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 encourages them to think in components.

++Less chance of a one-off element that has to be specially developed.

What are Pattern Builders?

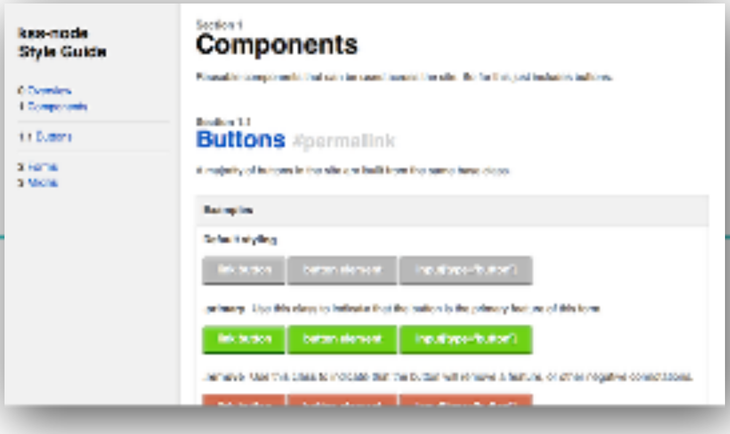
Pattern Builders - Older

- SassDoc
- Fractal

Pattern Builders - Newer

- Pattern Lab
- KSS Node

KSS Node



kss-node
Style Guide

0 Overview
1 Components

1.1 Buttons

2 Forms
3 Media

Section 1
Components

Reusable components that can be used across the site. So far this just includes buttons.

Section 1.1
Buttons #permalink

A majority of buttons in the site are built from the same base class.

Examples

Default styling

.primary Use this class to indicate that the button is the primary feature of this form.

.remove Use this class to indicate that the button will remove a feature, or other negative connotations.

- Organization

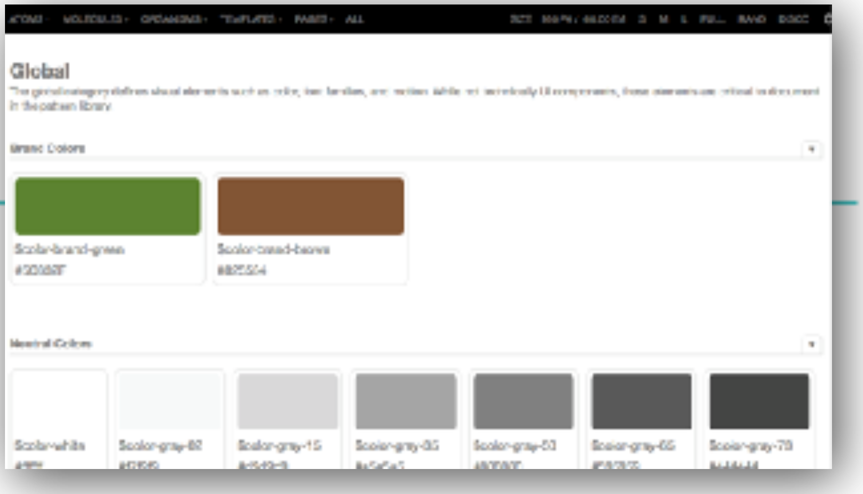
  happens in CSS templates

- Can use twig or html

- Simpler than Pattern Lab

Pattern Lab

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



Global

[illegible] in the pattern library

Brand Colors

$color-brand-green [illegible]

$color-brand-brown [illegible]

Neutral Colors

$color-white

$color-gray-02

$color-gray-15

$color-gray-35

$color-gray-50

$color-gray-65

$color-gray-70

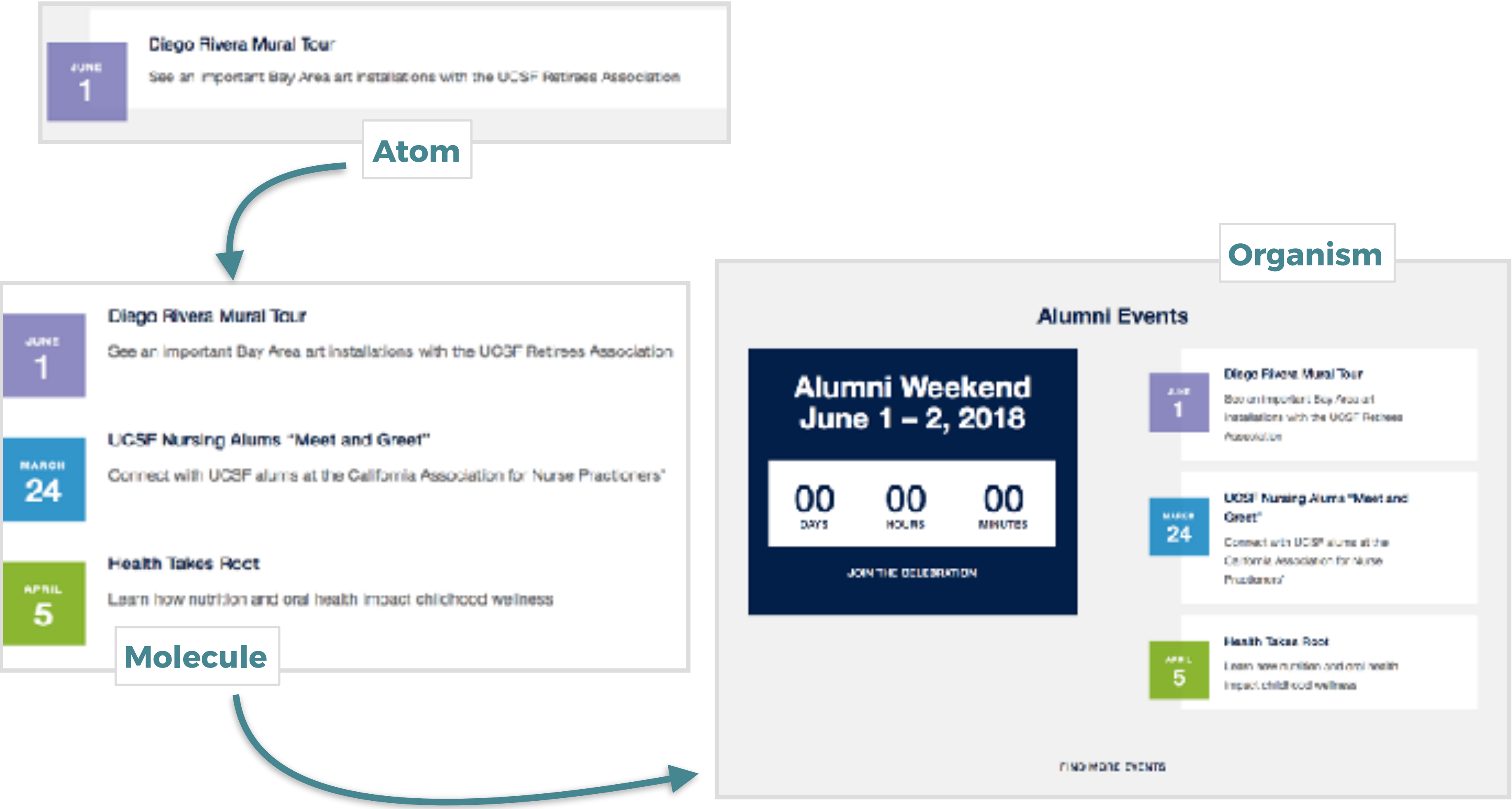
CHAPTER**THREE**

What is Atomic Design?

Atomic Design Components

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

Atomic Design Components



JUNE 1

Diego Rivera Mural Tour

See an important Bay Area art installations with the UCSF Retirees Association

Atom

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MARCH 24

UCSF Nursing Alums "Meet and Greet"

Connect with UCSF alums at the California Association for Nurse Practioners"

APRIL 5

Health Takes Root

Learn how nutrition and oral health impact childhood wellness

Molecule

Organism

Alumni Events

Alumni Weekend
June 1 – 2, 2018

00 DAYS 00 HOURS 00 MINUTES

JOIN THE CELEBRATION

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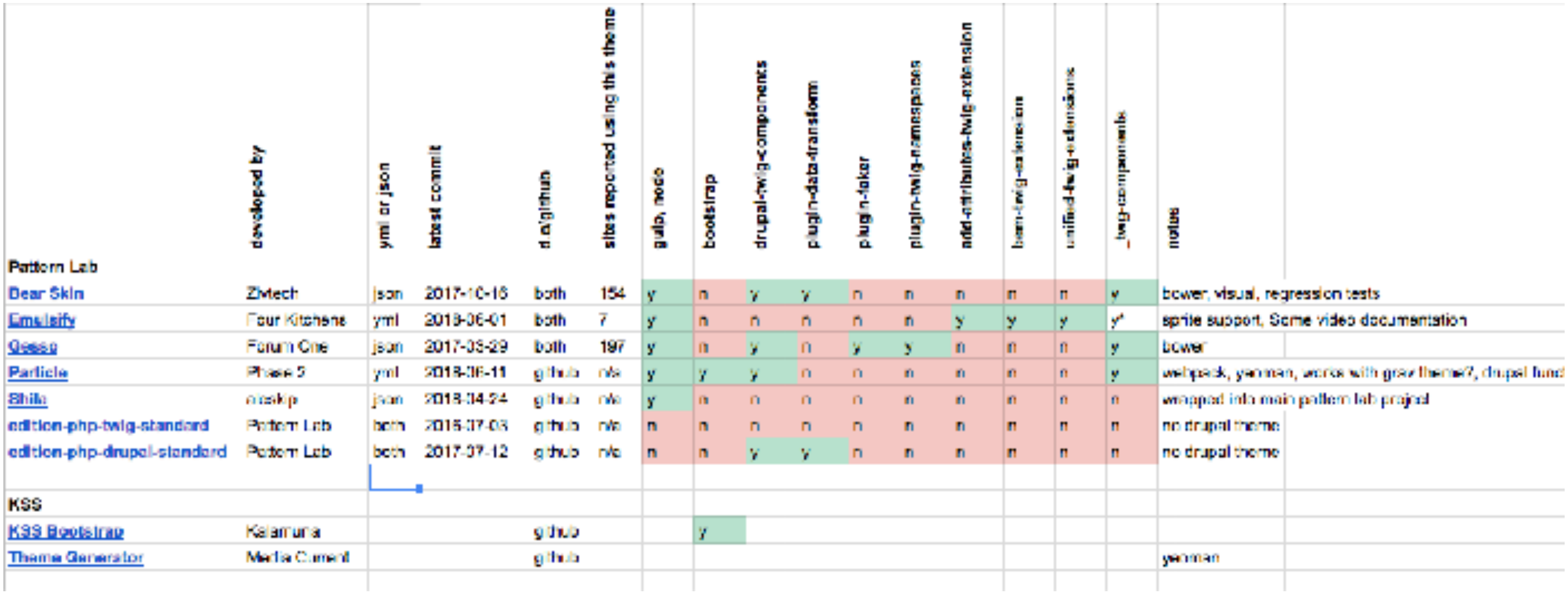
FIND MORE EVENTS

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	yml or json	latest commit	d.o/github	sites reported using this theme	gulp, node	bootstrap	drupal-twig-components	plugin-data-transform	plugin-faker	plugin-twig-namespaces	add-attributes-twig-extension	bem-twig-extension	unified-twig-extensions	_twig-components	notes
Pattern Lab																
Bear Skin	Zivtech	json	2017-10-16	both	154	y	n	y	y	n	n	n	n	n	y	bower, visual, regression tests
Emulsify	Four Kitchens	yml	2018-06-01	both	7	y	n	n	n	n	n	y	y	y	y*	sprite support, Some video documentation
Gesso	Forum One	json	2017-03-29	both	197	y	n	y	n	y	y	n	n	n	y	bower
Particle	Phase 2	yml	2018-06-11	github	n/a	y	y	y	n	n	n	n	n	n	y	webpack, yeoman, works with grav theme?, drupal func
Shila	[illegible]	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	2015-07-03	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												yeoman

Pattern Lab

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

~~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

- Use Pattern Lab's Drupal Standard Edition
- On installation, make sure you merge files
- Use plugins as desired
- Whichever approach, prepare for more work than a standalone theme.

All project require

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

*Make sure no other themes are 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.

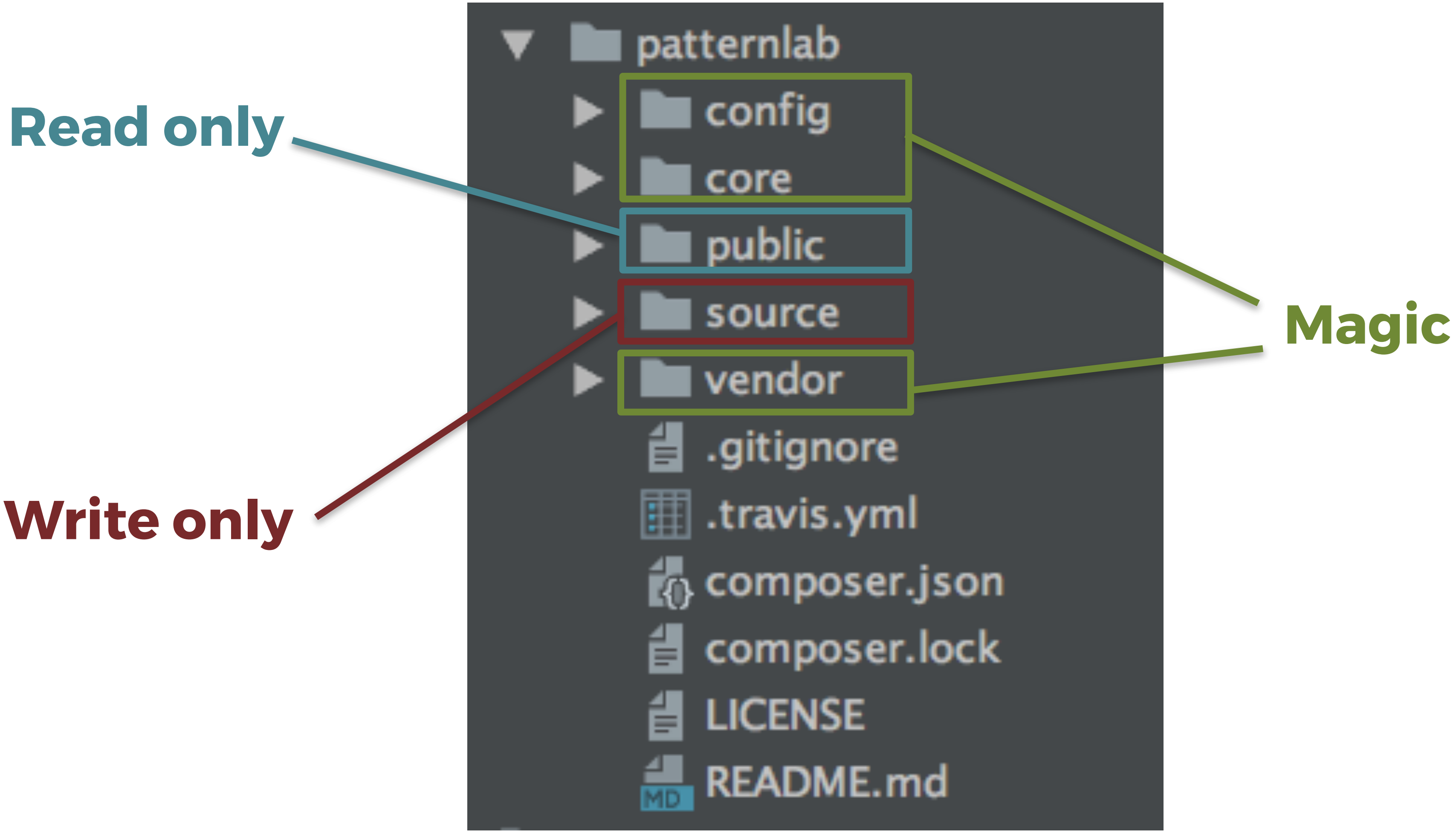
What about X module?

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



Read only

Write only

Magic

```
▼ patternlab
    ▶ config
    ▶ core
    ▶ public
    ▶ source
    ▶ vendor
      .gitignore
      .travis.yml
      composer.json
      composer.lock
      LICENSE
      README.md
```

Pattern Lab

- [DEMO]

What are the hard problems working with Drupal?

Hard Problem #1 - Data

- Creating .json and/or .yml 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 Pattern Lab.

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

Big Finish!

Questions?