WHO WE ARE

Ray Estrada

Lead Experience Developer

Jennifer Seavey

Associate Director, PMP

U.Group

ABOUT U.GROUP

U.Group is an Advanced Technology and User-Focused Design company. Our team of 280+ changemakers are using data science, engineering, and ingenuity to develop deep understanding of our clients' most pressing challenges, and developing powerful solutions for confronting them. U.Group is committed to using customer-centric innovation to create new opportunity in the public and private sectors.

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Drupal 8 Theming Advantages

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Templating engine: **TWIG**

- Separation between form and logic

- Enhanced security

- Easy to learn syntax

- Improved access to markup via templates

- Template debugging

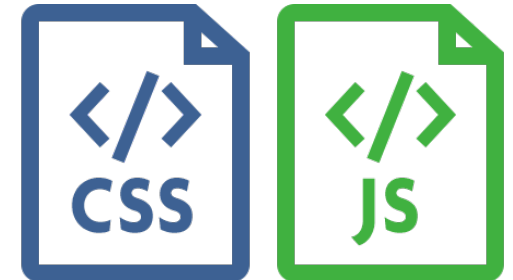- **"It's the most complete transformation of Drupal theming in 10 years."**
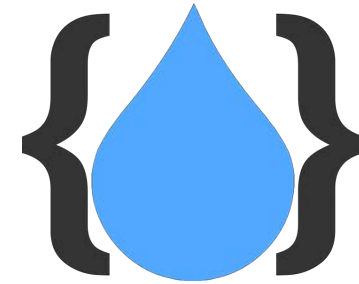
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—

Libraries

- Organizational system for assets to improve reusability and maintainability

- You can use libraries from core or from other modules or you can create your own

- Allows for loading assets only when they are needed

- Facilitates improved theming performance

</> CSS
</> JS

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API-first approach

- Opens the possibilities for a decoupled or a progressively decoupled front-end

- You can output data as JSON or XML almost as easily as HTML

- Expose Views lists as services too.

- Allows you to bypass Drupal's theme engine and leverage React or another framework

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Other advantages

- Breakpoints are defined within the theme and can be leveraged by other modules

- Responsive Images are now apart of core
    - picture or srcset

- CKeditor is now apart of core
    - Use styles from your theme and preview in the editor
    - Create new style declarations that editors can apply via the editor

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Architecture of a Drupal 8 Theme

themename.info.yml

- **Define theme settings**
  - Base theme:
    - classy: provides many classes in its markup (familiar to D7)
    - stable: provides minimal markup and very few css classes
  - libraries and libraries override
  - regions
  - define wysiwyg styles

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```yaml
name: ugroup
type: theme
description: Custom U.Group theme based on Classy
core: 8.x
version: '8.x-1.0'

# Defines the base theme for templates and classes, but we will remove the stylesheets
base theme: classy

# Removes classy styles from theme
libraries-override:
  classy/base: false
  system/base: false
  core/normalize: false
  core/html5shiv: false

# Defines libraries group in which we can add css/js.
libraries:
  - ugroup/global-styling

# Regions
regions:
  header: Header
  navigation: 'Navigation Bar'
  highlighted: Highlighted
  content: Content
  sidebar_first: 'First sidebar'
  sidebar_second: 'Second sidebar'
  footer: Footer
  bottom: 'Page bottom'

# define custom css for wysiwyg
#ckeditor_stylesheets:
#  - dist/css/wysiwyg.css
```

—

themename.libraries.yml

- **Define theme libraries**
  - They can include
    - css
    - js
    - other libraries

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```yaml
maintenance-page:
  version: VERSION
  js:
    js/mobile.install.js: {}
  css:
    theme:
      css/theme/maintenance-page.css: {}
  dependencies:
    - system/maintenance
    - seven/global-styling

install-page:
  version: VERSION
  js:
    js/mobile.install.js: {}
  css:
    theme:
      css/theme/install-page.css: {}
  dependencies:
    - seven/maintenance-page

drupal.nav-tabs:
  version: VERSION
  js:
    js/nav-tabs.js: {}
  dependencies:
    - core/matchmedia
    - core/jquery
    - core/drupal
    - core/jquery.once
    - core/drupal.debounce
    - core/collapse

drupal.responsive-detail:
  version: VERSION
  js:
```

—

themename.breakpoints.yml

- **Define Theme breakpoints**
  - to be used for modules such as Responsive Image Styles

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```yaml
ugroup.mobile:
  label: Mobile
  mediaQuery: 'all and (max-width: 767px)'
  weight: 0
  multipliers:
    - 1x
ugroup.tablet:
  label: Tablet
  mediaQuery: 'all and (min-width: 768px) and (max-width: 959px)'
  weight: 2
  multipliers:
    - 1x
ugroup.desktop:
  label: Desktop
  mediaQuery: 'all and (min-width: 960px)'
  weight: 5
  multipliers:
    - 1x
```

themename.theme

- **Define theme functions**
    - Preprocess
    - Hooks
    - Template suggestions

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```php
<?php
/**
 * @file
 * Theme Suggestion functions.
 */


/**
 * Block Theme Suggestions
 * @param $suggestions
 * @param $variables
 */
function ugroup_theme_suggestions_block_alter(&$suggestions, $variables) {
  // Create a blank block template for general use
  if ($variables['elements']['#plugin_id'] == 'system_main_block') {
    $suggestions[] = 'block__no_wrapper';
  }
}


/**
 * Region Theme Suggestions
 * @param $suggestions
 * @param $variables
 */
function ugroup_theme_suggestions_region_alter(&$suggestions, $variables) {
  // Create a blank region template for general use
  if ($variables['elements']['#region'] == 'content') {
    $suggestions[] = 'region__no_wrapper';
  }
}
```

—

Templates: **html.twig**

- pre-defined templates

- **extend** a template

- **include** a template

- **filters**

- **attach** a library

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```twig
{%
  set classes = [
    'node',
    'node--type-' ~ node.bundle|clean_class,
    node.isPromoted() ? 'node--promoted',
    node.isSticky() ? 'node--sticky',
    not node.isPublished() ? 'node--unpublished',
    view_mode ? 'node--view-mode-' ~ view_mode|clean_class,
  ]
%}
{{ attach_library('classy/node') }}
<article{{ attributes.addClass(classes) }}>

  {{ title_prefix }}
  {% if not page %}
    <h2{{ title_attributes }}>
      <a href="{{ url }}" rel="bookmark">{{ label }}</a>
    </h2>
  {% endif %}
  {{ title_suffix }}

  {% if display_submitted %}
    <footer class="node__meta">
      {{ author_picture }}
      <div{{ author_attributes.addClass('node__submitted') }}>
        {% trans %}Submitted by {{ author_name }} on {{ date }}{% endtrans %}
        {{ metadata }}
      </div>
    </footer>
  {% endif %}

  <div{{ content_attributes.addClass('node__content') }}>
    {{ content }}
  </div>

</article>
```

```twig
{#
/**
 * @file
 * Theme override for Congress Member: Teaser
 *
 */
#}

{% extends "node--congress-member.html.twig" %}
{% block details %}
    <div class="congress-member-details">
        {{ title_prefix }}
        {{ label }}
        {{ title_suffix }}
        {% if content.field_cm_district|render %}
            <div class="cm-state-district">{{- content.field_cm_state.0 -}}{{ separator }}{{- content.field_cm_district.0 -}}</div>
        {% endif %}
        {{ content.field_cm_voted_count }}
        {{ content.field_cm_letter_count }}
    </div>
{% endblock %}
```

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Theme Graphics

- favicon (.ico or .png)

- logo (.svg)

- screenshot (.png)

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UI Assets Directories

- css

- js

- svg

- images

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This is an example of the files and folders that are found in typical theme folder structure:

```
|-fluffiness.breakpoints.yml
|-fluffiness.info.yml
|-fluffiness.libraries.yml
|-fluffiness.theme
|-config
|   |-install
|   |   |-fluffiness.settings.yml
|   |-schema
|   |   |-fluffiness.schema.yml
|-css
|   |-style.css
|-js
|   |-fluffiness.js
|-images
|   |-buttons.png
|-logo.svg
|-screenshot.png
|-templates
|   |-maintenance-page.html.twig
|   |-node.html.twig
```

Below is a description of the most common files that you can find in a theme.

*.info.yml

A theme must contain an .info.yml file to define the theme. Among other things

This is an example of the files and folders that are found in typical theme folder structure:

```
|-fluffiness.breakpoints.yml
|-fluffiness.info.yml
|-fluffiness.libraries.yml
|-fluffiness.theme
|-config
|   |-install
|   |   |-fluffiness.settings.yml
|   |-schema
|   |   |-fluffiness.schema.yml
|-css
|   |-style.css
|-js
|   |-fluffiness.js
|-images
|   |-buttons.png
|-logo.svg
|-screenshot.png
|-templates
|   |-maintenance-page.html.twig
|   |-node.html.twig
```

Below is a description of the most common files that you can find in a theme.

*.info.yml

A theme must contain an .info.yml file to define the theme. Among other things

Modular-based build of a landing page system

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Leverage the tools

- template debugging (`sites/default/services.yml` or `sites/development.services.yml`)

- twig filters

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```yaml
38      #
39    twig.config:
40      # Twig debugging:
41      # When debugging is enabled:
42      # - The markup of each Twig template is surrounded by HTML comments that
43      #   contain theming information, such as template file name suggestions.
44      # - Note that this debugging markup will cause automated tests that directly
45      #   check rendered HTML to fail. When running automated tests, 'debug'
46      #   should be set to FALSE.
47      # - The dump() function can be used in Twig templates to output information
48      #   about template variables.
49      #
50      # For more information about debugging Twig templates, see
51      # https://www.drupal.org/node/1906392.
52      #
53      # Not recommended in production environments
54      # @default false
55      debug: true
56      # Twig auto-reload:
57      # Automatically recompile Twig templates whenever the source code changes.
58      # If you don't provide a value for auto_reload, it will be determined
59      # based on the value of debug.
60      #
61      # Not recommended in production environments
62      # @default null
63      auto_reload: true
64      # Twig cache:
65      # By default, Twig templates will be compiled and stored in the filesystem
66      # to increase performance. Disabling the Twig cache will recompile the
67      # templates from source each time they are used.
68      #
69      # Not recommended in production environments
70      # @default true
71      cache: false
72    renderer.config:
73      # Renderer required cache contexts:
74      #
```

```
1806
1807    <!-- THEME DEBUG -->
1808    <!-- THEME HOOK: 'paragraph' -->
1809    <!-- FILE NAME SUGGESTIONS:
1810       * paragraph--section--default.html.twig
1811       x paragraph--section.html.twig
1812       * paragraph--default.html.twig
1813       * paragraph.html.twig
1814    -->
1815    <!-- BEGIN OUTPUT from 'themes/custom/echo/templates/paragraphs/paragraph--section.html.twig' -->
1816      <div data-quickedit-entity-id="paragraph/96" class="paragraph paragraph--id--96 paragraph--type--section paragraph--view-mode--default section section-banner">
1817        <div class="inner-wrapper">
1818                <div class="background-image-container">
1819          <style>
1820            .paragraph--id--96 .background-image-container.in-viewport {
1821              background-image: url(/sites/default/files/2018-12/runner-tunnel.jpg);
1822            }
1823          </style>
1824        </div>
1825
1826
1827    <!-- THEME DEBUG -->
1828    <!-- THEME HOOK: 'field' -->
1829    <!-- FILE NAME SUGGESTIONS:
1830       * field--paragraph--field-section-content--section.html.twig
1831       * field--paragraph--field-section-content.html.twig
1832       * field--paragraph--section.html.twig
1833       x field--field-section-content.html.twig
1834       * field--entity-reference-revisions.html.twig
1835       * field.html.twig
1836    -->
1837    <!-- BEGIN OUTPUT from 'themes/custom/echo/templates/field/field--field-section-content.html.twig' -->
1838
1839
1840
1841    <!-- THEME DEBUG -->
1842    <!-- THEME HOOK: 'paragraph' -->
1843    <!-- FILE NAME SUGGESTIONS:
1844       * paragraph--content--default.html.twig
1845       x paragraph--content.html.twig
1846       * paragraph--default.html.twig
1847       * paragraph.html.twig
1848    -->
1849    <!-- BEGIN OUTPUT from 'themes/custom/echo/templates/paragraphs/paragraph--content.html.twig' -->
1850      <div data-quickedit-entity-id="paragraph/91" class="paragraph paragraph--type--content paragraph--view-mode--default section-content">
1851
1852
1853    <!-- THEME DEBUG -->
1854    <!-- THEME HOOK: 'field' -->
1855    <!-- FILE NAME SUGGESTIONS:
1856       * field--paragraph--field-content--content.html.twig
1857       * field--paragraph--field-content.html.twig
1858       * field--paragraph--content.html.twig
1859       * field--field-content.html.twig
1860       x field--text-long.html.twig
1861       * field.html.twig
1862    -->
1863    <!-- BEGIN OUTPUT from 'core/themes/classy/templates/field/field--text-long.html.twig' -->
1864
1865            <div data-quickedit-field-id="paragraph/91/field_content/en/default" class="clearfix text-formatted field field--name-field-content field--type-text-long field--label-hidden field__item"><h2>Discover.
1865    <br />
1866    Invest.<br />
```

```
<!-- THEME DEBUG -->
<!-- THEME HOOK: 'paragraph' -->
<!-- FILE NAME SUGGESTIONS:
   * paragraph--section--default.html.twig
   x paragraph--section.html.twig
   * paragraph--default.html.twig
   * paragraph.html.twig
-->
<!-- BEGIN OUTPUT from 'themes/custom/echo/templates/paragraphs/paragraph--section.html.twig' -->
  <div data-quickedit-entity-id="paragraph/96" class="paragraph paragraph--id--96 paragraph--type--section paragraph--view-mode--default section section-banner">
    <div class="inner-wrapper">
            <div class="background-image-container">
        <style>
            .paragraph--id--96 .background-image-container.in-viewport {
                background-image: url(/sites/default/files/2018-12/runner-tunnel.jpg);
            }
        </style>
      </div>


<!-- THEME DEBUG -->
<!-- THEME HOOK: 'field' -->
<!-- FILE NAME SUGGESTIONS:
   * field--paragraph--field-section-content--section.html.twig
   * field--paragraph--field-section-content.html.twig
   * field--paragraph--section.html.twig
   x field--field-section-content.html.twig
   * field--entity-reference-revisions.html.twig
   * field.html.twig
-->
<!-- BEGIN OUTPUT from 'themes/custom/echo/templates/field/field--field-section-content.html.twig' -->



<!-- THEME DEBUG -->
<!-- THEME HOOK: 'paragraph' -->
<!-- FILE NAME SUGGESTIONS:
   * paragraph--content--default.html.twig
   x paragraph--content.html.twig
   * paragraph--default.html.twig
   * paragraph.html.twig
-->
<!-- BEGIN OUTPUT from 'themes/custom/echo/templates/paragraphs/paragraph--content.html.twig' -->
  <div data-quickedit-entity-id="paragraph/91" class="paragraph paragraph--type--content paragraph--view-mode--default section-content">


<!-- THEME DEBUG -->
<!-- THEME HOOK: 'field' -->
<!-- FILE NAME SUGGESTIONS:
   * field--paragraph--field-content--content.html.twig
   * field--paragraph--field-content.html.twig
   * field--paragraph--content.html.twig
   * field--field-content.html.twig
   x field--text-long.html.twig
   * field.html.twig
-->
<!-- BEGIN OUTPUT from 'core/themes/classy/templates/field/field--text-long.html.twig' -->
            <div data-quickedit-field-id="paragraph/91/field_content/en/default" class="clearfix text-formatted field field--name-field-content field--type-text-long field--label-hidden field__item"><h2>Discover.
<br />
Invest.<br />
```

```
1805
1806
1807   <!-- THEME DEBUG -->
1808   <!-- THEME HOOK: 'paragraph' -->
1809   <!-- FILE NAME SUGGESTIONS:
1810      * paragraph--section--default.html.twig
1811      x paragraph--section.html.twig
1812      * paragraph--default.html.twig
1813      * paragraph.html.twig
1814   -->
1815   <!-- BEGIN OUTPUT from 'themes/custom/echo/templates/paragraphs/paragraph--section.html.twig' -->
1816      <div data-quickedit-entity-id="paragraph/96" class="paragraph paragraph--id--96 paragraph--type--s
1817        <div class="inner-wrapper">
1818                 <div class="background-image-container">
1819             <style>
1820                .paragraph--id--96 .background-image-container.in-viewport {
1821                   background-image: url(/sites/default/files/2018-12/runner-tunnel.jpg);
1822                }
1823             </style>
1824          </div>
1825
1826
1827   <!-- THEME DEBUG -->
1828   <!-- THEME HOOK: 'field' -->
1829   <!-- FILE NAME SUGGESTIONS:
1830      * field--paragraph--field-section-content--section.html.twig
1831      * field--paragraph--field-section-content.html.twig
1832      * field--paragraph--section.html.twig
1833      x field--field-section-content.html.twig
1834      * field--entity-reference-revisions.html.twig
1835      * field.html.twig
```

```twig
/**
 * @file
 * Custom theme implementation to display a section paragraph.
 * @see template_preprocess_paragraph()
 *
 * @ingroup themeable
 */
#}
{%
set classes = [
'paragraph',
'paragraph--id--' ~ paragraph.id(),
'paragraph--type--' ~ paragraph.bundle|clean_class,
view_mode ? 'paragraph--view-mode--' ~ view_mode|clean_class,
'section',
content.field_classes|render ? content.field_classes.0|e|striptags,
content.field_section_styles|render ? content.field_section_styles.0|e|striptags,
]
%}
{% block paragraph %}
  <div{{ attributes.addClass(classes) }}>
    <div class="inner-wrapper">
      {% if content.field_background_image|render %}
        <div class="background-image-container">
          <style>
            .paragraph--id--{{ paragraph.id() }} .background-image-container.in-viewport {
              background-image: url({{ content.field_background_image.0|e|striptags }});
            }
          </style>
        </div>
      {% endif %}
      {% block content %}
        {{ content|without('field_background_image', 'field_classes', 'field_section_styles') }}
      {% endblock %}
    </div>
  </div>
{% endblock paragraph %}
```

Enhance design options

- WYSIWYG styles match the sites.

- Editors can add formatting styles without editing source code.

- Attach styles to a section via a classes input field or a dropdown

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Not Secure | https://echohealth.lndo.site/node/1/edit

Manage   Shortcuts   restrada

Content   Structure   Appearance   Extend   Configuration   People   Reports   Help

Section

Remove

Content *   **Settings** *

Show row weights

SECTION CONTENT *

Content

Collapse

Content *

B I S x² x₂ Iₓ | ≡ ≡ ≡ | 🔗 🔗 | ⋮≡ ⋮≡ | ❞ 🖼 ▦ ▬ | Format | Styles | ⊡ Source

How We Invest

We are stage agnostic, investing in everything from early to late-stage companies. We take a hands-on approach, supported by a dedicated market development team, to develop strategic relationships and partnerships. Learn more about our investment philosophy and market development model.

Learn More

Text format Full HTML

About text formats

▼ **FILE UPLOAD**

Add a new file

Choose Files   No file chosen

Unlimited number of files can be uploaded to this field.
100 MB limit.
Allowed types: pdf ppt pptx xls xlsx doc docx.

Not Secure | https://echohealth.lndo.site/node/1/edit

≡ Manage | ⭐ Shortcuts | 👤 restrada

📄 Content | 🔧 Structure | 🎨 Appearance | 🔌 Extend | ⚙ Configuration | 👥 People | 📊 Reports | ❓ Help

✛ Section

Remove

Content * | **Settings** *

Show row weights

SECTION CONTENT *

✛ Content

Collapse ▾

Content *

B | I | S | x² | x₂ | I_x | | ≣ | ≣ | ≣ | | 🔗 | 🔗 | | ≔ | ≔ | | " | 🖼 | ▦ | ▤ | | Heading 2 ▾ | | Styles ▾ | | 🖼 | 🔲 Source

Block Styles

Large Paragraph

How We Invest

We are stage agnostic, investing in everything from early to late-stage companies. W___proach,
supported by a dedicated market development team, to develop strategic relationsh___ Learn more
about our investment philosophy and market development model.

Intro Paragraph

Inline Styles

QUOTE ATTRIBUTION

Learn More

body   h2

About text formats ❓

Text format | Full HTML ▾

▼ **FILE UPLOAD**

Add a new file

Choose Files | No file chosen

Unlimited number of files can be uploaded to this field.
100 MB limit.
Allowed types: pdf ppt pptx xls xlsx doc docx.

Not Secure | https://echohealth.lndo.site/node/1/edit

Manage ☰   ★ Shortcuts   👤 restrada

📄 Content   Structure   Appearance   Extend   Configuration   People   Reports   ❓ Help

✛ Section   Remove

Content * | Settings *

Section Styles
– None –

Background Image

[+]

🔍 Preview

Alternative text *
Abstract Beach

Short description of the image used by screen readers and displayed when the image is not loaded. This is important for accessibility.

📄 beach-exposure.jpg (51.21 KB)   Remove

Classes
section-cta

Separate classes with a space.

✛ Section   Remove

Content * | Settings

Show row weights

SECTION CONTENT *

✛ Content   What We Do As stage-agnostic investors, we are committed to a new approach to strategic investi...   Edit ▾

✛ Link List   Edit ▾

Add Content ▾ to *Section Content*

Add Hero Banner ▾ to *Page Components*

https://echohealth.lndo.site/node/1/edit#edit-group-settings

—

Improve Performance

- Build reusable components and pattern libraries

- Load assets only when you need them

    - libraries

- Responsive Images

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```yaml
global-styling:
    version: 1.0
    css:
        theme:
            dist/css/common.css: {}

echo-homepage:
    version: 1.0
    css:
        theme:
            dist/css/homepage.css: {}

echo-forms:
    version: 1.0
    css:
        theme:
            dist/css/forms.css {}
    js:
        dist/js/forms.js: { scope: footer }
    dependencies:
        - core/jquery

echo-tabs:
    version: 1.0
    css:
        theme:
            dist/css/tabs.css {}
    js:
        dist/js/tabs.js: { scope: footer }
    dependencies:
        - core/jquery
```

Label *

Square   Machine name: square

Example: 'Hero image' or 'Author image'.

Breakpoint group *

Responsive Image ▼

Select a breakpoint group from the installed themes and modules. Below you can select which breakpoints to use from this group. You can also select which image style or styles to use for each breakpoint you use. Warning: if you change the breakpoint group you lose all your image style selections for each breakpoint.

▼ **1X VIEWPORT SIZING []**

Type

◉ Select multiple image styles and use the sizes attribute.

○ Select a single image style.

○ Do not use this breakpoint.

See the Responsive Image help page for information on the sizes attribute.

Sizes *

100vw

Enter the value for the sizes attribute, for example: *(min-width:700px) 700px, 100vw.*

Image styles

☐ Scale 320w

☐ Scale 640w

☐ Scale 960w

☑ Square 320

☑ Square 640

☑ Square 960

☐ standard 1440

☐ standard 1920

☐ standard 320

☐ standard 640

☐ standard 960

☐ Thumbnail (100×100)

Select image styles with widths that range from the smallest amount of space this image will take up in the layout to the largest, bearing in mind that high resolution screens will need images 1.5x to 2x larger.

Fallback image style *

Square 320 ▼

Select the smallest image style you expect to appear in this space. The fallback image style should only appear on the site if an error occurs.
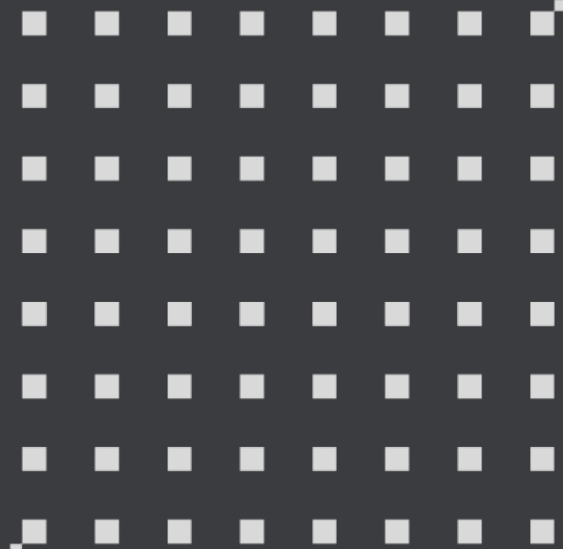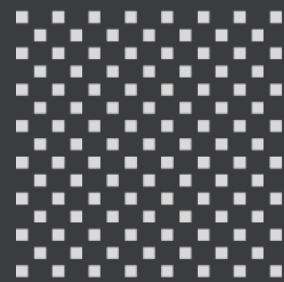
Save   Delete

RESOURCES

—

https://sqndr.github.io/d8-theming-guide

https://www.drupaI.org/docs/8/theming

U.Group

Q&A

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