

Rails View Components

View whats now?

View whats now?

- Joel Hawksley @ Github

View whats now?

- Joel Hawksley @ Github
- Inspired by React

View whats now?

- Joel Hawksley @ Github
- Inspired by React
- Rails 6.1

Is this just another templating language?

Is this just another templating language?

• **NO**

Is this just another templating language?

- **NO**

- erb

Is this just another templating language?

- **NO**

- erb

- slim

Is this just another templating language?

- **NO**

- erb

- slim

- haml

Scaffold Code

```
rails new view_components_demo
```

```
rails generate scaffold Post title:string body:text
```

```
<%= form_with(model: post, local: true) do |form| %>
•
•
•
  <div class="field">
    <%= form.label :body %>
    <%= form.text_area :body %>
  </div>

  <div class="actions">
    <%= form.submit %>
  </div>
<% end %>
```

```
<%= form_with(model: post, local: true) do |form| %>
  .
  .
  .
  <div class="field">
    <%= form.label :body %>
    <%= form.text_area :body %>
  </div>

  <div class="actions">
    <%= form.submit %>
  </div>
<% end %>
```

```
<%= form_with(model: @post, local: true) do |form| %>
  .
  .
  .
  <div class="field">
    <%= form.label :body %>
    <%= form.text_area :body %>
  </div>

  <div class="actions">
    <%= form.submit %>
  </div>
<% end %>
```

```
<%= form_with(model: @post, local: true) do |form| %>
  .
  .
  .
  <div class="field">
    <%= form.label :body %>
    <%= form.text_area :body %>
  </div>

  <div class="actions">
    <%= form.submit %>
  </div>
<% end %>
```

```
class FormComponent < ViewComponent::Base
  def initialize(post:)
    @post = post
  end
end
```


app/components/form_component.rb

```
class FormComponent < ViewComponent::Base
  def initialize(post:)
    @post = post
  end
end
```

app/components/form_component.rb

```
class FormComponent < ViewComponent::Base
  def initialize(post:)
    @post = post
  end
end
```

app/views/posts/new.html.erb

```
<h1>New Post</h1>
```

```
<%= render 'form', post: @post %>
```

```
<%= link_to 'Back', posts_path %>
```

app/views/posts/new.html.erb

```
<h1>New Post</h1>
```

```
<%= render 'form', post: @post %>
```

```
<%= link_to 'Back', posts_path %>
```

app/views/posts/new_with_component.html.erb

```
<h1>New Post</h1>
```

```
<%= render FormComponent.new(post: @post) %>
```

```
<%= link_to 'Back', posts_path %>
```

app/views/posts/new_with_component.html.erb

```
<h1>New Post</h1>
```

```
<%= render FormComponent.new(post: @post) %>
```

```
<%= link_to 'Back', posts_path %>
```

Easy to use, must be difficult to set up.. right?

```
#Gemfile
gem 'view_component'

#config/application.rb
require "view_component/engine"
```

Why View Components?

Why View Components?

- Performance

Why View Components?

- Performance
- Reuse

Why View Components?

- Performance
- Reuse
- Testing

Performance

```
# app/controllers/posts_controller.rb
# GET /posts/new
def new
  @post = Post.new
  render 'new_with_component' if params[:use_component].present?
end
```

Performance

```
# app/controllers/posts_controller.rb
# GET /posts/new
def new
  @post = Post.new
  render 'new_with_component' if params[:use_component].present?
end
```

Performance

```
# app/views/posts/new.html.erb
<% 20.times do %>
  <h1>New Post</h1>

  <%= render FormComponent.new(post: @post) %>

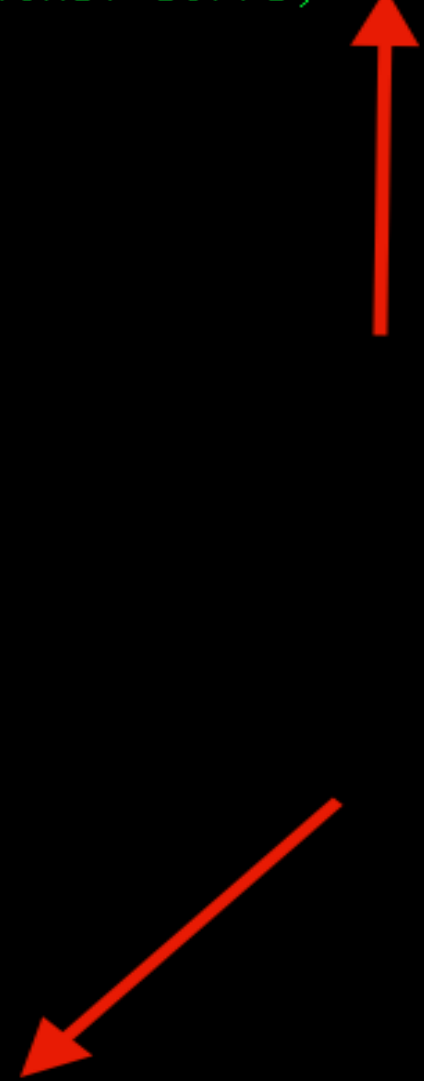
  <%= link_to 'Back', posts_path %>
<% end %>
```

Performance

```
view_components_demo — fsevent_watch • localhost:3000) [view_components_demo] __GIT_PROMPT_IGNORE_STASH= rvm_bin_path=/Users/joesimms/.rvm/bin — 111x36
~/Repos/view_components_demo — fsevent_watch • localhost:3000) [view_components_demo] __GIT_PROMPT_IGNORE_STASH= rvm_bin_path=/Users/joesimms/.rvm/bin

Started GET "/posts/new?use_component=true" for ::1 at 2020-07-08 13:30:39 -0300
Processing by PostsController#new as HTML
  Parameters: {"use_component"=>"true"}
  Rendering posts/new_with_component.html.erb within layouts/application
  Rendered posts/new_with_component.html.erb within layouts/application (Duration: 14.6ms | Allocations: 15193)
Completed 200 OK in 18ms (Views: 18.0ms | ActiveRecord: 0.0ms | Allocations: 18771)

Started GET "/posts/new" for ::1 at 2020-07-08 13:30:44 -0300
Processing by PostsController#new as HTML
  Rendering posts/new.html.erb within layouts/application
    Rendered posts/_form.html.erb (Duration: 1.2ms | Allocations: 713)
    Rendered posts/_form.html.erb (Duration: 0.8ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.0ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.9ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.0ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.9ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.0ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.8ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.8ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.7ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.0ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 0.8ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.3ms | Allocations: 691)
    Rendered posts/_form.html.erb (Duration: 1.0ms | Allocations: 691)
  Rendered posts/new.html.erb within layouts/application (Duration: 20.8ms | Allocations: 15626)
Completed 200 OK in 26ms (Views: 25.3ms | ActiveRecord: 0.0ms | Allocations: 18550)
```



Reuse

- Wherever you can use a partial, you can use a component.

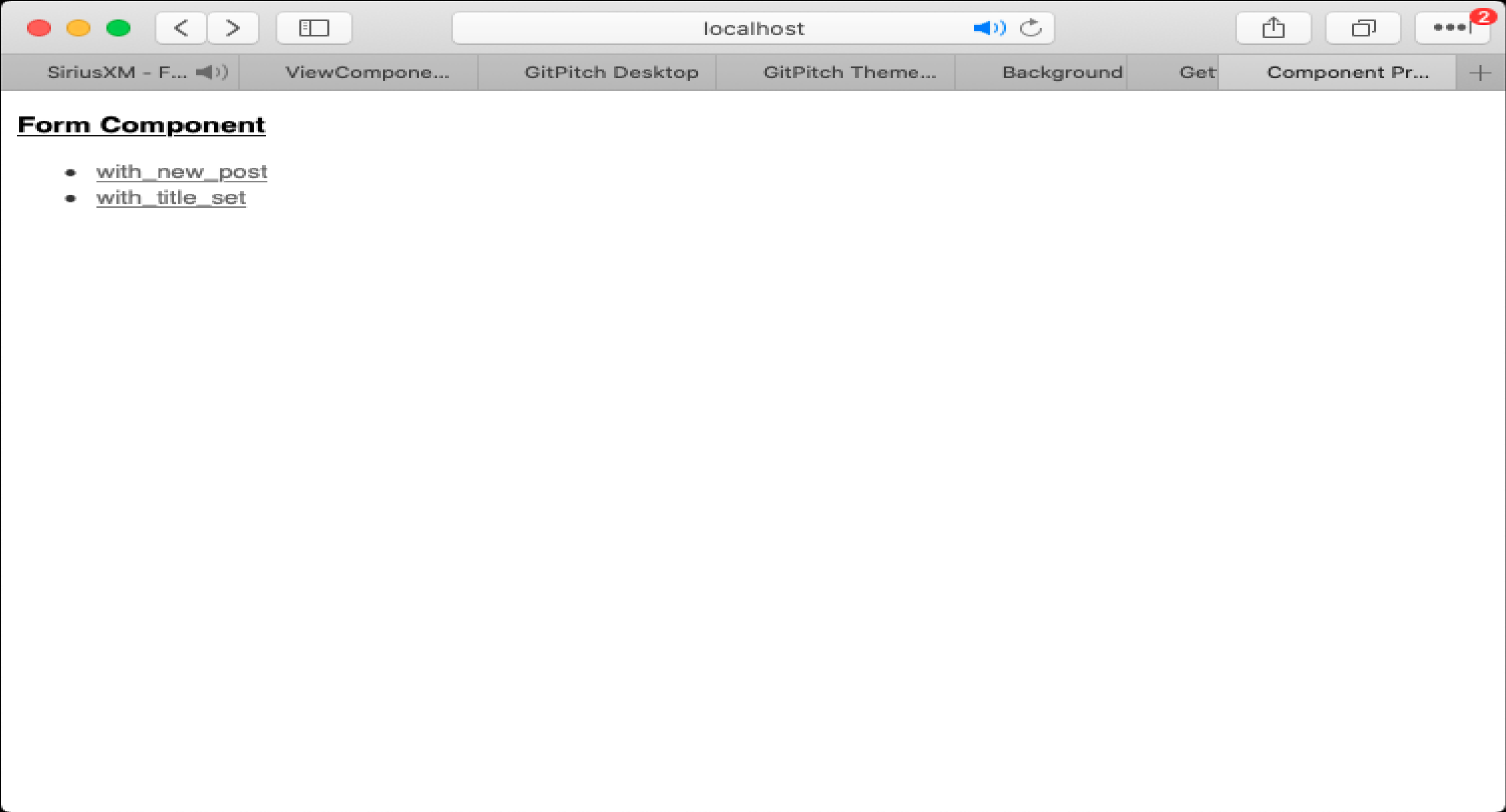
- Wherever you can use a partial, you can use a component.
- Previews make it easy to see what is already built

Previews

```
#test/components/previews/form_component_preview.rb
class FormComponentPreview < ViewComponent::Preview
  def with_new_post
    render(FormComponent.new(post: Post.new))
  end

  def with_title_set
    render(FormComponent.new(post: Post.new(title: 'Title.')))
  end
end
```

Preview listing



Form Component Preview

The image shows a web browser window with the address bar set to 'localhost'. The browser's tab bar contains several tabs, including 'SiriusXM - F...', 'ViewCompone...', 'GitPitch Desktop', 'GitPitch Theme...', 'Background', 'Get', and another 'ViewCompone...'. The main content area displays a form component with the following elements:

- Title:** A text input field containing the text 'This is a title.'
- Body:** A larger text area for additional content.
- Create Post:** A button located below the body text area.

Testing

```
#test/components/form_component_test.rb
require "view_component/test_case"
class FormComponentTest < ViewComponent::TestCase
  test "render component" do
    post = Post.new(title: 'Title.')
    result = render_inline(FormComponent.new(post: post))
    assert_includes result.css("input[type='text']").to_html,
'value="Title."'
  end
end
```

Testing

```
#test/components/form_component_test.rb
require "view_component/test_case"
class FormComponentTest < ViewComponent::TestCase
  test "render component" do
    post = Post.new(title: 'Title.')
    result = render_inline(FormComponent.new(post: post))
    assert_includes result.css("input[type='text']").to_html,
'value="Title."'
  end
end
```

Testing

```
#test/components/form_component_test.rb
require "view_component/test_case"
class FormComponentTest < ViewComponent::TestCase
  test "render component" do
    post = Post.new(title: 'Title.')
    result = render_inline(FormComponent.new(post: post))
    assert_includes result.css("input[type='text']").to_html,
'value="Title."'
  end
end
```


Testing

```
#test/components/form_component_test.rb
require "view_component/test_case"
class FormComponentTest < ViewComponent::TestCase
  test "render component" do
    post = Post.new(title: 'Title.')
    result = render_inline(FormComponent.new(post: post))
    assert_includes result.css("input[type='text']").to_html,
'value="Title."'
  end
end
```

Joel Hawksley

[github/view_component](#)

[Rails 6.1 Component Documentation](#)

[This Code and Presentation](#)

[GitPitch](#)

Questions?

joe@joesim.ms