

BADCamp

Layout Building in Drupal

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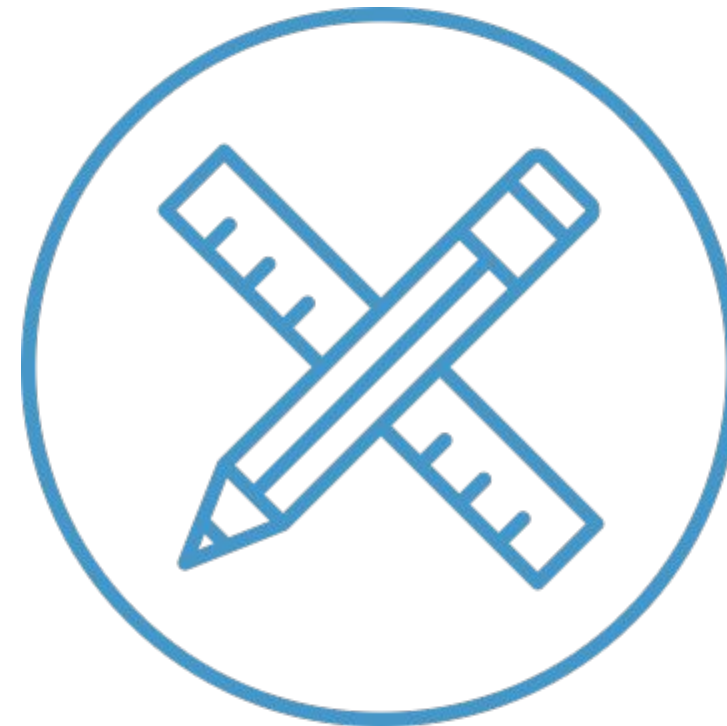
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Strategy



Design



Development



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Poynter.



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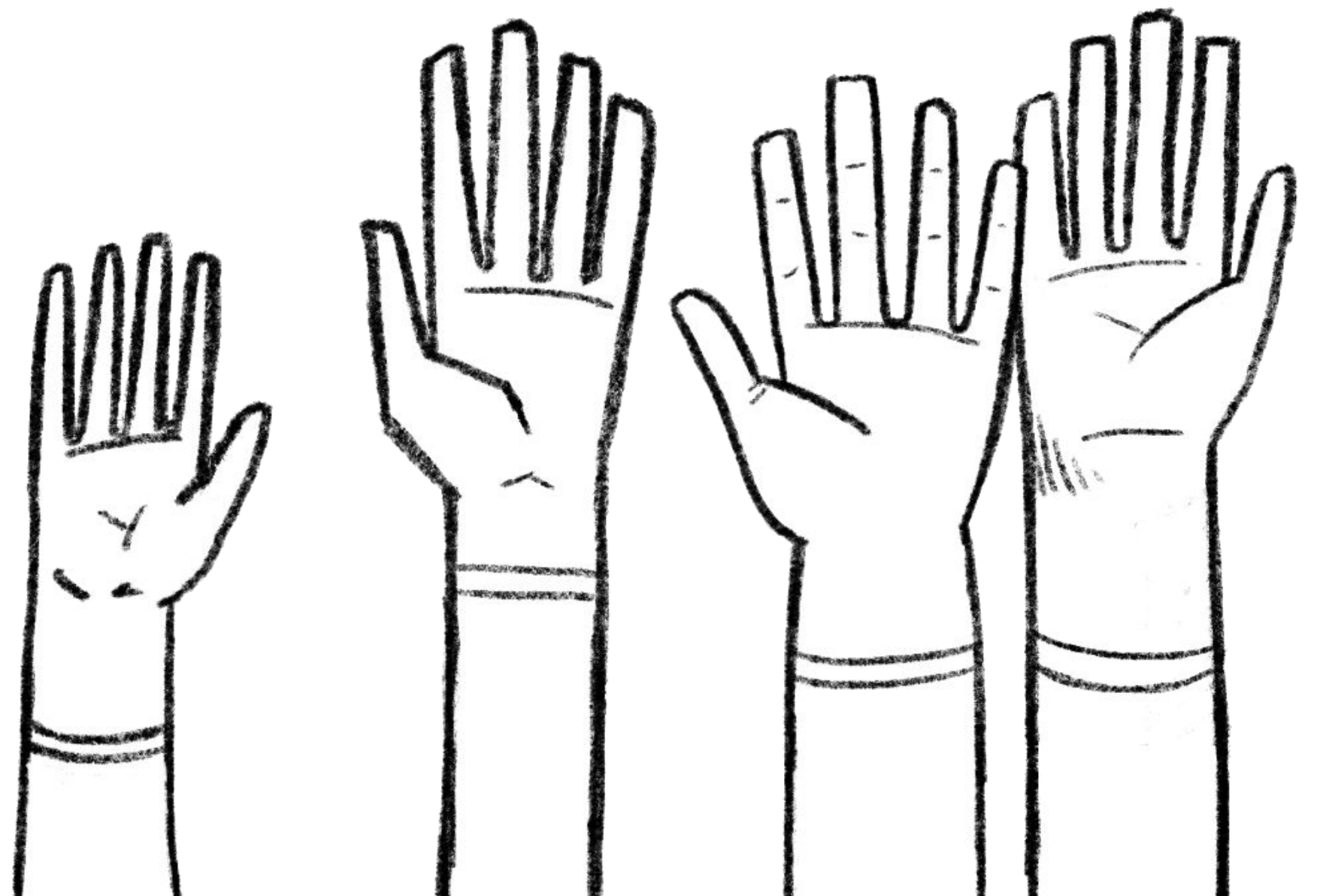
Work That Matters



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Questions?

Drop them in the chat



What to Expect

- Overview of the modules available.
- API behind building layouts.
- Cover design specific best practices and some lessons learned.

The Tools

What options do we have for controlling layout in Drupal?



Layout Discovery API

Layout Discovery API

- Drupal Core API.
- Powers all other solutions.
- Provides a consistent framework for all other modules.

Layout Builder

Layout Builder

Pros

- Drupal Core solution.
- Lives at the View Mode level in Drupal.
- Provide default layouts with easy overriding on a per node basis.
- Allows for easy intermixing of entity fields, blocks, views, or embedding other content.

Layout Builder



Cons


- The content authoring experience is lacking.
- Needs to be reigned in some.
- Global blocks missing contextual links (See Issue #3020876)
- Layout customizations require custom PHP code.

Layout Builder

Helpful Modules

- Layout Builder Restrictions
- Entity Browser Block (w/ patch in issue #3172230)
- Moderation Sidebar

 Choose a block 

 [Create custom block](#)

Filter by block name

Content fields

Authored by

Authored on

Changed

Content type

Default revision

Default translation

Header Image

ID

Language

Layout

Links



Menu link


Metatags

Promoted to front page

Published

Revision create time

 Choose a block 

 [Create custom block](#)

Filter by block name

Entity Browser

Call to Action
Browser
Image Browser

FM

Hosts
Now Playing
On-Air Host
Playlist: Classical
WETA
Playlist: VivaLaVoce

Jobs

Jobs

NPR

Classical News

Layout Builder

Helpful Modules

- Layout Builder Restrictions
- Entity Browser Block (w/ patch in issue #3172230)
- Moderation Sidebar

 Manage

 admin

 Tasks

PUBLISHED

 Edit



Content



Structure



Appearance



Extend



Configuration



People



Reports



Help



Layout Paragraphs

Layout Paragraphs

Pros

- Drupal contrib solution built on top of Paragraphs.
- Can be layered on top of existing Paragraphs setups.
- Provides improved content authoring experience for Paragraphs.
- Layouts are Paragraph entities, so configurations can be added via the Field API.
- Lives at the Field level in Drupal.

Layout Paragraphs

Cons

- No default layouts, each page needs to be built from scratch.
- Adding other structures into layouts requires a new Paragraph type.
- Can be tricky to pass layout Paragraph entity config down to the layout template.
- Lives at the Field level in Drupal.

The Code

What does it look like to work with these tools in Drupal?



Defining Layouts

— *.layouts.yml



```
twocol:
  label: 'Two Column'
  path: layouts/twocol
  template: twocol-section
  library: mymodule_layouts/twocol
  class: '\Drupal\mymodule_layouts\Plugin\Layout\TwoColLayout'
  default_region: main
  regions:
    header:
      label: Header
    main:
      label: Main
    sidebar:
      label: Sidebar
  icon_map:
    - [header]
    - [main, sidebar]
```



```
mosaic:  
  label: 'Mosaic'  
  path: layouts/mosaic  
  template: mosaic  
  library: mymodule_layouts/mosaic  
  class: '\Drupal\mymodule\Plugin\Layout\MosaicLayout'  
  default_region: main  
  regions:  
    main:  
      label: Main  
  icon_map:  
    - [main, main, main_1]  
    - [main, main, main_2]  
    - [main_3, main_4, main_5]
```




Two Column



Mosaic



```
twocol:
  label: 'Two Column'
  path: layouts/twocol
  template: twocol-section
  library: mymodule_layouts/twocol
  class: '\Drupal\mymodule_layouts\Plugin\Layout\TwoColLayout'
  default_region: main
  regions:
    header:
      label: Header
    main:
      label: Main
    sidebar:
      label: Sidebar
  icon_map:
    - [header]
    - [main, sidebar]
```



```
<?php
```

```
namespace Drupal\mymodule_layouts\Plugin\Layout;
```

```
use Drupal\Core\Plugin\PluginFormInterface;
```

```
use Drupal\Core\Layout\LayoutDefault;
```

```
use Drupal\Core\Form\FormStateInterface;
```

```
/**
```

```
 * Configurable two column layout plugin class.
```

```
 *
```

```
 * @internal
```

```
 *   Plugin classes are internal.
```

```
 */
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {
```

```
    public function defaultConfiguration() {}
```


```
    public function buildConfigurationForm(array $form, FormStateInterface $form_state) {}
```

```
    public function validateConfigurationForm(array &$form, FormStateInterface $form_state) {}
```

```
    public function submitConfigurationForm(array &$form, FormStateInterface $form_state) {}
```

```
    public function build(array $regions) {}
```

```
}
```



```
<?php
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {

    public function defaultConfiguration() {
        $flow_classes = array_keys($this->getFlowOptions());

        return parent::defaultConfiguration() + [
            'content_flow' => array_shift($flow_classes),
        ];
    }

    protected function getFlowOptions() {
        return [
            'before' => 'Before content',
            'after' => 'After content',
        ];
    }
}
```




```
<?php
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {

    public function buildConfigurationForm(array $form, FormStateInterface $form_state) {
        $form = parent::buildConfigurationForm($form, $form_state);
        $configuration = $this->getConfiguration();

        $form['content_flow'] = [
            '#type' => 'select',
            '#title' => $this->t('Sidebar position'),
            '#default_value' => $configuration['content_flow'],
            '#options' => $this->getFlowOptions(),
            '#description' => $this->t('Choose where the sidebar should be positioned on mobile devices. '),
        ];

        return $form;
    }
}
```

 Add section

Configure Featured Mosaic



Configure Featured
Mosaic



Administrative label

Featured Mosaic



```
<?php
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {

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            '#type' => 'select',
            '#title' => $this->t('Sidebar position'),
            '#default_value' => $configuration['content_flow'],
            '#options' => $this->getFlowOptions(),
            '#description' => $this->t('Choose where the sidebar should be positioned on mobile devices. '),
        ];

        return $form;
    }
}
```



```
<?php
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {  
  
    public function submitConfigurationForm(array &$form, FormStateInterface $form_state) {  
        parent::submitConfigurationForm($form, $form_state);  
        $this->configuration['content_flow'] = $form_state->getValue('content_flow');  
    }  
  
}
```



```
<?php
```

```
class TwoCol extends LayoutDefault implements PluginFormInterface {

    /**
     * {@inheritdoc}
     */
    public function build(array $regions) {
        $build = parent::build($regions);
        $default_region = $this
            ->getPluginDefinition()
            ->getDefaultRegion();

        if (isset($build[$default_region])) {
            foreach ($build[$default_region] as &$block) {
                $block['#attributes']['class'][] = 'l-grid__item';
            }
        }

        return $build;
    }
}
```




```
{% if content %}
  {% set classes = [
    'l-two-col',
    'l-two-col' ~ settings.content_flow,
  ] %}

  <section {{ attributes.addClass(classes) }}>
    {% if content.header %}
      <header {{ region_attributes.header }}>
        {{ content.header }}
      </header>
    {% endif %}

    {% if settings.content_flow == 'before' %}
      {% if content.sidebar %}
        <aside {{ region_attributes.sidebar }}>
          {{ content.sidebar }}
        </aside>
      {% endif %}
    {% endif %}

    {% if content.main %}
      <main {{ region_attributes.main }}>
        {{ content.main }}
      </main>
    {% endif %}

    {% if settings.content_flow == 'after' %}
      {% if content.sidebar %}
        <aside {{ region_attributes.sidebar }}>
          {{ content.sidebar }}
        </aside>
      {% endif %}
    {% endif %}
  </section>
{% endif %}
```

The Approach

What are the tips and tricks to know while building?



The Design

Establish some ground rules.

The Design

- You don't have to follow these rules, just make sure you have rules.
- Layouts will handle the spacing between components and between other sections.
- Components fill up the entire region they're placed within.
- Always offer up header and footer regions for layouts.
- Stick to using Layout Builder only for full view modes. Lower view modes are likely more specific and less flexible.

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Now Streaming



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What should be configurable?

The Design

- More layout options can require more configurations.
- More configurations create more variations.
- Not every component might work in every layout under every configuration.
- Background colors and images can be the hardest options to figure out.

What should be configurable?

The Design - Backgrounds

- Always ensure that text will remain accessible when backgrounds are changed.
- For solid colors, do spacing rules change for adjacent sections with the same color?
- For images, are there overlays or gradients? Do other properties, like positioning, need controlled?



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THE ANTIQUES ROADSHOW

NOVA

Downfall

THE WILDERNESS

VICTORIA
MATTERPICK

JAMESTOWN

TONY AUMLEY

<?php

```
class TwoCol extends LayoutDefault implements PluginFormInterface {

    public function defaultConfiguration() {
        $bgcolor_classes = array_keys($this->getBgColorOptions());

        return parent::defaultConfiguration() + [
            'bg_color' => array_shift($bgcolor_classes),
            'color_mode' => 'light',
        ];
    }

    public function submitConfigurationForm(array &$form, FormStateInterface $form_state) {
        parent::submitConfigurationForm($form, $form_state);

        // Map the color selection to it's associated settings.
        $color_opts = explode('__', $form_state->getValue('bg_color'));
        $this->configuration['color_mode'] = $color_opts[0];
        $this->configuration['bg_color'] = $color_opts[1];
    }

    protected function getBgColorOptions() {
        return [
            'light__lt-blue' => $this->t('Light Blue'),
            'dark__dk-blue' => $this->t('Dark Blue'),
        ];
    }
}
```



```
{% set classes = [  
    'l-two-col',  
    'l-two-col__' ~ settings.bg_color,  
    'l-two-col__' ~ settings.color_mode ~ '-mode',  
] %}
```

What should be configurable?

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Andy's quest to make posters for Senor Fabuloso leads to the colorful world of Japanese papermaking and kites.

goes on the warpath. Daisy attempts to foil a blossoming romance, and things begin to look up for the Crawley sisters.

refuses to join the basketball team because of polar bears.



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MATTERPICK

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TONY AUMLEY

Understand columns vs grids.

The Implementation

- Layouts, by default, assume you always want a strict column structure for sections.
- Grids can look like columns at first, but require a different content flow which becomes clear at smaller screens.

A New Collaboration

Ken Burns works with Siddhartha Mukherjee, M.D., to produce a three-hour documentary to premiere Spring 2020 on PBS

PBS announced Ken Burns Presents The Gene: An Intimate History, a new three-hour documentary executive produced by Ken Burns, will premiere over three nights in Spring 2020 on PBS. Pulitzer Prize-winning author Siddhartha Mukherjee, M.D., and acclaimed filmmaker Ken Burns will collaborate on the new documentary inspired by Mukherjee’s best-selling 2016 book, The Gene: An Intimate History. Award-winning filmmaker Barak Goodman will produce and, in addition to Burns and Goodman, the film will largely have the same production team behind the Emmy Award-nominated Cancer: The Emperor of All Maladies, an adaption of Mukherjee’s earlier 2010 book that aired in 2015 on PBS.

Additional Documents

| Date | File Name | File Type |
|-----------------|--------------------------------|--------------------------|
| January 4, 2020 | List of Scientists Interviewed | PDF > |
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Press Releases

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Cello Maestro Yo-Yo Ma Provides Musical Solace

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The Chaperone Screening and Discussion

WETA members and guests enjoyed an exclusive preview screening of the new film *The Chaperone* starring Elizabeth McGovern and based on the novel by Laura Moriarty.



Poldark Quiz

Are you more of a dashing hero, a strong-willed heroine or a conflict heiress? Take our Poldark Quiz and find out.



Giveaway

Local cultural organizations often make free tickets available to WETA listeners, viewers, and members. New giveaways are added regularly, so check back with us often.



WETA Kids at Discovery Engineering Day

Our WETA Kids team and the popular children's character Jet Propulsion from the WETA Kids children's show.



Telly Visions

Whether you're a fan of Masterpiece Classic, Sherlock and Poirot, empire waists and Jane Austen, or your tastes run toward Doc Martin, Lionel and Jean and Hyacinth Bucket, we hope you will find something you like.



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Understand columns vs grids.

The Implementation

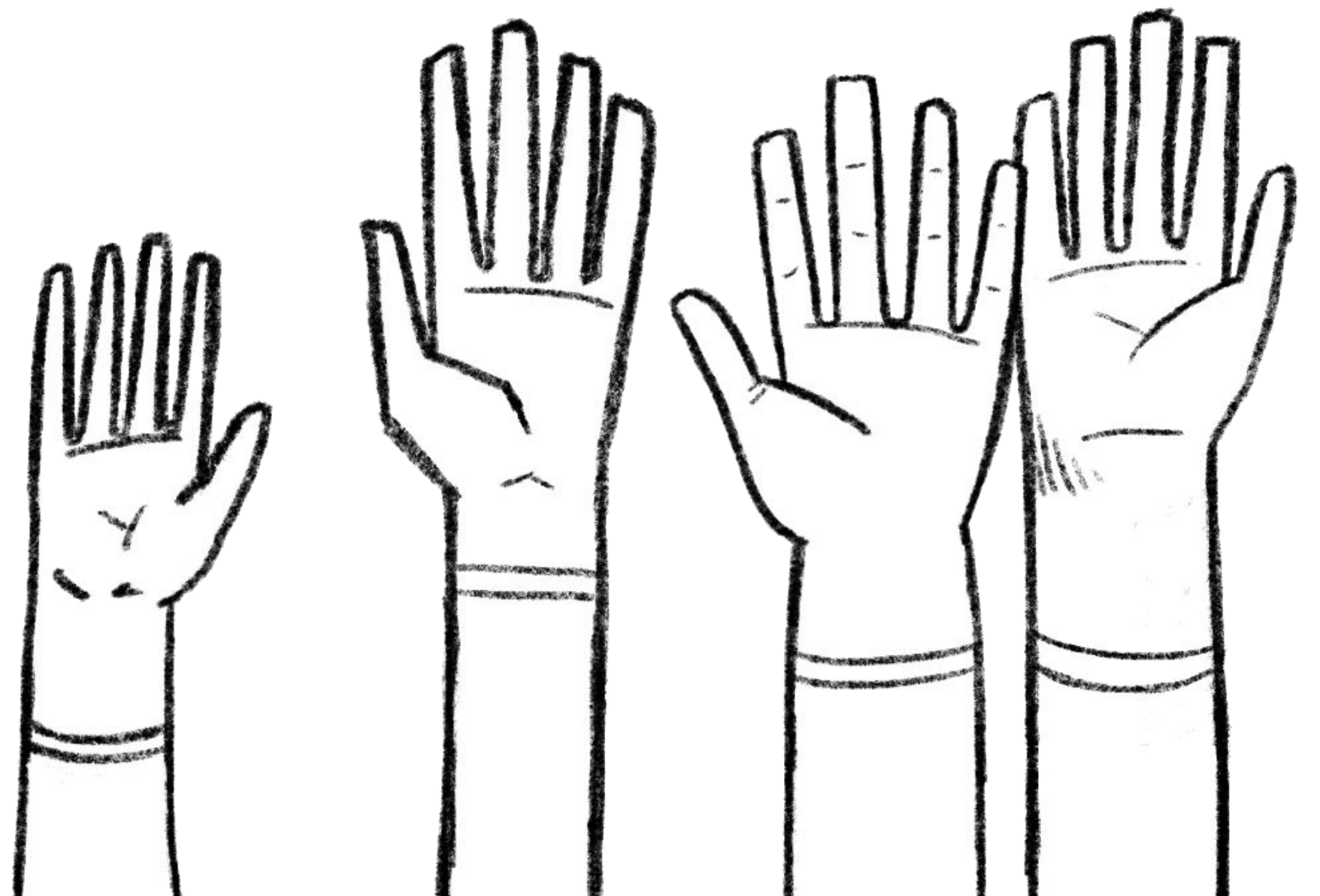
- Create a Grid layout.
- Loops over blocks placed and add classes to control spacing.
- The number of columns in the grid can be a configurable setting.

Understand columns vs grids.

The Implementation

- Use View Modes consistently so multiple types of content can be embedded together and still look good.
- Allow for View Modes to be selectable by content editors when placing content.
- Create a “Static Teaser” block type that can be an open ended solution for content editors.

Questions?



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- 4pm - 7pm - BADCamp Happy Hour
- 4:30pm - 7:30pm - Board Game Night

Check the BADCamp website for more details

