

Drupal 8 Theming

Zakiya Khabir

drupal.org/u/zakiya

twitter.com/zakiyadesigns

Code:

github.com/zakiya/d8-theming-camp-demo

Questions?

D7 < D8

Small Core Changes

- Views, Admin Menu, Breakpoints, Date, Entity Reference, Link, CKeditor, Migrate, Block Menus (light), Responsive Image, multilingual support, and fieldable blocks all in core
- Backbone.js, Underscore.js, and Modernizr are in core
- No JQuery or CSS loads by default.

D7 < D8

Big Core Changes

- **Configuration Management**
- **Using Twig templating engine**
- **No more IE 6, 7, and 8 support**

D7 < D8

Gotchas

- `drush cr not drush cc all`
- `/themes` instead of `/sites/all/themes`
- `/modules` instead of `sites/all/modules`

Local Dev Setup

Get your Drupal

- Find latest dev or beta on d.o
- drupal.org/node/3060/release
- Download and install on your favorite
_AMP stack

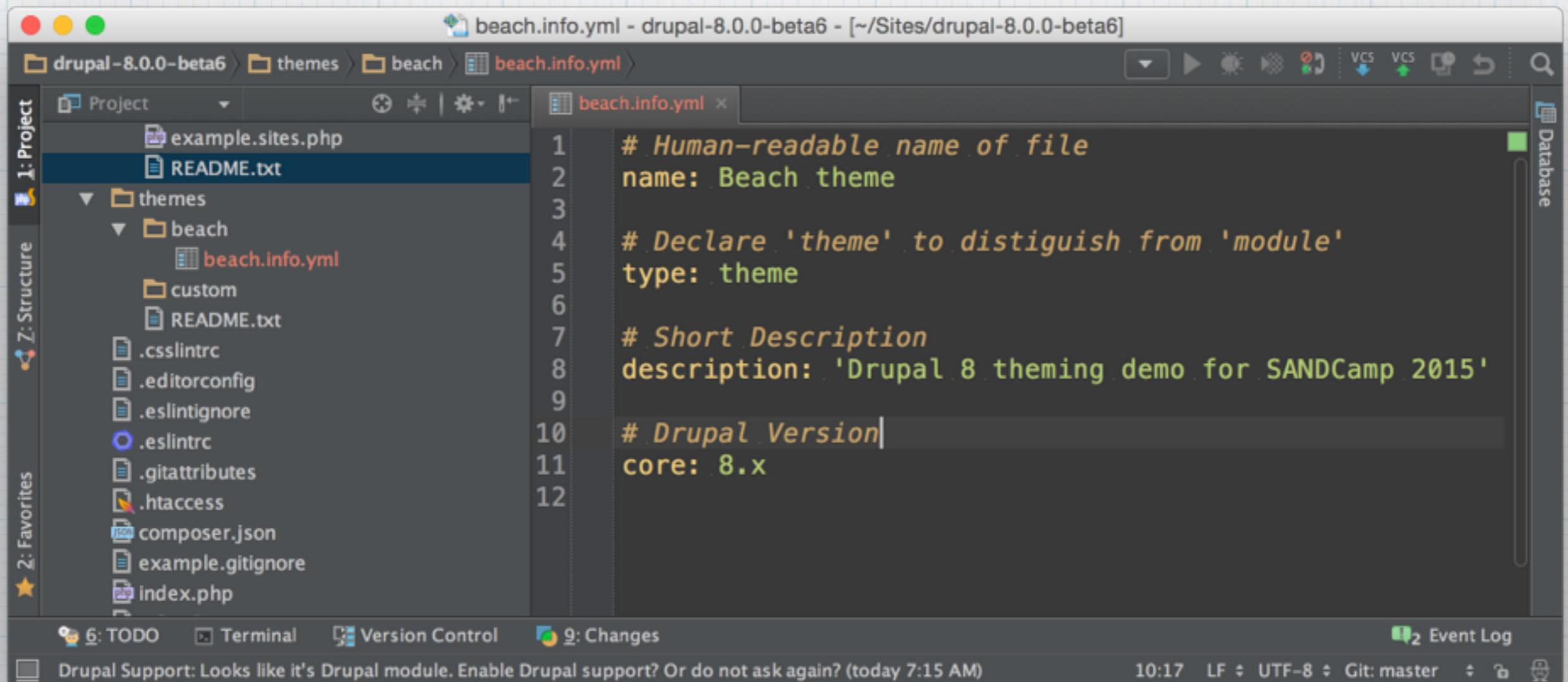
Local Dev Setup

Performance Settings

- By default css, js and html are cached
- Disable caching through UI at [/config/development/performance](#)
- Or
- Copy [sites/example.settings.local.php](#) to settings.local.php
 - See [/sites/example.settings.local.php](#))
 - Uncomment these lines in [/default/settings.php](#) :

```
if (file_exists(__DIR__ . 'settings.local.php'))  
{ include __DIR__ . '/settings.local.php'; }
```
 - `drush cr` when done!

THEME.info.yml



The screenshot shows a code editor window titled "beach.info.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]". The breadcrumb navigation shows the path: drupal-8.0.0-beta6 > themes > beach > beach.info.yml. The left sidebar shows a project structure with a "themes" folder containing a "beach" subfolder with the "beach.info.yml" file. The main editor area displays the following YAML content:

```
1 # Human-readable name of file
2 name: Beach theme
3
4 # Declare 'theme' to distinguish from 'module'
5 type: theme
6
7 # Short Description
8 description: 'Drupal 8 theming demo for SANDCamp 2015'
9
10 # Drupal Version
11 core: 8.x
12
```

The bottom status bar includes: 6: TODO, Terminal, Version Control, 9: Changes, Event Log, and a message: "Drupal Support: Looks like it's Drupal module. Enable Drupal support? Or do not ask again? (today 7:15 AM)". The time is 10:17, encoding is UTF-8, and the Git branch is master.

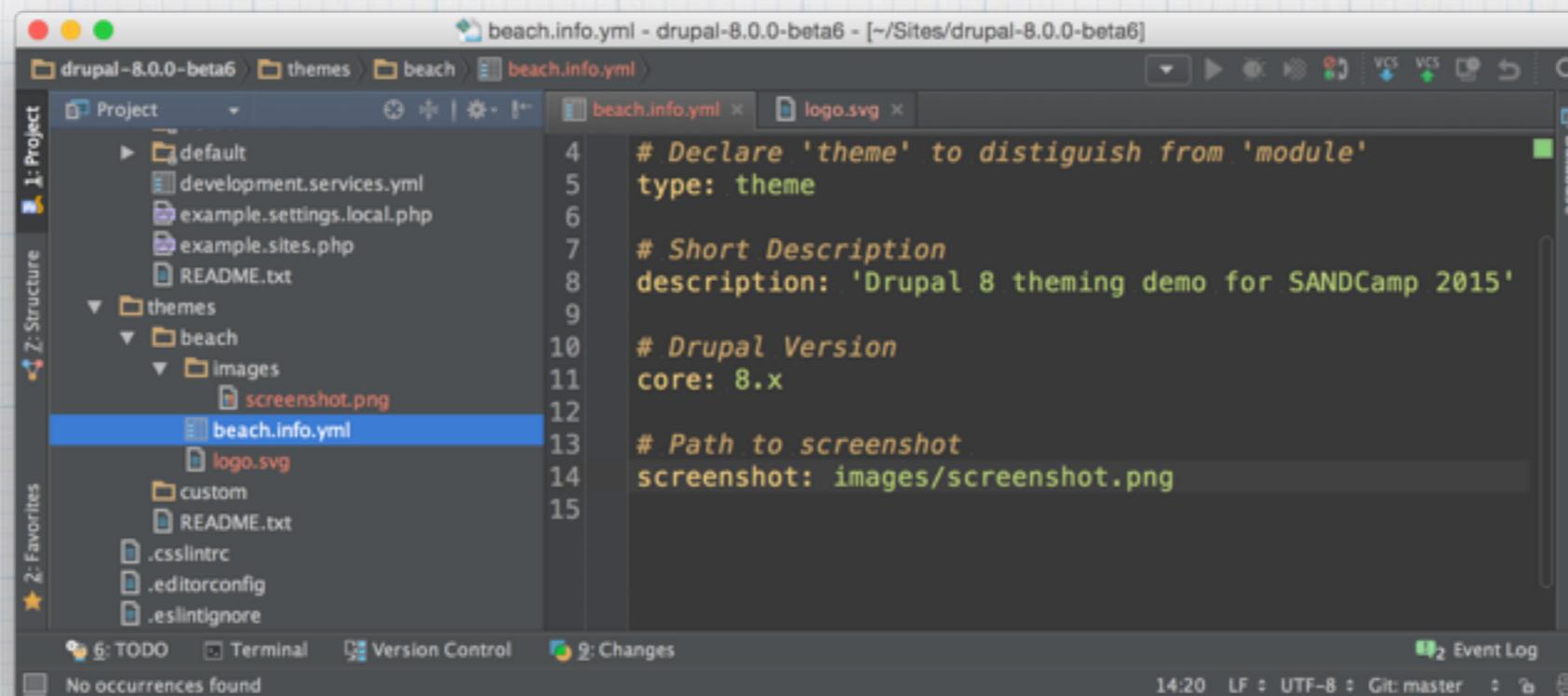
Basic Declarations

Logo

- If logo is called logo.svg and put in root folder Drupal will auto-detect
- logo.png or logo.gif can be added via Drupal UI

Screenshot

- screenshot.png placed in root will be auto-detected
- or declare in THEME.info.yml



Declare Base Theme

```
base theme: classy
```

Theme Features

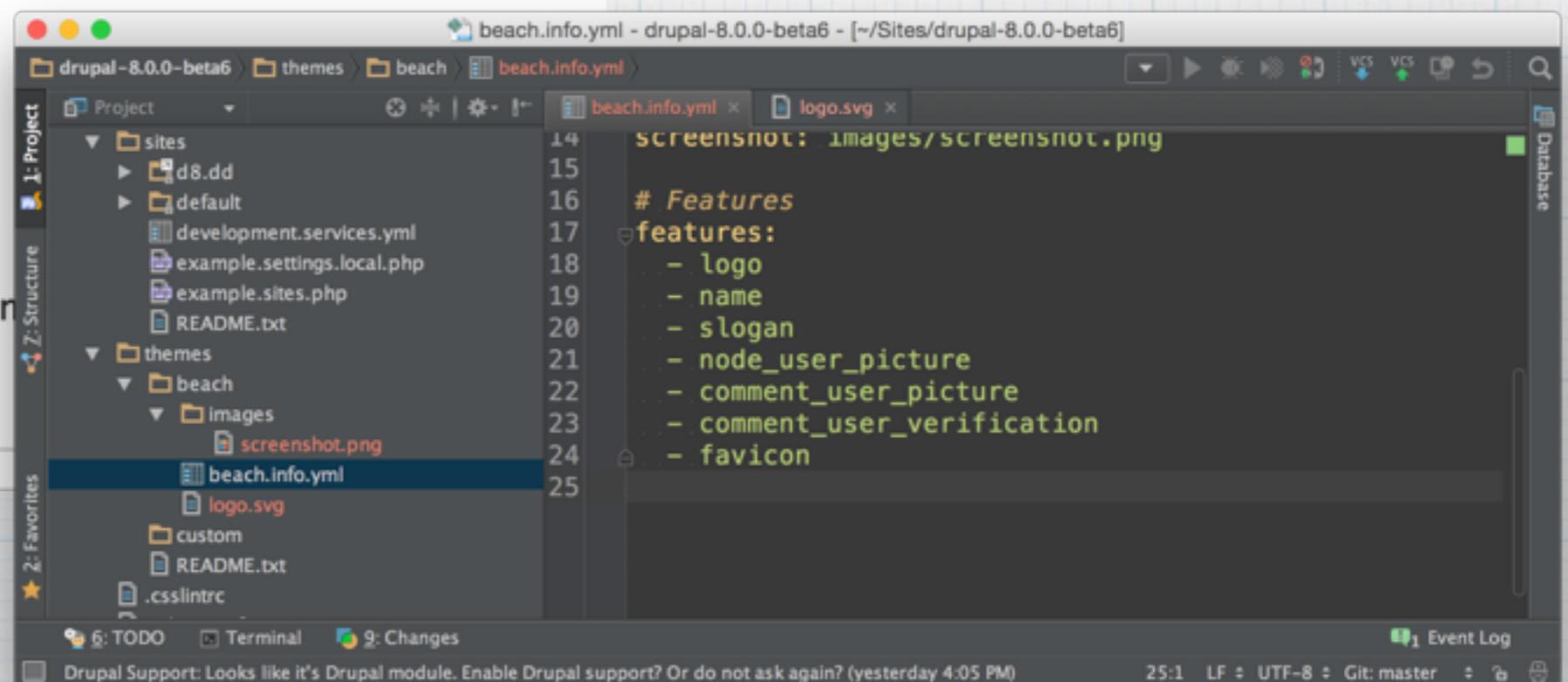
[Home](#) » [Administration](#) » [Appearance](#) » [Settings](#)

These options control the display settings for the *Beach theme* theme. When using this theme, these settings will be used.

▼ TOGGLE DISPLAY

Enable or disable the display of certain page elements.

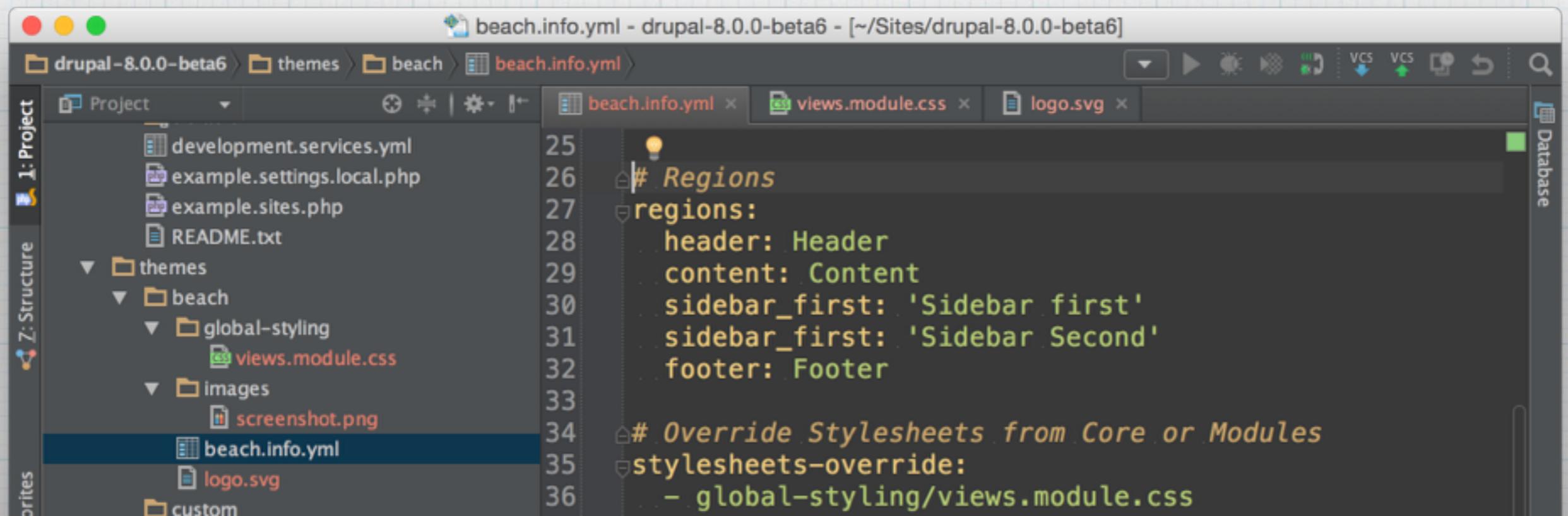
- Logo
- Site name
- Site slogan
- User pictures in posts
- User pictures in comments
- User verification status in comments
- Shortcut icon



```
14 screensnot: images/screensnot.png
15
16 # Features
17 features:
18   - logo
19   - name
20   - slogan
21   - node_user_picture
22   - comment_user_picture
23   - comment_user_verification
24   - favicon
25
```

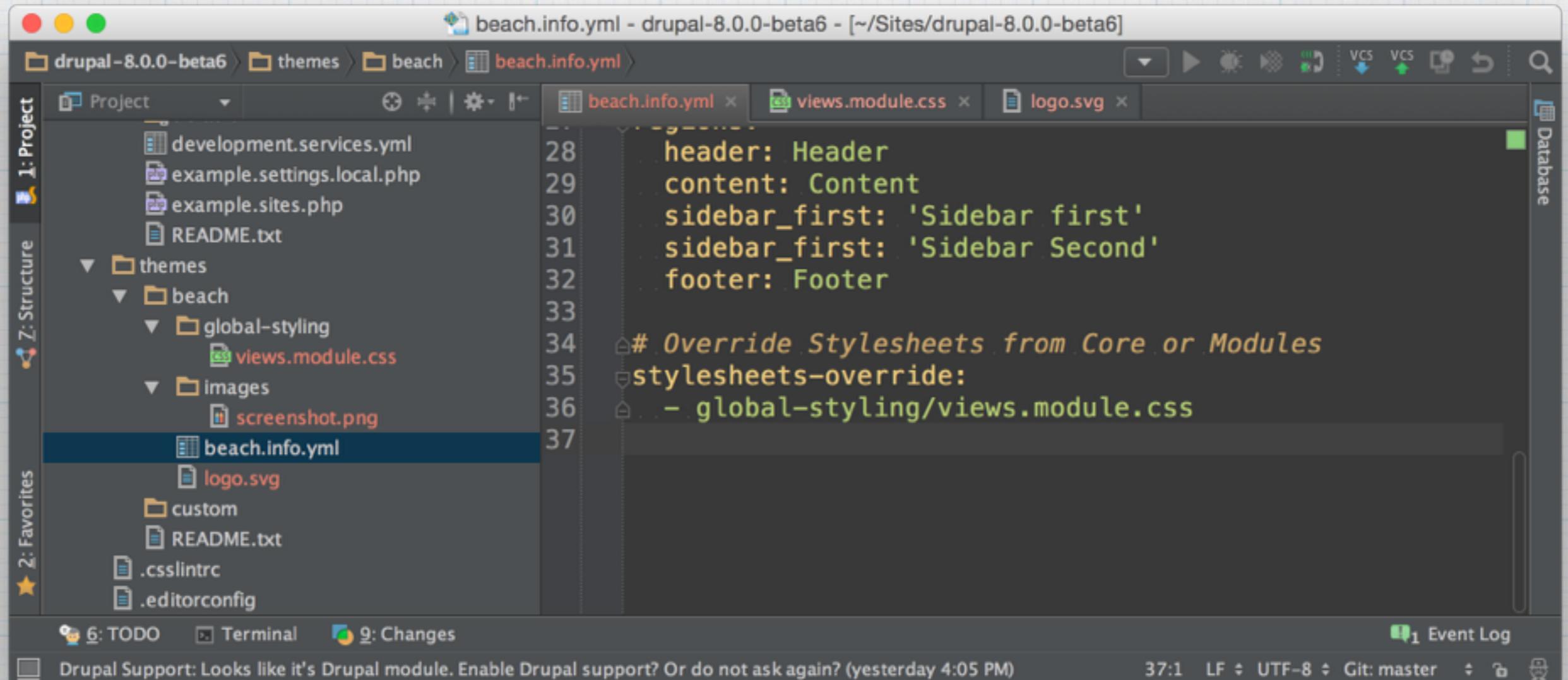
Regions

- Theme will work with no regions
- Declare regions in THEME.info.yml



```
25
26 # Regions
27 regions:
28   header: Header
29   content: Content
30   sidebar_first: 'Sidebar first'
31   sidebar_first: 'Sidebar Second'
32   footer: Footer
33
34 # Override Stylesheets from Core or Modules
35 stylesheets-override:
36   - global-styling/views.module.css
```

Modify Core/Module CSS

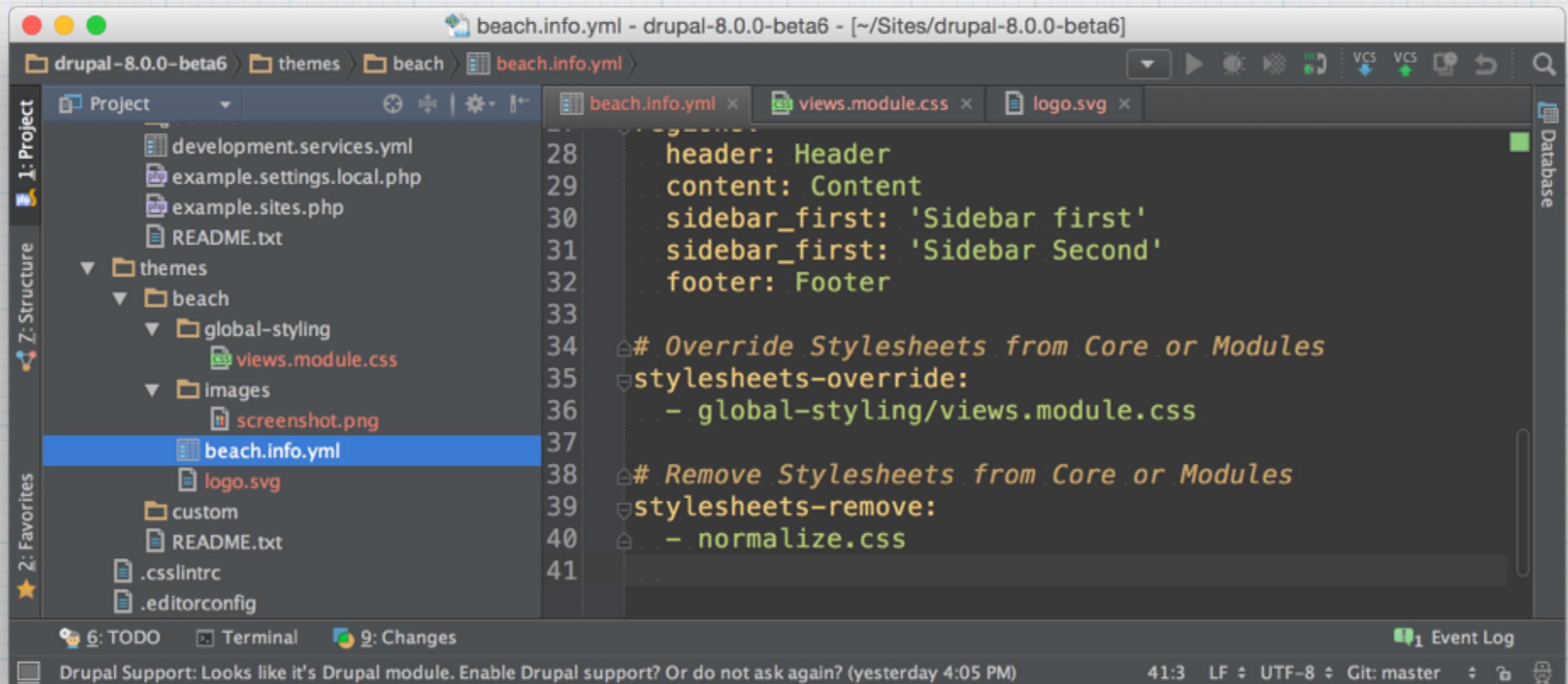


The screenshot shows a code editor window for a Drupal 8.0.0-beta6 project. The file being edited is `beach.info.yml` located in the `themes/beach` directory. The code in the editor is as follows:

```
28 header: Header
29 content: Content
30 sidebar_first: 'Sidebar first'
31 sidebar_first: 'Sidebar Second'
32 footer: Footer
33
34 # Override Stylesheets from Core or Modules
35 stylesheets-override:
36   - global-styling/views.module.css
37
```

The IDE interface includes a Project view on the left showing the file structure, a Database view on the right, and a status bar at the bottom with various tool icons and a message: "Drupal Support: Looks like it's Drupal module. Enable Drupal support? Or do not ask again? (yesterday 4:05 PM)".

Remove Core/Module CSS



```
beach.info.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]
drupal-8.0.0-beta6 > themes > beach > beach.info.yml
Project
  development.services.yml
  example.settings.local.php
  example.sites.php
  README.txt
  themes
    beach
      global-styling
        views.module.css
      images
        screenshot.png
      beach.info.yml
      logo.svg
    custom
      README.txt
      .csslintrc
      .editorconfig
  Favorites
  6: TODO
  Terminal
  9: Changes
  Database
  Event Log
  Drupal Support: Looks like it's Drupal module. Enable Drupal support? Or do not ask again? (yesterday 4:05 PM)
  41:3 LF UTF-8 Git: master
```

```
28 header: Header
29 content: Content
30 sidebar_first: 'Sidebar first'
31 sidebar_first: 'Sidebar Second'
32 footer: Footer
33
34 # Override Stylesheets from Core or Modules
35 stylesheets-override:
36   - global-styling/views.module.css
37
38 # Remove Stylesheets from Core or Modules
39 stylesheets-remove:
40   - normalize.css
41
```

~~Adding Stylesheets~~

Adding Libraries

- drupal.org/developing/api/8/assets

Adding stylesheets (CSS) and JavaScript (JS) to a Drupal 8 module

[View](#) [Edit](#) [Revisions](#)

Last updated December 18, 2014. Created on May 27, 2014.

Edited by [Wim Leers](#), [nod_](#), [dstorozhuk](#). You can [edit this page](#), too.

In Drupal 8, stylesheets (CSS) and JavaScript (JS) are loaded through the same system for modules (code) and themes, for everything: asset libraries. Asset libraries can contain one or more CSS assets, one or more JS assets and one or more JS settings.

Drupal uses a high-level principle: assets (CSS or JS) are still only loaded if you tell Drupal it should load them. Drupal does not load all assets (CSS/JS) on all pages, because this is bad for front-end performance.

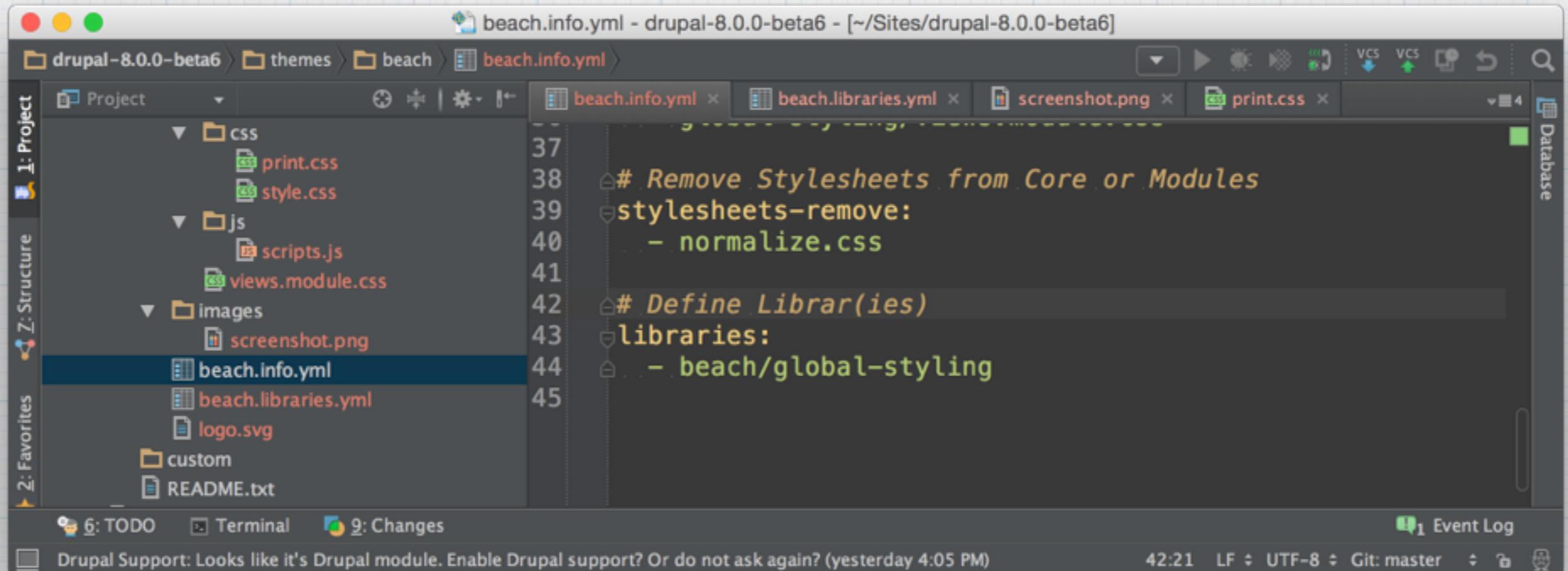
Differences compared to Drupal 7

There is one important difference compared to Drupal 7 for developers:

1. Only the JavaScript required on a particular page will be added to that page. In particular, by default Drupal

Declare Library

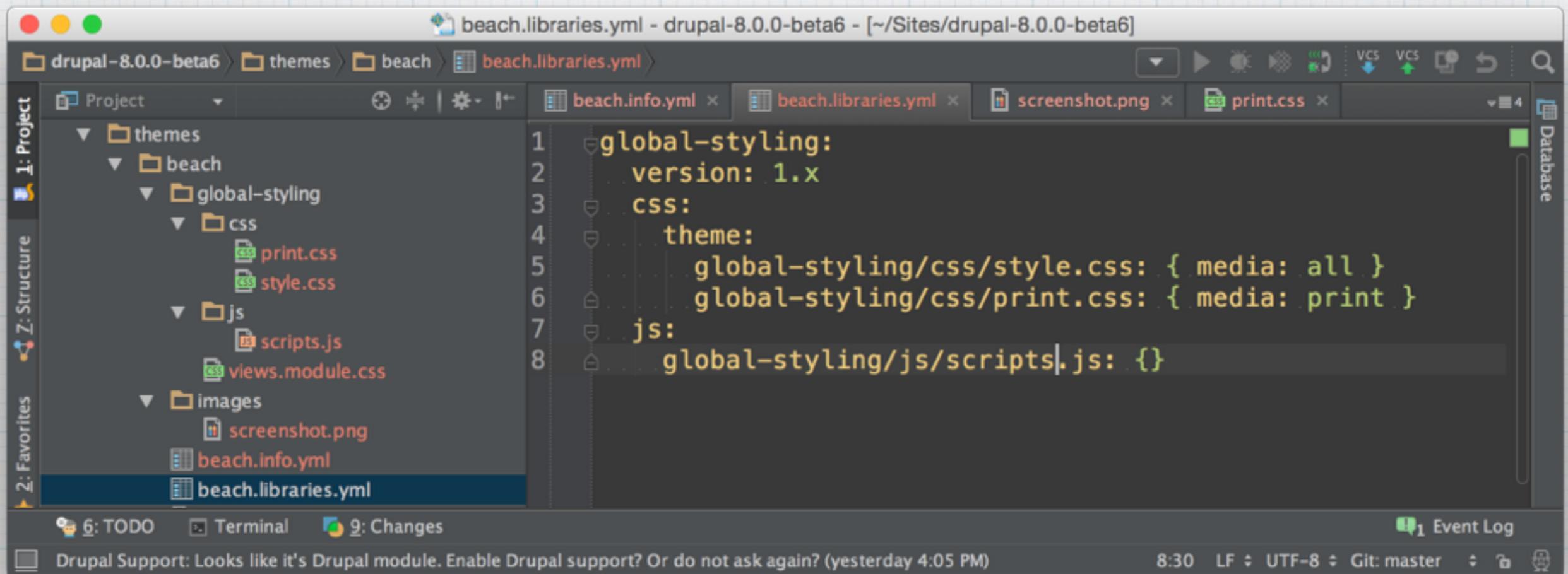
- Edit THEME.info.yml



```
37
38 # Remove Stylesheets from Core or Modules
39 stylesheets-remove:
40   - normalize.css
41
42 # Define Librar(ies)
43 libraries:
44   - beach/global-styling
45
```

The screenshot shows an IDE window titled "beach.info.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]". The breadcrumb path is "drupal-8.0.0-beta6 > themes > beach > beach.info.yml". The left sidebar shows a project structure with folders "css" (containing "print.css" and "style.css"), "js" (containing "scripts.js" and "views.module.css"), and "images" (containing "screenshot.png"). Below these are files "beach.info.yml" (selected), "beach.libraries.yml", and "logo.svg", along with a "custom" folder and "README.txt". The main editor area shows the content of "beach.info.yml" with line numbers 37-45. The code defines "stylesheets-remove" and "libraries" sections. The status bar at the bottom indicates "6: TODO", "Terminal", "9: Changes", "Event Log", and a message: "Drupal Support: Looks like it's Drupal module. Enable Drupal support? Or do not ask again? (yesterday 4:05 PM)". The time is 42:21, encoding is UTF-8, and the git branch is master.

Add CSS and JS

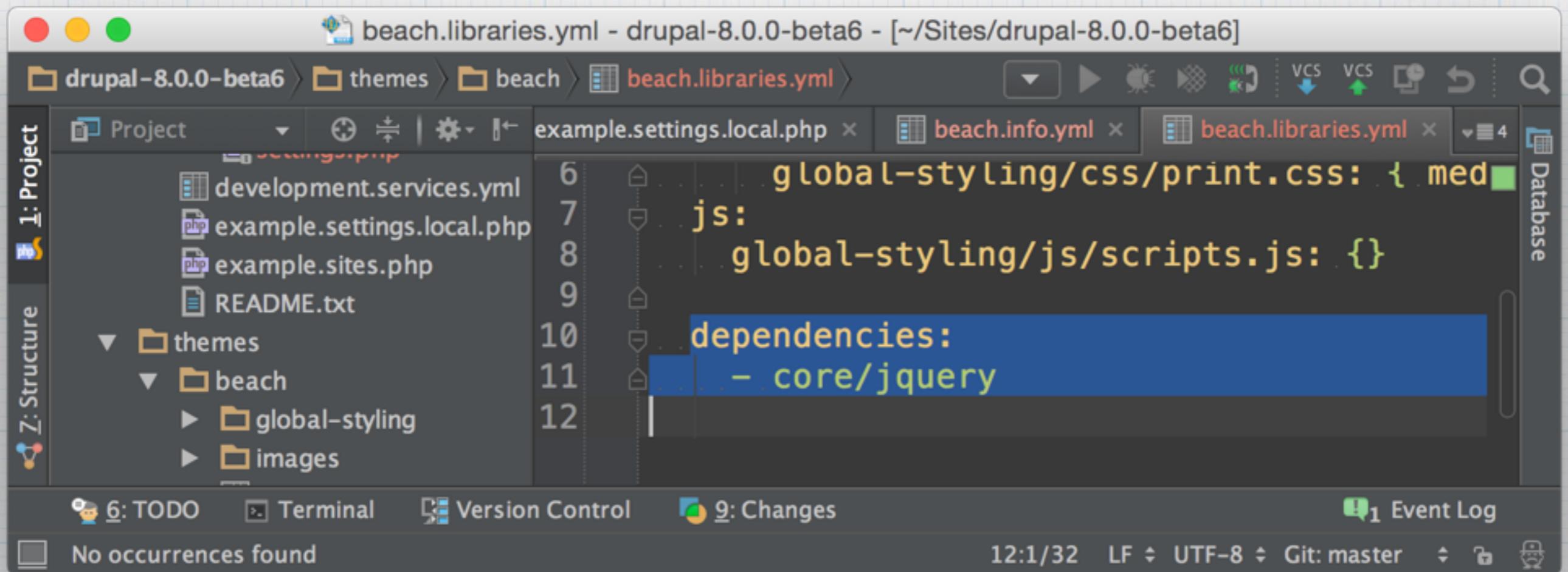


The screenshot shows an IDE window titled "beach.libraries.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]". The breadcrumb path is "drupal-8.0.0-beta6 > themes > beach > beach.libraries.yml". The left sidebar shows a project structure with folders "themes", "beach", "global-styling", "css", "js", and "images". The "css" folder contains "print.css" and "style.css", and the "js" folder contains "scripts.js" and "views.module.css". The "images" folder contains "screenshot.png". The main editor area shows the content of "beach.libraries.yml" with the following code:

```
1 global-styling:
2   version: 1.x
3   css:
4     theme:
5       global-styling/css/style.css: { media: all }
6       global-styling/css/print.css: { media: print }
7   js:
8     global-styling/js/scripts.js: {}
```

The bottom status bar shows "6: TODO", "Terminal", "9: Changes", and "Event Log". A message at the bottom reads: "Drupal Support: Looks like it's Drupal module. Enable Drupal support? Or do not ask again? (yesterday 4:05 PM)". The system tray shows "8:30", "LF", "UTF-8", "Git: master", and a refresh icon.

Optionally Include jQuery



The screenshot shows an IDE window titled "beach.libraries.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]". The breadcrumb navigation indicates the file path: "drupal-8.0.0-beta6 > themes > beach > beach.libraries.yml". The left sidebar shows a project structure with folders "themes", "beach", "global-styling", and "images". The main editor displays the content of "beach.libraries.yml" with the following code:

```
6     global-styling/css/print.css: { med
7     js:
8       global-styling/js/scripts.js: {}
9
10    dependencies:
11    - core/jquery
12
```

The "dependencies" section is highlighted in blue. The bottom status bar shows "No occurrences found", "12:1/32", "LF", "UTF-8", "Git: master", and "Event Log".

Other Ways to include assets

- To versioning existing libraries:

```
hook_library_info_alter()
```

See: api.drupal.org

- To add assets conditionally:

```
hook_preprocess_page(&$vars) {  
    $vars['#attached']['library'][] = 'core/modernizr';  
}
```

- OR

```
hook_page_attachments_alter(&$page) {  
    if ($conditions) {  
        $page['#attached']['library'][] = 'core/jquery';  
    }  
}
```

See: drupal.org/theme-guide/8/assets

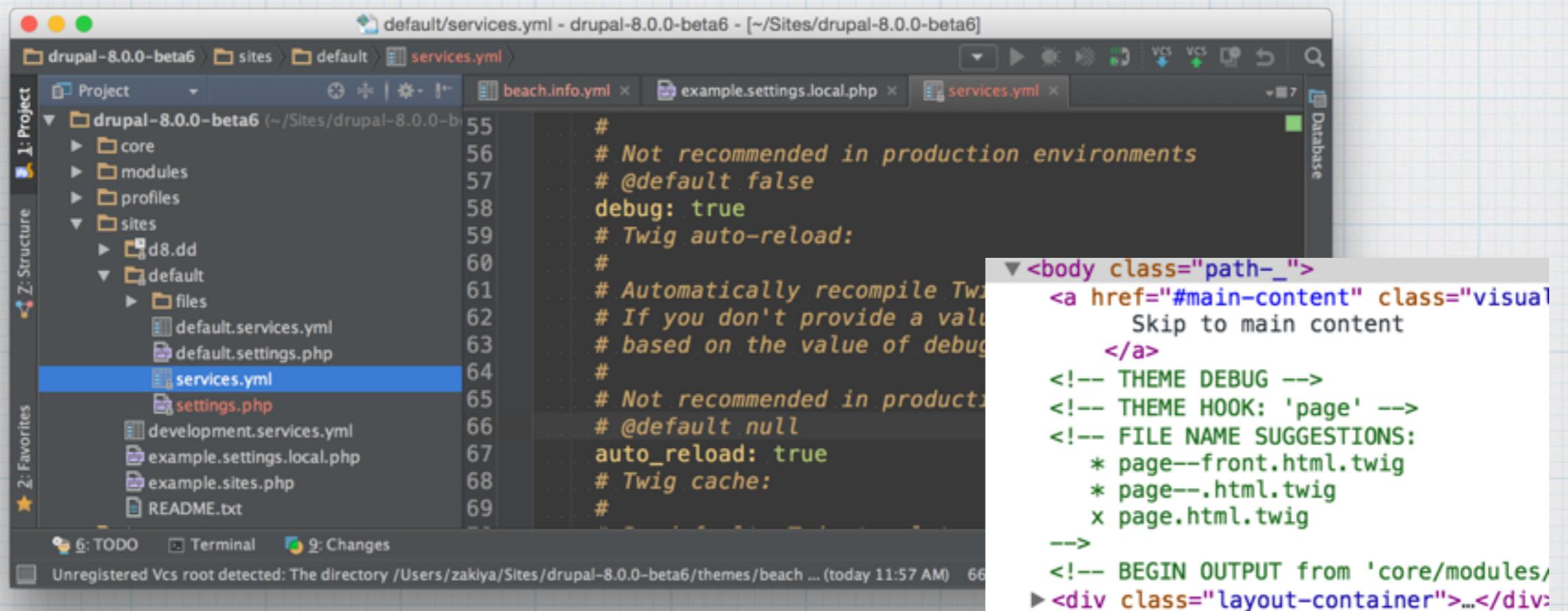
Twig Time

Why Twig

- **Secure**
- **Separate business logic from display**
- **Faster, smarter templating engine**
- **Supported/used beyond Drupal**

Twig Debug

- Change twig.config: debug: true in services.yml



The screenshot shows an IDE window with the following content:

```
default/services.yml - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]
drupal-8.0.0-beta6 > sites > default > services.yml
Project
  drupal-8.0.0-beta6 (~/Sites/drupal-8.0.0-beta6)
  |
  |__ core
  |__ modules
  |__ profiles
  |__ sites
  |   |__ d8.dd
  |   |__ default
  |       |__ files
  |       |   |__ default.services.yml
  |       |   |__ default.settings.php
  |       |   |__ services.yml
  |       |   |__ settings.php
  |       |__ development.services.yml
  |       |__ example.settings.local.php
  |       |__ example.sites.php
  |       |__ README.txt
  |__ Z: Structure
  |__ 2: Favorites
  |__ 6: TODO
  |__ Terminal
  |__ 9: Changes
  |__ Unregistered Vcs root detected: The directory /Users/zakiya/Sites/drupal-8.0.0-beta6/themes/beach ... (today 11:57 AM) 66
  |__ Database

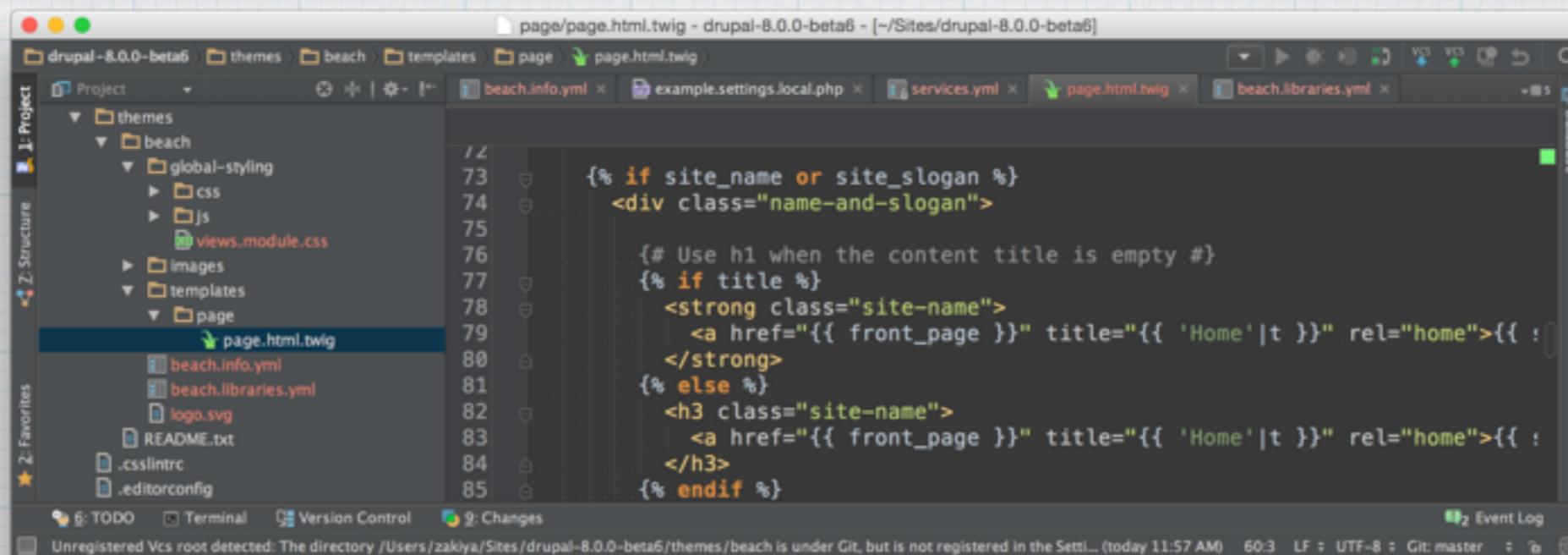
55 #
56 # Not recommended in production environments
57 # @default false
58 debug: true
59 # Twig auto-reload:
60 #
61 # Automatically recompile Twig templates
62 # If you don't provide a value
63 # based on the value of debug
64 #
65 # Not recommended in production environments
66 # @default null
67 auto_reload: true
68 # Twig cache:
69 #
```

The browser output shows the following HTML:

```
<body class="path-_">
  <a href="#main-content" class="visual" >
    Skip to main content
  </a>
  <!-- THEME DEBUG -->
  <!-- THEME HOOK: 'page' -->
  <!-- FILE NAME SUGGESTIONS:
  * page--front.html.twig
  * page--.html.twig
  x page.html.twig
  -->
  <!-- BEGIN OUTPUT from 'core/modules/
  ><div class="layout-container">...</div>
```

Twig Templates

- 141 Twig templates*
- To override, place in *.html.twig in theme folder
- Don't forget to `drush cr`



```
12
73
74
75
76
77
78
79
80
81
82
83
84
85

{% if site_name or site_slogan %}
  <div class="name-and-slogan">

    {# Use h1 when the content title is empty #}
    {% if title %}
      <strong class="site-name">
        <a href="{{ front_page }}" title="{{ 'Home'|t }}" rel="home">{{ :
      </strong>
    {% else %}
      <h3 class="site-name">
        <a href="{{ front_page }}" title="{{ 'Home'|t }}" rel="home">{{ :
      </h3>
    {% endif %}
```

```
*$ find path/to/core/modules -name *.html.twig ! -path "*test*"
```

Twig Code Basics

- **To print**

```
{ {my_variable} }
```

- **To comment**

```
{# Drupaling b. #}
```

- **To operate**

```
{% if title %} ...
```

Twig Code Extras

- Translate function (filter)

```
{{ 'Home' |t }}
```

- Check_plain

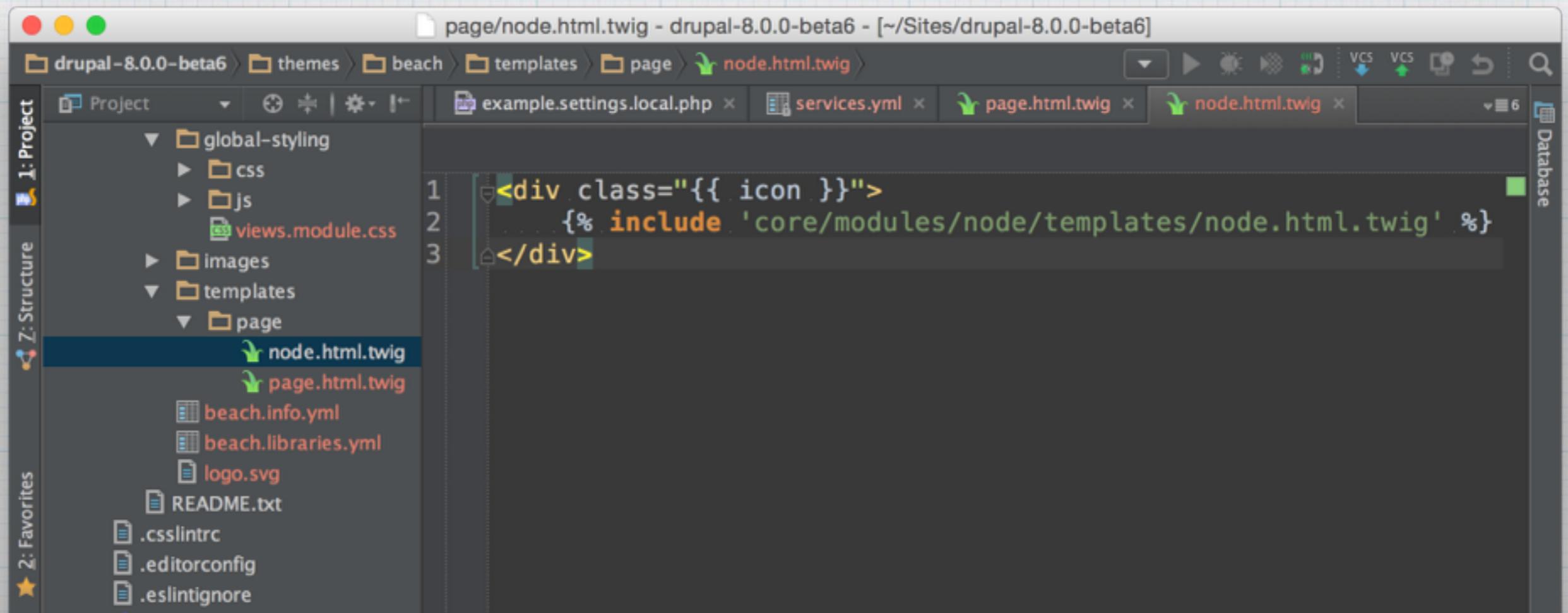
```
{{ title|striptags }}
```

- See others at

- [undpaul.de/en/blog/2013/02/26/
theming-drupal-8-twig-part-2](http://undpaul.de/en/blog/2013/02/26/theming-drupal-8-twig-part-2)
- drupal.org/node/1918824

Twig Code Extras

Reuse Templates



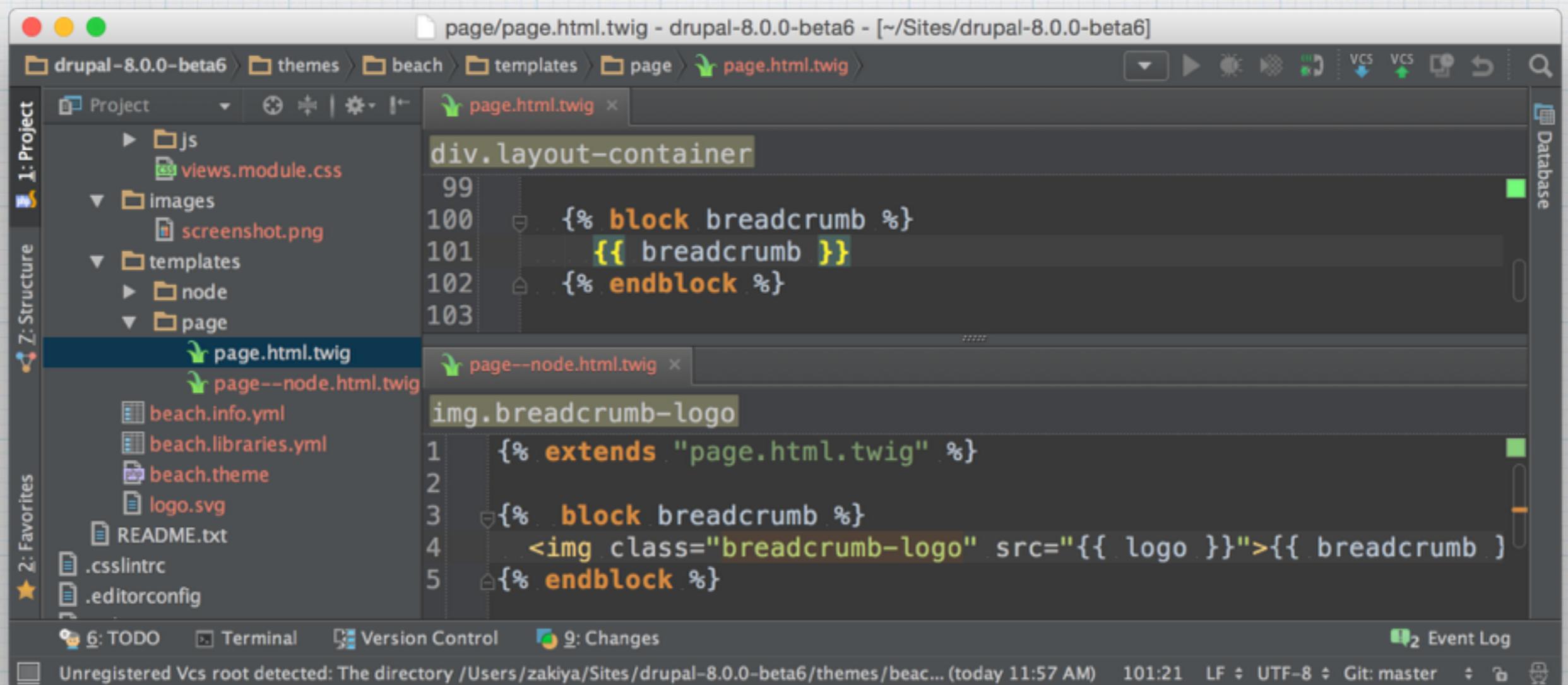
The screenshot shows a code editor window titled "page/node.html.twig - drupal-8.0.0-beta6 - [~/Sites/drupal-8.0.0-beta6]". The breadcrumb navigation shows the path: drupal-8.0.0-beta6 > themes > beach > templates > page > node.html.twig. The editor displays the following Twig code:

```
1 <div class="{{ icon }}">
2   {% include 'core/modules/node/templates/node.html.twig' %}
3 </div>
```

The left sidebar shows a project structure with folders like "global-styling", "css", "js", "images", "templates", and "page". The "page" folder is expanded, showing "node.html.twig" and "page.html.twig". The bottom sidebar shows a "Favorites" section with files like ".csslintrc", ".editorconfig", and ".eslintignore".

Twig Code Extras

Twig Blocks



The screenshot shows an IDE window with the following structure:

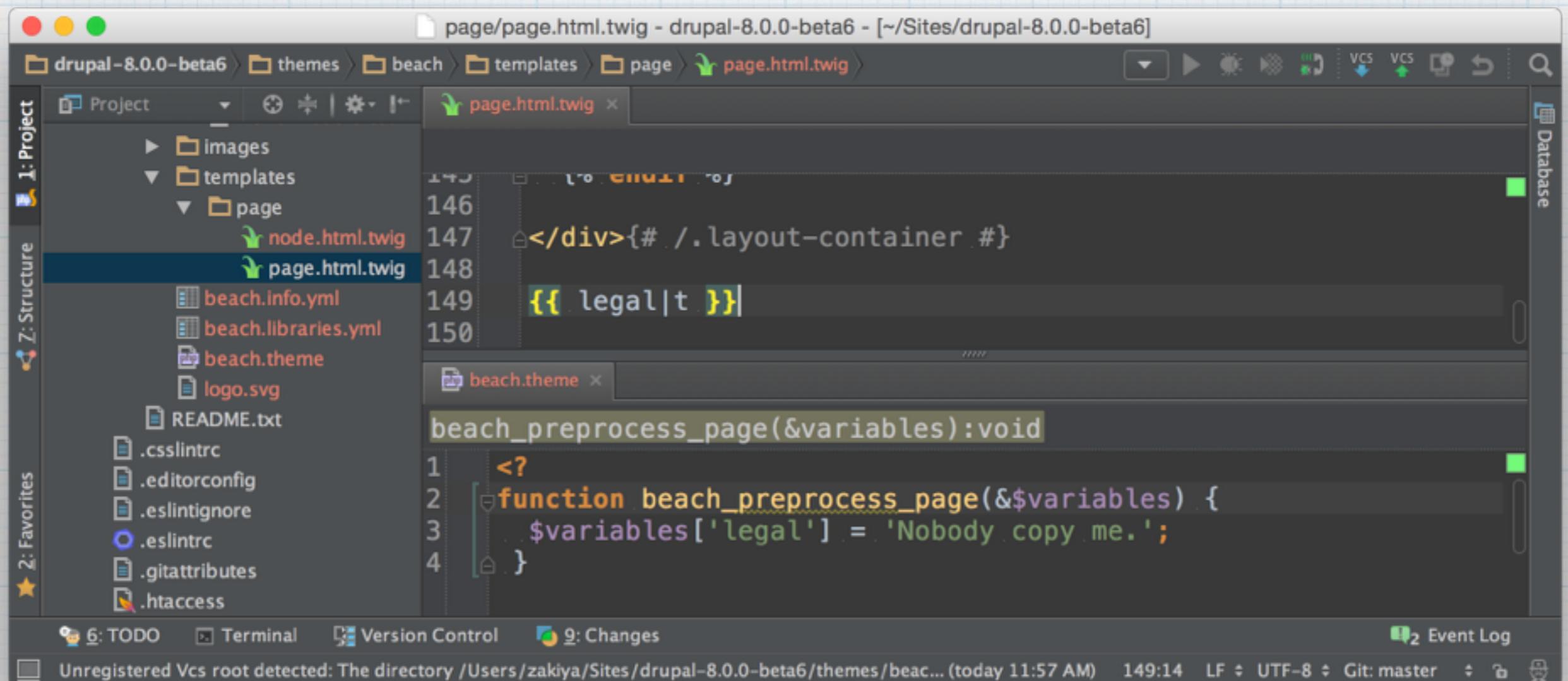
- Project: drupal-8.0.0-beta6 > themes > beach > templates > page > page.html.twig
- Structure: js, views.module.css, images (screenshot.png), templates (node, page), page.html.twig (selected), page--node.html.twig, beach.info.yml, beach.libraries.yml, beach.theme, logo.svg, README.txt, .csslintrc, .editorconfig
- Code Editor:
 - page.html.twig:

```
div.layout-container
99
100   {% block breadcrumb %}
101     {{ breadcrumb }}
102   {% endblock %}
103
```
 - page--node.html.twig:

```
img.breadcrumb-logo
1   {% extends "page.html.twig" %}
2
3   {% block breadcrumb %}
4     {{ breadcrumb }}
5   {% endblock %}
```
- Bottom Bar: 6: TODO, Terminal, Version Control, 9: Changes, 2: Event Log
- Status Bar: Unregistered Vcs root detected: The directory /Users/zakiya/Sites/drupal-8.0.0-beta6/themes/beac... (today 11:57 AM) 101:21 LF UTF-8 Git: master

Twig Preprocess

- **THEME.theme** replaces **template.php**



The screenshot shows an IDE window for a Drupal 8.0.0-beta6 project. The breadcrumb path is `drupal-8.0.0-beta6 > themes > beach > templates > page > page.html.twig`. The left sidebar shows the project structure with `page.html.twig` selected under `templates > page`. The main editor displays the Twig template code:

```
145 </div>{# end of #}  
146  
147 </div>{# /.layout-container #}  
148  
149 {{ legal|t }}  
150
```

Below the template, the `beach.theme` file is open, showing the preprocessing function:

```
beach_preprocess_page(&variables):void  
1 <?  
2 function beach_preprocess_page(&$variables) {  
3     $variables['legal'] = 'Nobody copy me.';  
4 }
```

The status bar at the bottom indicates the file is in Git master branch, UTF-8 encoding, and LF line endings.

Twig `{{dump}}`*

- `{{ dump() }}`
- `{{ dump(my_variable) }}`
- drupal.org/node/1906780

*Might get WSOD due to memory issues

Devel + Kint

Twig

Documentation

- twig.sensiolabs.org/documentation

Responsive

- breakpoints in core
drupal.org/documentation/modules/breakpoint
- [THEME.breakpoints.yml](#)
- picture in core

Other things

- **Drupal settings for use in js**
- **Classy module**
- **Initialize Image Style Settings in theme <https://www.drupal.org/node/2356753>**
- **No HOOK_process**

Gimme feedback

Zakiya Khabir

drupal.org/u/zakiya

twitter.com/zakiyadesigns

Code:

github.com/zakiya/d8-theming-camp-demo