [EvanLovely/plugin-twig-namespaces](#)
 - Allows use of templates somewhere other than source/_patterns.
- [drupal-pattern-lab/add-attributes-twig-extension](#)
 - Somewhat emulates attributes in Drupal. However, can't use `addClass`, `removeClass` etc. Advertises that you can add it to to Drupal as well.
 - Must be copied to pattern lab's functions folder.

Pattern Lab plugins 3/3

- [drupal-pattern-lab/bem-twig-extension](#)
 - Another method of adding classes in PL.
- [drupal-pattern-lab/unified-twig-extensions](#)
 - A Drupal module that will allow your custom PL functions to be usable in Drupal templates.
- **More**
 - See Pattern Lab documentation.

Resources

Pattern Lab plugins 3/3

- <https://hackernoon.com/front-end-journey-into-drupal-pattern-lab-4db02e617fb4>

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Big Finish!

Questions?