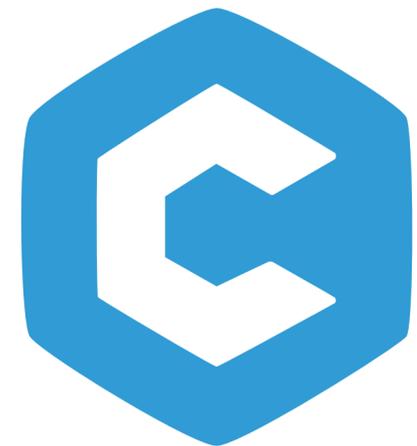


# Branch Out of Your Comfort Zone with Twig Templates



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# PHP Template

# Twig

# PHP Template vs Twig

# PHPTemplate vs Twig

```
// node.tpl.php
<?php if (!$page): ?>
    <h2<?php print $title_attributes; ?>>
        <a href="<?php print $node_url; ?>"><?php print $title; ?></a>
    </h2>
<?php endif; ?>
```

```
// node.html.twig
{% if not page %}
    <h2{{ title_attributes.addClass('node__title') }}>
        <a href="{{ url }}"> {{ label }}</a>
    </h2>
{% endif %}
```

# Roadmap

Creating Templates

Overriding Default Templates

Theme Hook Suggestions

Naming Conventions

Variables

Conditionals

Control Structures

Filters

Links

Render Arrays

Debugging

Coding Standards

# Creating Templates

in `modules/\*/.`

## Creating Templates: Drupal 7

aggregator-feed-source.tpl.php  
aggregator-item.tpl.php  
aggregator-summary-item.tpl.php  
aggregator-summary-items.tpl.php  
aggregator-wrapper.tpl.php  
block-admin-display-form.tpl.php  
block.tpl.php  
book-all-books-block.tpl.php  
book-export-html.tpl.php  
book-navigation.tpl.php  
book-node-export-html.tpl.php

comment-wrapper.tpl.php  
comment.tpl.php  
field.tpl.php  
forum-icon.tpl.php  
forum-list.tpl.php  
forum-submitted.tpl.php  
forum-topic-list.tpl.php  
forums.tpl.php  
node.tpl.php  
overlay.tpl.php  
poll-bar--block.tpl.php  
poll-bar.tpl.php  
poll-results--block.tpl.php  
poll-results.tpl.php  
poll-vote.tpl.php  
profile-block.tpl.php

profile-listing.tpl.php  
profile-wrapper.tpl.php  
search-block-form.tpl.php  
search-result.tpl.php  
search-results.tpl.php  
page.tpl.php  
maintenance-page.tpl.php  
region.tpl.php  
html.tpl.php  
taxonomy-term.tpl.php  
toolbar.tpl.php  
user-picture.tpl.php  
user-profile-category.tpl.php  
user-profile-item.tpl.php  
user-profile.tpl.php

# Creating Templates: Drupal 7

- \* node.tpl.php
- \* node--promoted.tpl.php

## template.php

```
function THEME_preprocess_node(&$variables) {  
    if ($variables['promote']) {  
        $variables['theme_hook_suggestions'] = 'node__promoted';  
    }  
}
```

# Creating Templates: Drupal 8

`theme/templates/*.html.twig`

theme

- templates
  - block.html.twig
  - comment.html.twig
  - maintenance-page.html.twig
  - node.html.twig
  - page.html.twig
  - status-messages.html.twig
  - custom-template.html.twig

# Overriding Default Templates

# Overriding Default Templates: Drupal 7

- \* page.tpl.php
- \* page--[node-type].tpl.php

## template.php

```
function THEME_preprocess_page(&$variables) {  
  if (isset($variables['node']->type)) {  
    $variables['theme_hook_suggestions'][] = $variables['node']->type;  
  }  
}
```

# Overriding Default Templates: Drupal 8

“

1. Locate the template you wish to override.
2. Copy the template file from its base location into your theme folder.
3. (optionally) Rename the template according to the **naming conventions**.
4. Modify the template to your liking. ”

# Theme Hook Suggestions

# Theme Hook Suggestions: Drupal 7

## template.php

```
/**
 * Implements hook_preprocess_HOOK.
 */
function THEME_preprocess_page(&$variables) {
  if (isset($variables['node']->type)) {
    $variables['theme_hook_suggestion'] = $variables['node']->type;
  }
}
```

# Theme Hook Suggestions: Drupal 7

template.php

```
$variables['theme_hook_suggestion'] != $variables['theme_hook_suggestions']
```

# Theme Hook Suggestions: Drupal 8

## custom.theme

```
function hook_theme_suggestions_alter(array &$suggestions, array &$variables, $hook) {  
  // Alters named suggestions for all theme hooks.  
}  
  
function hook_theme_suggestions_HOOK(array &$variables) {  
  // Provides alternate named suggestions for a specific theme hook.  
}  
  
function hook_theme_suggestions_HOOK_alter(array &$suggestions, array $variables) {  
  // Alters named suggestions of a specific theme hook.  
  // Can reorder or remove suggestions provided by hook_theme_suggestions_HOOK.  
}
```

# Theme Hook Suggestions: Drupal 8

## custom.theme

```
/**
 * Implements hook_theme_suggestions_HOOK_alter().
 */
function custom_suggestions_user_alter(array &$suggestions, array &$variables) {
  if (!empty($variables['elements']['#view_mode'])) {
    $suggestions[] = 'user__' . $variables['elements']['#view_mode'];
  }
}
```

## user--custom-view-mode.html.twig

# Naming Conventions

# Naming Conventions: Drupal 7

<http://example.com/node/1>

## # Naming Conventions Hierarchy

- \* `page--front.tpl.php` // but only if `node/1/edit` is the front page
- \* `page--node--1.tpl.php` // prefix is not changed because the component is a number
- \* `page--node--%.tpl.php`
- \* `page--node.tpl.php` // and prefix is set to `page__node`
- \* `page.tpl.php` // this is always a suggestion

# Naming Conventions: Drupal 7

<http://example.com/node/1>

## # Naming Conventions Hierarchy

- \* `page--front.html.twig` // but only if `node/1/edit` is the front page
- \* `page--node--1.html.twig`
- \* `page--node.html.twig`
- \* `page.html.twig`

# Variables

# Variables: Drupal 7

## template.php

```
function THEME_preprocess_node(&$variables) {  
    $variables['foo'] = 'bar';  
}
```

## node.tpl.php

```
<div id="foo-wrapper">  
    <?php print $foo; ?>  
</div>
```

# Variables: Drupal 8

## custom.theme

```
function custom_preprocess_node(&$variables) {  
  $variables['foo'] = 'bar';  
}
```

## node.html.twig

```
<div id="foo-wrapper">  
  {{ foo }}  
</div>
```

# Variables: Comparison

template.php || custom.theme

```
function custom_preprocess_node(&$variables) {  
    $variables['foo'] = 'bar';  
}
```

node.tpl.php

```
<div id="foo-wrapper">  
    <?php print $foo; ?>  
</div>
```

node.html.twig

```
<div id="foo-wrapper">  
    {{ foo }}  
</div>
```

# Conditionals

# Conditionals: Drupal 7

```
<?php if ($url): ?>  
  <a href="<?php print $url; ?>"><?php print $image; ?></a>  
<?php else: ?>  
  <?php print $image; ?>  
<?php endif; ?>
```

# Conditionals: Drupal 8

```
{% if url %}
  <a href="{{ url }}">
    {{ image }}
{% else %}
  {{ image }}
{% endif %}
```

# Conditionals: Comparison

## PHPTemplate

```
<?php if ($url): ?>  
  <a href="<?php print $url; ?>">  
    <?php print $image; ?>  
  </a>  
<?php else: ?>  
  <?php print $image; ?>  
<?php endif; ?>
```

## Twig

```
{% if url %}  
  <a href="{{ url }}">  
    {{ image }}  
  </a>  
{% else %}  
  {{ image }}  
{% endif %}
```

# Conditionals: Comparison

## PHPTemplate

```
// !empty()
<?php if !empty($url): ?>
    <a href="<?php print $url; ?>">
        My Link!
    </a>
<?php endif; ?>

// isset()
<?php if isset($url): ?>
    <a href="<?php print $url; ?>">
        My Link!
    </a>
<?php endif; ?>
```

## Twig

```
// !empty()
{% if url is not empty %}
    <a href="{{ url }}">
        My Link!
    </a>
{% endif %}

// isset()
{% if url is defined %}
    <a href="{{ url }}">
        My Link!
    </a>
{% endif %}
```

# Control Structures

# Control Structures: Drupal 7

## PHP

```
foreach ($rows as $row) {  
    print $row;  
}
```

## PHPTemplate

```
<?php foreach ($rows as $row): ?>  
    <?php print $row; ?>  
<?php endforeach; ?>
```

# Control Structures: Drupal 8

```
{% for row in rows %}  
  {{ row.content }}  
{% endfor %}
```

# Control Structures: Comparison

## PHPTemplate

```
<?php foreach ($rows as $row): ?>  
  <?php print $row; ?>  
<?php endforeach; ?>
```

## Twig

```
{% for row in rows %}  
  {{ row.content }}  
{% endfor %}
```

# Filters

# Filters

- Check Plain
- Translate
- Translate with substitutions
- Implode
- Escape

# Filters: Drupal 7

```
// Check Plain
<?php print check_plain($title); ?>

// Translate
<?php print t('Home'); ?>

// Translate with Substitutions
<?php print t('Welcome, @username', array('@username' => $user->name)); ?>

// Implode
<?php echo implode(', ', $usernames); ?>

// Escape
<?php echo check_plain($title); ?>
```

# Filters: Drupal 8

```
// Check Plain
{{ title|striptags }}

// Translate
{{ 'Home'|t }}

// Translate with Substitutions
{{ 'Welcome, @username'|t({ '@username': user.name }) }}

// Implode
{{ usernames|safe_join(', ') }}

// Escape
{{ title }}
```

# Filters: Comparison

## PHPTemplate

```
// Check Plain
<?php print check_plain($title); ?>

// Translate
<?php print t('Home'); ?>

// Translate with Substitutions
<?php print t('Welcome, @username',
array('@username' => $user->name)); ?>

// Implode
<?php echo implode(', ', $usernames); ?>

// Escape
<?php echo check_plain($title); ?>
```

## Twig

```
// Check Plain
{{ title|striptags }}

// Translate
{{ 'Home'|t }}

// Translate with Substitutions
{{ 'Welcome, @username'|
t({'@username': user.name }) }}

// Implode
{{ usernames|safe_join(', ') }}

// Escape
{{ title }}
```

# Filters: Drupal 8

```
// Implode and lowercase  
{{ usernames|safe_join(', ')|lower }}
```

# Links

`drupal_get_path()` // returns path of a system item.

`path_to_theme()` // returns path to the current themed element

Template.php

```
$variable['custom_url'] = url(node_uri($node)['path']);
```

custom-url.tpl.php

```
<a href="<?php print $custom_url; ?>">
```

Check out this link!

```
</a>
```

**path()** - Generates a [relative] URL path given a route name and parameters.

```
// Link to the default frontpage content listing view.
```

```
<a href="{{ path('view.frontpage'); }}">
  {{ 'View all content'|t }}
</a>
```

**url()** - Generates an absolute URL given a route name and parameters.

```
// Link to a specific node page.
```

```
<a href="{{ url('entity.node.canonical', {'node': node.id}) }}">
  {{ 'Read more'|t }}
</a>
```

# Render Arrays

# Render Arrays: Drupal 7

## template.php

```
// Using theme() in D7.  
$logo = theme('image', array(  
  'path' => 'logo.png',  
  'alt' => t('My logo!'),  
));  
  
// Render array in D7.  
$logo = array(  
  '#theme' => 'image',  
  '#path' => 'logo.png',  
  '#alt' => t('My logo!'),  
);
```

## page.tpl.php

```
<?php print $logo; ?>
```

## page.tpl.php

```
<?php print render($logo); ?>
```

# Render Arrays: Drupal 8

custom.theme

```
// Render array in D8.  
$logo = array(  
  '#theme' => 'image',  
  '#path' => 'logo.png',  
  '#alt' => t('My logo!'),  
);
```

page.html.twig

```
{{ logo }}
```

# Render Arrays: Comparison

template.php || custom.theme

```
// Render array in D7/D8.  
$logo = array(  
  '#theme' => 'image',  
  '#path' => 'logo.png',  
  '#alt' => t('My logo!'),  
);
```

page.tpl.php

```
<?php print render($logo); ?>
```

page.html.twig

```
{{ logo }}
```

# Render Array Resources

## Blog Post

<https://chromatichq.com/blog/badcamp-2015-transitioning-theme-and-theme-functions-render-arrays-and-templates>

## DrupalCon Session

<https://events.drupal.org/neworleans2016/sessions/aha-understanding-and-using-render-arrays-drupal-8>

# Debugging

## Devel Module & Devel Themer

```
// template.php  
dpm($variables);  
  
// Settings.php  
$conf['theme_debug'] = TRUE;
```

```
... (Array, 32 elements)  
  page (Array, 15 elements)  
    #show_messages (Boolean) TRUE  
    #theme (String, 4 characters ) page  
    #theme_wrappers (Array, 1 element)  
    #type (String, 4 characters ) page
```

## \*.html.twig

```
// all variables in the current context.
{{ dump() }}
// a specific variable.
{{ dump(variable) }}
```

## sites/default/services.yml

```
parameters:
  twig.config:
    debug: true
    auto_reload: true
```

## Devel Module

```
// *.html.twig
{{ kint() }}
```

```
<!-- THEME DEBUG -->
<!-- THEME HOOK: 'node' -->
<!-- FILE NAME SUGGESTIONS:
  * node--view--frontpage--page-1.html.twig
  * node--view--frontpage.html.twig
  * node--1--teaser.html.twig
  * node--1.html.twig
  * node--article--teaser.html.twig
  * node--article.html.twig
  * node--teaser.html.twig
  x node.html.twig
-->
<!-- BEGIN OUTPUT from
'core/themes/classy/templates/content/node.html.twig' -->
```

# Coding Standards

# Coding Standards: Drupal 7

- \* Add 2 spaces for indents.
- \* Match the indentation of long opening and closing block HTML tags.
- \* Avoid curly brackets.
- \* Prefer PHP in HTML to HTML in PHP in templates.
- \* Separate logic from presentation.
- \* Avoid Drupal functions in templates.
- \* Always put a semicolon at the end of your small PHP printing statement

# Coding Standards: Drupal 8

- \* Indent code inside of tags.
- \* Only use lowercase and underscored variable names.

# Coding Standards: Drupal 8

## Place only one space

### Before:

- \* Delimiters (beginning and end)  
{{, {&, {#  
}}, %}, #}

### After:

- \* : sign in hashes
- \* , in arrays & hashes

### Before and After:

- \* Comparison operators
- \* Logic
- \* Ternary operators

# Coding Standards: Drupal 8

## No Spaces

### Before:

- \* Closing parenthesis in an expression:  
{{, {&, {#  
}}, %}, #}

### After:

- \* Opening parenthesis in an expression
- \* , in arrays and hashes

### Before and After:

- \* String delimiters ‘ & “
- \* The following operators:  
| . .. []
- \* Parenthesis in filter/function calls

# Join us for contribution sprints on Friday, September 30

**First Time Sprinter Workshop** - 9:00-12:00 - Room Wicklow2A

**Mentored Core Sprint** - 9:00-18:00 - Wicklow Hall 2B

**General Sprints** - 9:00 - 18:00 - Wicklow Hall 2A

Q & A

Evaluate the Session:

<https://events.drupal.org/dublin2016/sessions/branch-out-your-comfort-zone-twig-templates>

Branch Out of Your Comfort  
Zone with Twig Templates