

WORKING WITH
**SINGLE STORY
DIRECTOR
COMPONENTS
AND
UI PATTERNS**

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Drupal Camp Asheville 2025



sevaa
group

WHO AM I?

Dan Hansen

- Lead Developer @ Sevaa Group, Inc.
- Drupal Developer ~15 Years
 - Since Drupal 6
- Also enjoy WordPress, data modeling, and weird CSS and JS stuff
- Trivia: Has a whole room full of LEGO.



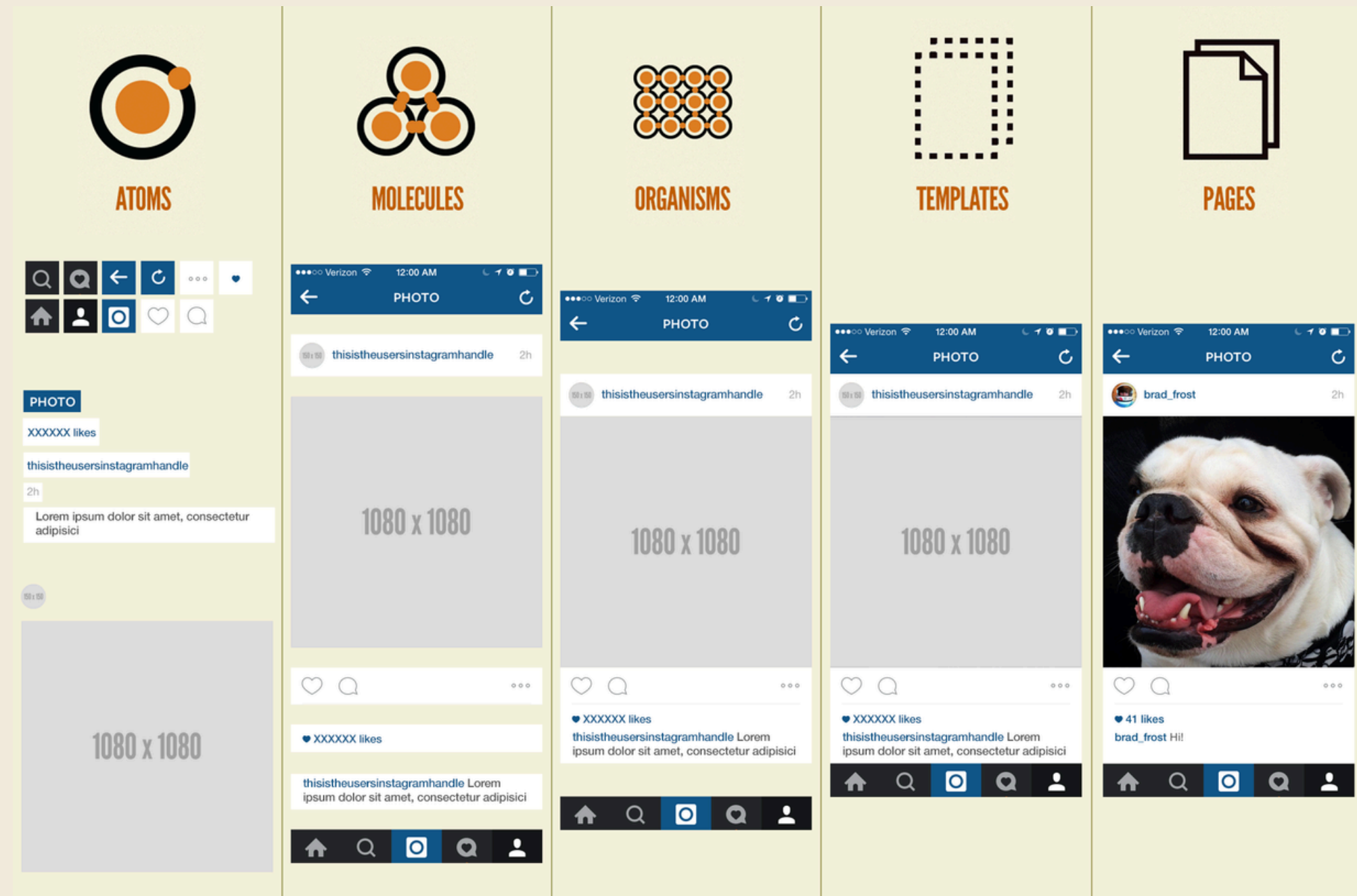
dhansen on Drupal.org and Drupal Slack

PART 1: **SINGLE DIRECTORY** **DIRECTORY** **COMPONENTS**

<https://www.drupal.org/docs/develop/theming-drupal/using-single-directory-components>

CONCEPT OF A COMPONENT

- What makes a component?
 - Modular
 - Reusable
 - Specific Function
- Usually Able to be Nested in Other Components
- Examples
 - Menus
 - Forms (Fields)
 - Sliders
 - Cards



THE SINGLE DIRECTORY PART

- **Take baseline HTML (or in this case, the twig template)**
- **Add in other files that flesh out the component:**
 - **CSS**
 - **JS**
 - **Resources like images or libraries**
- **Shove them all in a single directory**
- **Provide a YAML definition**
- **Put ‘em in a specific module/theme directory**
 - **components**
- **Now you can build a component library for use in your site!**

DEFINING AN SDC

- Information laid out in `component_name.yml`
- At most basic, just needs name and a type
- The real meat is the creation of inputs with Props and Slots
 - **Props**
 - For tightly structured data
 - Think: a boolean value, a small unformatted string, the value from a select field
 - **Slots**
 - For unstructured data, usually UI logic
 - Think: nested components, formatted text, images (usually), just about everything else

<https://www.drupal.org/docs/develop/theming-drupal/using-single-directory-components/annotated-example-component.yml>

PART 1A:
DEMONSTRATION
SINGLE DIRECT
COMPONENT

USING SDC

- **Single Directory Components (SDC) are part of Core as of 10.1**
 - **No need to enable SDC module after 10.3**
- **Build or obtain components and put them into the correct directory in a theme or module (/components)**
- **Embed your component**
 - **Render with a PHP array**
 - **Include in a Twig template file**

PHP RENDERING AN SDC

```
<?php
return [
  '#type' => 'component',
  '#component' => 'sdc_examples:my-cta',
  '#props' => [
    'label' => t('Click Me'),
  ],
  '#slots' => [
    'body' => [
      '#type' => 'html_tag',
      '#tag' => 'span',
      '#value' => t('I am a render array in a slot.'),
    ]
  ],
];
```

<https://www.drupal.org/docs/develop/theming-drupal/using-single-directory-components/using-your-new-single-directory-component>

EMBEDDING SDC IN TWIG

```
{% embed 'sdc_examples:my-card' with { header: label } only %}  
  {% block card_body %}  
    {{ content.field_media_image }}  
    {{ content|without('field_media_image') }}  
    {{ include('sdc_examples:my-button', { text: 'Like', iconType:  
      'like' }, with_context = false) }}  
  {% endblock %}  
{% endembed %}
```

Not the best approach?

<https://www.drupal.org/docs/develop/theming-drupal/using-single-directory-components/using-your-new-single-directory-component>

INCLUDING SDC
IN TWIG

```
{{ include(
  'umami:disclaimer', {
    disclaimer: content.field_date,
    copyright: content.field_location
  },
  with_context = false,
) }}
```

[Complete and Clarify SDC Documentation](https://www.drupal.org/project/drupal/issues/3484727)

<https://www.drupal.org/project/drupal/issues/3484727>

THAT'S ALL

FINE

BUT COULDN'T THIS BE A LITTLE EASIER*?

***for certain, specific definitions of “easy”.**

PART 2:

INTRODUCING UI SUITE

https://www.drupal.org/project/ui_suite

WHAT IS UI SUITE?

- “[A]n ecosystem of modules and themes that connects all Design System artifacts with Drupal UI”
- Goal to develop and implement a full set of APIs to allow design systems to be worked on by site builders with low/no code.
- Ecosystem of modules and themes geared towards reaching that goal.
 - Themes likely already available for your favorite design systems like Bootstrap, Daisy UI (Tailwind), DSFR, USWDS, Material
- Very active team lead by Pierre Dureau (pdureau)
 - Monthly team meetings anyone can join
 - Very active Drupal Slack support (#ui-suite-initiative)

**THE TEAM LOVES
THESE GRAPHICS**

Without UI Suite

Display	Partially Site Buildable	Custom Code	Custom Code
Business layer	Site Buildable	Site Buildable	Custom Code
Content modeling	Site Buildable	Site Buildable	Custom Code
	Simple	Medium	Complex

With UI Suite

Display	Site Buildable	Site Buildable	Custom Code
Business layer	Site Buildable	Site Buildable	Custom Code
Content modeling	Site Buildable	Site Buildable	Custom Code
	Simple	Medium	Complex

ECOSYSTEM MODULES

All the ecosystem modules in UI Suite are meant to expose things to site builders to allow them to create using only the UI.

- **UI Styles**
 - **Defines styles from modules and themes**
- **UI Skins**
 - **Sets CSS variables/themes**
- **UI Icons**
 - **Allows creation of icon packs**
- **UI Examples**
 - **Demonstrations of the other UI Suite modules**
- **UI Patterns**

THEY LOVE THIS
GRAPHIC TOO

Design system artefacts

Components & variants

Layouts & grids

Style utilities & helpers

Themes & modes

CSS variables

Icon packs

Examples pages

UI Suite modules

ui_patterns 2.x

ui_styles

ui_skins

ui_icons

ui_examples



Layout Builder
Manage Display
Ckeditor5
Views
Blocks
Theme settings
...

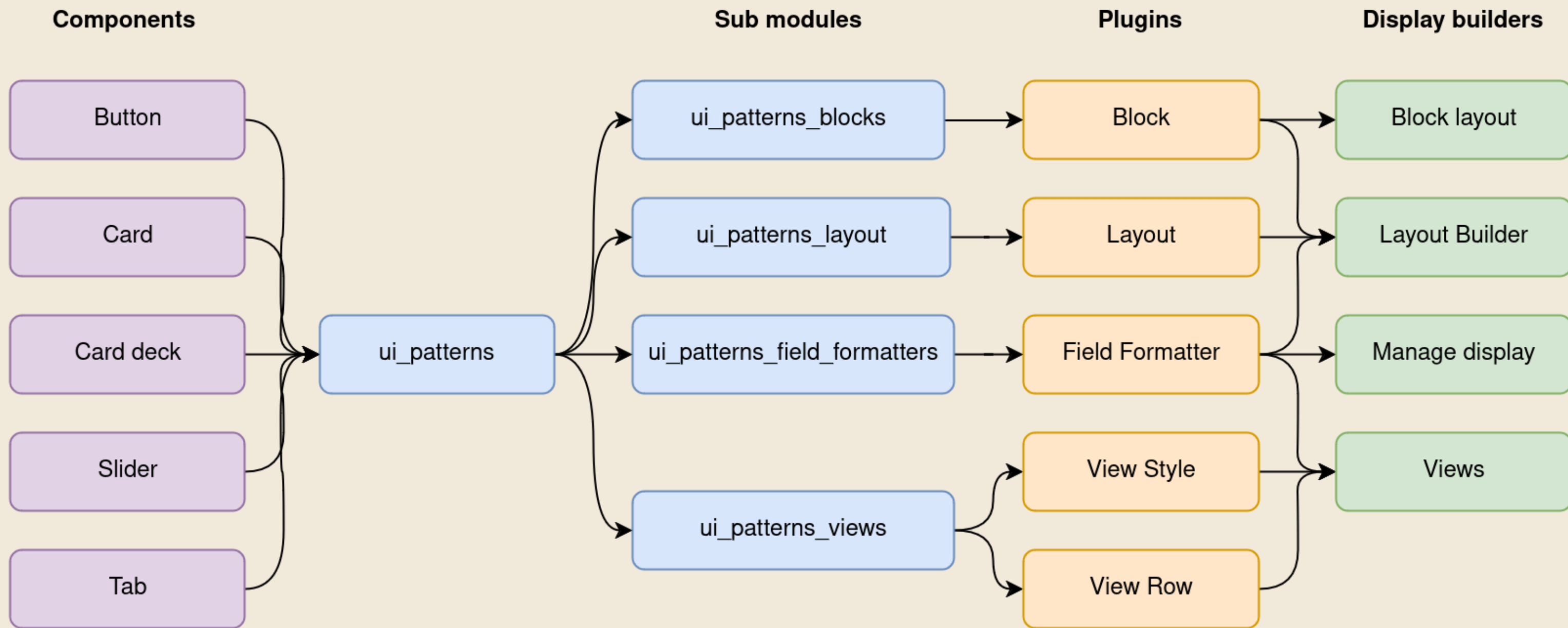
PART 3: UI PATTERNS AND SDC

https://www.drupal.org/project/ui_patterns
https://project.pages.drupalcode.org/ui_patterns/

UI PATTERNS

- **UI Patterns 2 is the connection between Single Directory Components (SDC) and just about every other tool used to format content in the UI in Drupal**
- **UI Patterns predates SDC, but UI Patterns 2 uses the Drupal Core SDC API directly**
- **Submodules that implement SDC in several specific places:**
 - **ui_patterns_blocks** for the Block System
 - **ui_patterns_layout** for the Layout Builder
 - **ui_patterns_field_formatters** for Field Formatters
 - **ui_patterns_views** for View Styles and View Rows
 - **(new!) ui_pattern_fields** for field implementation
 - **(extended) ui_patterns_ds** for Display Suite
 - **(extended) ui_patterns_field_group** for Field Groups

OOH MORE
GRAPHICS



PART 4A: **DEMONSTRATION** **UI PATTERNS** **BLOCKS**

https://project.pages.drupalcode.org/ui_patterns/1-users/1-as-block/

PART 4B: DEMONSTRATION UI PATTERN FIELD FORMATTER

https://project.pages.drupalcode.org/ui_patterns/1-users/3-in-field-formatter/

PART 4C: **DEMONSTRATION** **UI PATTERNS**

https://project.pages.drupalcode.org/ui_patterns/1-users/2-as-layout/

PART 4D: DEMONSTRATION UI PATTERNS VIEWS

https://project.pages.drupalcode.org/ui_patterns/1-users/4-with-views/

PART 5:

LOOKING TOWARD THE FUTURE

THE FUTURE

- **Constant updates and improvements in the module ecosystem.**
- **More core implementation**
 - **Themes**
 - **Field implementation**
- **Display Builder https://www.drupal.org/project/display_builder**
 - **Seeks to replace core building components like Layout Builder, Blocks UI, and even Views displays and Entity View Displays/Forms!**
 - **All built on UI Suite APIs**
 - **NOT the same as Experience Builder (XB)**
 - **XB more focused on content specific experience, while Display Builder works more broadly across many builders**
- **Stay tuned on Slack**

THANKS FOR
COMING!
ANY QUESTIONS?

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