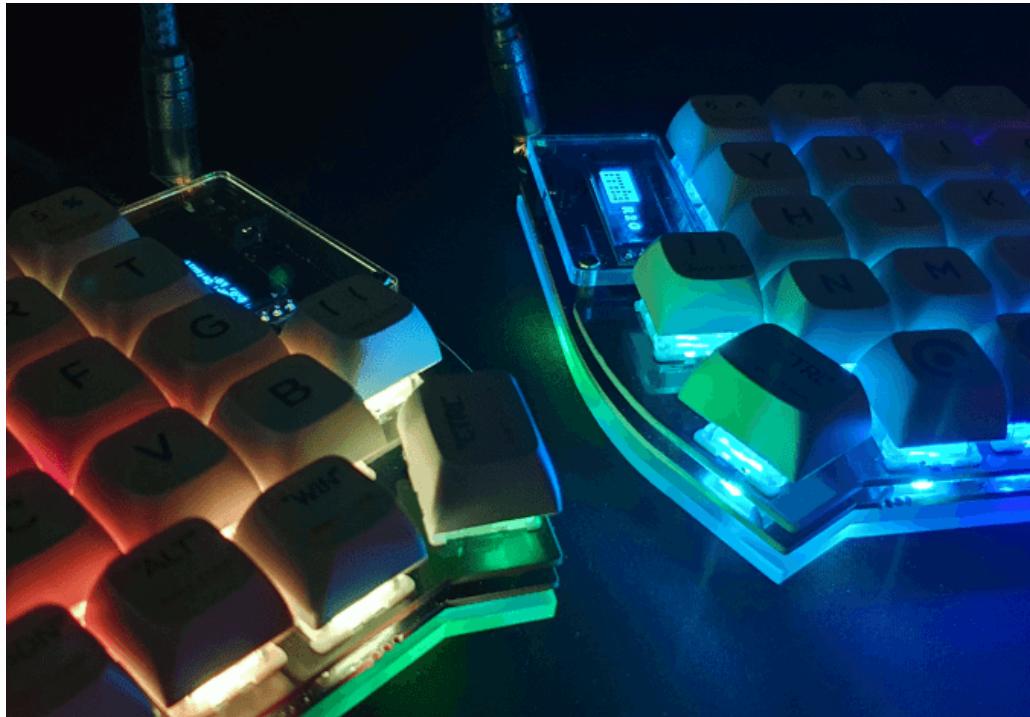


Using Storybook To Preview Single Directory Components

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DrupalCamp Scotland 2025

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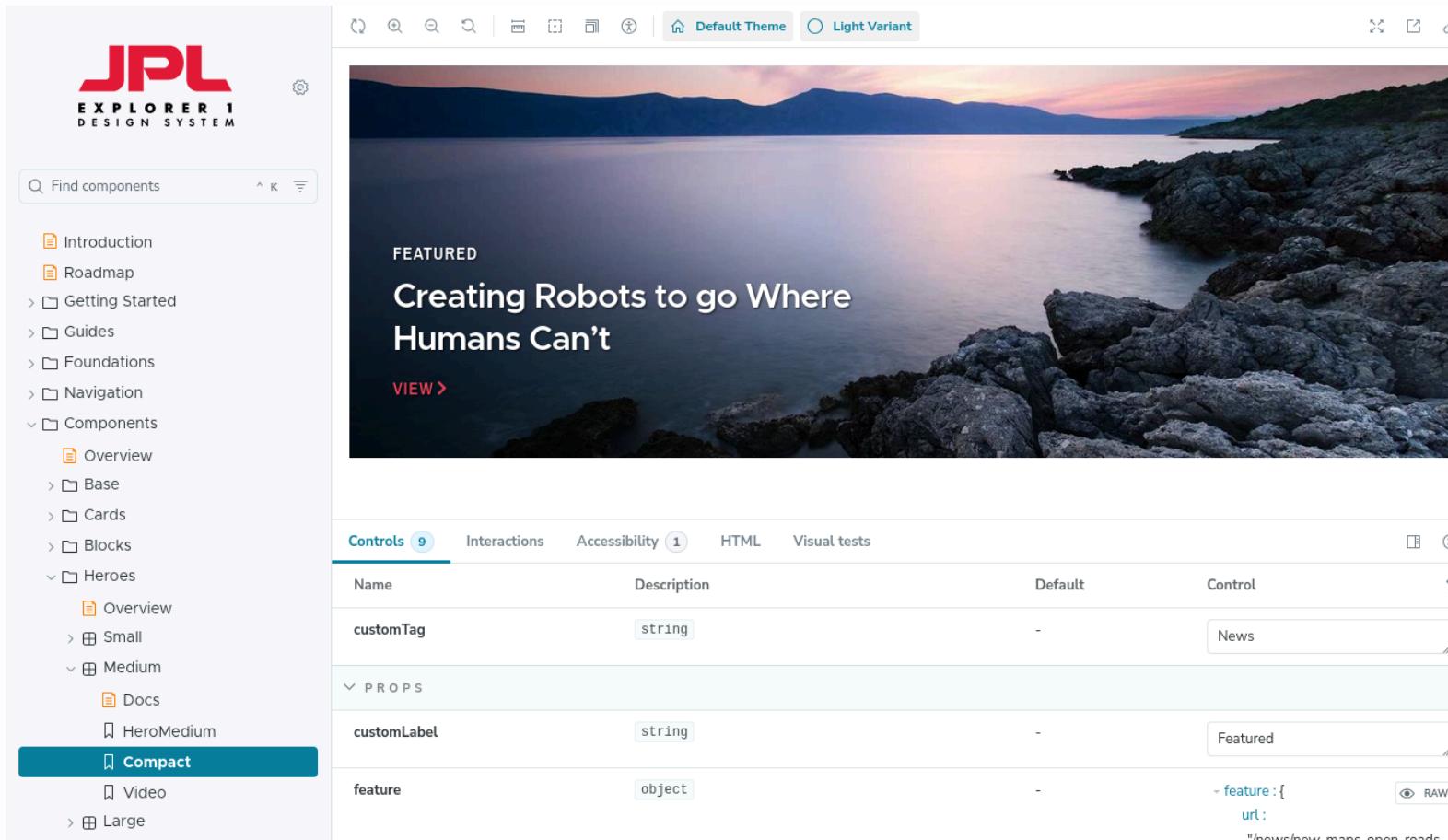
Source Code

- Talk is available at:
<https://github.com/hashbangcode/druj-storybook-talk> or via QR code.
- All code seen can be found at
<http://bit.ly/3W1bnu0>
- www.hashbangcode.com



What Is Storybook?

- Storybook is a frontend tool for creating UI components.



Why Single Directory Components?

- An important part of modern Drupal theme development.
- Can be added to themes or modules.
- Integrates with **Drupal Canvas**.

Contents

- Introduction To Single Directory Components
- Installing the Storybook Module
- Installing and running Storybook

Single Directory Components (SDC)

A *very* short introduction.



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SDC

- They exist in a single directory (hence the name).

```
example_component/
    example_component.component.yml
    example_component.css
    example_component.js
    example_component.twig
```

SDC - *.component.yml

- The `*.component.yml` file is used to define the structure of the component.

```
name: My Component
```

```
props:
```

```
  type: object
```

```
  properties:
```

```
    # ...
```

```
slots:
```

```
  # ...
```

SDC - *.component.yml

- `props` have defined properties with set data types.

```
props:  
  type: object  
  properties:  
    title:  
      type: ['string', 'null']  
      title: Extra classes  
    examples:  
      - extrawide, dark
```

- `{{ title }}` can now be used in the template.

SDC - *.component.yml

- `slots` are much simpler to define.

```
slots:  
  body:  
    title: "Body copy."
```
- `{{ body }}` is now available in the template.

SDC - Props vs Slots

- `props` - Properties or simple elements that the component has. Title, classes, menu depth, display options, etc.
- `slots` - Objects or more complex elements that the component can render. Body copy, images etc.

SDC - *.twig

- A normal twig template that renders the defined structure of the component.

Slot in a *.component.yml file:

```
slots:  
  title:  
    title: "Title"
```

Twig template:

```
{{ title }}
```

SDC - *.twig

- You should probably add `slots` using the `block` Twig tag.

```
{% block title %}  
  {{ title }}  
{% endblock %}
```

- This allows you to override the value in Storybook without having to add `|raw` to your Twig template.

SDC - Other files

- Any `*.css` or `*.js` files will be automatically included as attachments.
- Template and CSS can reference files inside the SDC.

[[[add some examples of images being referenced from SDC]]]

SDC - Usage

- With the SDC created we can now add it to our Drupal template templates.

```
 {{ include('my_theme:example_component', {  
   title: label,  
   body: content.body,  
 }) }}
```

SDC - Usage

- An example of rendering an Author content type.

```
{{ include('my_theme:author', {  
    author_url: url,  
    name: label,  
    bio: content.field_author_short_bio,  
    avatar: content.field_author_avatar  
}) }}
```

Storybook Module

Storybook Module

- Require and install the Storybook module

```
composer require drupal/storybook  
drush en storybook
```

Storybook Module - Permissions

- Ensure that the correct permissions are set.

```
drush role:perm:add anonymous 'render storybook stories'
```

Storybook Module - Stories

- For each component you want to test you need a `*.stories.twig` file.
- This contains a number of examples of the SDC in use.
- Add additional markup or other components to the story.

Storybook Module - Stories

```
{% stories componentName with { title: 'Components/ComponentName' } %}

{% story default with {
  name: '1. Default',
  args: {
    some_property: 'A value'
  }
} %}
{% embed 'my_theme:componentName' %}
{% endembed %}

{% endstory %}

{% endstories %}
```

Storybook Module - Stories

- [[look at how stories are translated into Storybook previews]]

Storybook Module - Stories

- Use `include` for simple components.

`example_component.twig`

```
<div>
  <h2>{{ title }}</h2>
</div>
```

`example_component.stories.twig`

```
{% story default with {
  name: '1. Default',
  args: {
    title: 'The Title'
  }
} %}
{{ include('my_theme:example_component', {
  title
}) }}
```

- Use `embed` with more complex components that have slots.

`example_component.twig`

```
<div>
  {% block body %}
    {{ body }}
  {% endblock %}
</div>
```

`example_component.stories.twig`

```
---
  {% story default with {
    name: '1. Default',
    args: {
      body: '<p>Some body copy.</p>'
    }
  } %}
  {% embed 'my_theme:example_component' %}
    {% block body %}
      {{ body|raw }}
```

Storybook Module - Stories

- Storybook doesn't understand `*.stories.twig` files.
- They need converting into `*.stories.json`.
- This Storybook module comes with a couple of Drush commands to do this.

```
drush storybook:generate-all-stories
```

Drupal Setup

- Some settings are needed to allow Storybook to connect to Drupal.

Drupal Setup - CORS Prevention

- Add these rules to `development.services.yml` file.

```
parameters:  
  storybook.development: true  
cors.config:  
  enabled: true  
  allowedHeaders: [ '*' ]  
  allowedMethods: [ '*' ]  
  allowedOrigins: [ '*' ]  
  exposedHeaders: false  
  maxAge: false  
  supportsCredentials: true
```

Drupal Setup - CORS Prevention

- Add a reference to the services file from the `settings.php` file.

```
$settings['container_yamls'][] = DRUPAL_ROOT . '/sites/development.services.yml';
```

Drupal Setup - Twig Debug

Turn on the theme development settings.

```
drush state:set twig_debug 1  
drush state:set twig_cache_disable 1  
drush state:set disable_rendered_output_cache_bins 1
```

[[[[Insert a picture of the twig debug page here]]]]

Storybook

Storybook - Install

- Install Storybook in a separate directory, away from your Drupal root.
- Eg. .

```
npm init -y
npx storybook init --type server
```

Storybook - Install

- This will give you a directory containing.

```
.storybook  
stories  
node_modules  
package.json  
package-lock.json
```

Storybook - Configure

- Edit the `.storybook/main.js` file to point Storybook at your stories.

```
"stories": [  
    ".../..../web/themes/custom/my_theme/components/**/*.{stories.@(json|yaml|yml)}"  
],
```

Running Storybook

- Storybook is a JavaScript application that can be run on its own.

```
npm run storybook
```

- This will open a browser window with the address <http://localhost:6006>.

Running Storybook - DDEV

- If you are using DDEV then can run Storybook from inside the web container, with some config.

```
web_extra_exposed_ports:  
  - name: storybook  
    container_port: 6006  
    http_port: 6007  
    https_port: 6006  
web_extra_daemons:  
  - name: node.js  
    command: "tail -F package.json > /dev/null"  
    directory: /var/www/html/tests
```

Running Storybook - DDEV

- To stop DDEV complaining you may want to add
--no-open flag the relevant line in the
package.json file to prevent the browser opening.

```
"scripts": {  
  "storybook": "storybook dev -p 6006 --no-open",  
  "build-storybook": "storybook build"  
},
```

Building Storybook

- Storybook can also be built as a static website.

```
npm run build-storybook
```

- The static site can be deployed and served as a site.

Hosting Storybook

- Use the following nginx configuration.

```
location ^~ /storybook-static {  
    add_header "Access-Control-Allow-Origin" *;  
    add_header "Access-Control-Allow-Methods" "GET, POST, OPTIONS";  
    disable_symlinks off;  
    alias /your/project/directory/tests/storybook-static;  
    index index.html;  
}
```

Workflow

- A workflow for building a component.
 - Create story for component
 - Build (or run) storybook
 - Preview story
 - Once the SDC is complete, add it to your template.

Demo

Tips

- Look for CORS errors.
- If you only see a blank screen, check Drupal logs.
- Be aware that Drupal will wrap some things with extra elements. That might throw off your positioning and margins.
- Setup a styleguide storybook.

Tips

- Understand props and slots.
- Don't abstract too much with SDC.
- Don't try to cover too much with SDC.

Alternatives

- SDC - Component library

[[[ADD SCREENSHOT OF SDC COMPONENT LIBRARY MODULE N USE HERE]]]

Alternatives

- Single Directory Components Styleguide

[[[ADD SCREENSHOT OF SDC COMPONENT
STYLEGUIDE MODUE N USE HERE]]]

Resources

- Storybook
- Storybook Module
- Drupal Documentation on SDC
- Drupal 11: Using Storybook To Preview Single Directory Components

Questions?

- Slides:
<https://github.com/hashbangcodestorybook-talk>



Thanks!

- Slides:
[https://github.com/hashbangcod
storybook-talk](https://github.com/hashbangcod/storybook-talk)

