



Dox

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ONE DOES NOT SIMPLY



WRITE AN API WITHOUT DOCUMENTATION

Maintaining docs is a pain.

DOCUMENTATION?

AIN'T NOBODY GOT TIME FOR THAT

4.

NOT SURE IF API IS WRONG



OR IF DOCUMENTATION IS WRONG

**WHAT IF WE AUTOMATE
THIS?**

We already have this ...

```
RSpec.describe 'Pokemons', type: :request do

  let(:pikachu) { create(:pokemon) }

  describe 'GET /pokemons/:id' do
    it 'gets a pokemon' do
      get pokemon_path(pikachu), as: :json
      expect(response).to have_http_status(200)
    end
  end
end
```

... and with a bit more info ...

test

```
RSpec.describe 'Pokemons', type: :request do
  include Documentation::Pokemons::Api

  let(:pikachu) { create(:pokemon) }

  describe 'GET /pokemons/:id' do
    include Documentation::Pokemons::Show

    it 'gets a pokemon' do
      get pokemon_path(pikachu), as: :json
      expect(response).to have_http_status(200)
    end
  end
end
```

doc descriptor

```
module Documentation
  module Pokemons
    extend Dox::DSL::Syntax

    document :api do
      resource 'Pokemons' do
        endpoint '/pokemons'
        group 'Pokemons'
      end
    end

    document :show do
      action 'Get pokemon'
    end
  end
end
```


... and one command ...

```
$ generate_documentation
```

... we could get something like this!

Pokemons

Get pokemon

Pokemons

POKEMONS

GET

/pokemons/{id}.json

Get pokemon

Example URI

GET /pokemons/1.json

URI Parameters

id number (required) Example: 1

Hide

Request gets a pokemon

Show

Response 200

Hide

Headers

Content-Type: application/json

Body

```
{
  "id": 1,
  "name": "Pikachu",
  "pokemon_type": "electric",
  "created_at": "2016-10-24T19:24:20.158Z",
  "updated_at": "2016-10-24T19:24:20.158Z",
  "url": "http://www.example.com/pokemons/1.json"
}
```

DOX

API docs generator for rails + rspec

TOP DEFINITION



dox

Personal information about people on the Internet, often including real name, known aliases, address, phone number, SSN, credit card number, etc.

"Someone dropped Bob's dox and the next day, ten pizzas and three tow trucks showed up at his house."

#lulz #owned #hacker #social engineering #ruin



Page not found.

It will be mine. Oh yes. It will be mine.

[Back to RubyGems.org](https://rubygems.org) →

HOW DOES IT WORK?

Define descriptors using DSL

```
module Documentation
  module Pokemons
    extend Dox::DSL::Syntax
```

```
    document :api do
      resource 'Pokemons' do
        endpoint '/pokemons'
        group 'Pokemons'
      end
    end
  end
```

Documentation::Pokemons::Api

```
    document :show do
      action 'Get pokemon'
    end
```

Documentation::Pokemons::Show

```
  end
end
```

Include modules ...

```
RSpec.describe 'Pokemons', type: :request do
  include Documentation::Pokemons::Api

  let(:pikachu) { create(:pokemon) }

  describe 'GET /pokemons/:id' do
    include Documentation::Pokemons::Show

    it 'gets a pokemon' do
      get pokemon_path(pikachu), as: :json
      expect(response).to have_http_status(200)
    end
  end
end
```


... which generate some meta data

```
RSpec.describe 'Pokemons', type: :request, :apidoc, resource_name: 'Pokemons',  
  resource_group: 'Pokemons', resource_endpoint: '/pokemons' do  
  
  let(:pikachu) { create(:pokemon) }  
  
  describe 'GET /pokemons/:id', action_name: 'Get Pokemon' do  
  
    it 'gets a pokemon' do  
      get pokemon_path(pikachu), as: :json  
      expect(response).to have_http_status(200)  
    end  
  end  
end
```

Run tests with DOX formatter

```
$ rspec spec/controllers --tag apidoc -f Dox::Formatter --out spec/  
apispec.md
```

API BLUEPRINT

**A powerful high-level API
description language for web APIs.**

<https://apiblueprint.org/>

Apispec.md

```
<!-- include(/Users/mel/dev/dox-demo/spec/documentation/api.md) -->
```

```
# Group Pokemons
```

```
## Pokemons [/pokemons]
```

```
### Get pokemon [GET /pokemons/{id}.json]
```

```
+ Parameters
```

```
  + id: `1` (number, required)
```

```
+ Request gets a pokemon (application/json)
```

```
+ Response 200 (application/json)
```

```
{
  "id": 1,
  "name": "Pikachu",
  "pokemon_type": "electric",
  "created_at": "2016-10-24T19:24:20.158Z",
  "updated_at": "2016-10-24T19:24:20.158Z",
  "url": "http://www.example.com/pokemons/1.json"
}
```


Render HTML with Aglio

```
$ aglio -i spec/apispec.md -o public/api/docs/index.html
```

AGLIO

**An API Blueprint renderer that
supports multiple themes and
outputs static HTML**

<https://github.com/danielgtaylor/aglio>

And that's it!

Pokemons 

Get pokemon 

Pokemons

POKEMONS

GET

/pokemons/{id}.json

Get pokemon

Example URI

GET /pokemons/1.json

URI Parameters

Hide

id

number

(required)

Example: 1

Request

gets a pokemon

Show

Response

200

Hide

Headers

Content-Type: application/json

Body

```
{
  "id": 1,
  "name": "Pikachu",
  "pokemon_type": "electric",
  "created_at": "2016-10-24T19:24:20.158Z",
  "updated_at": "2016-10-24T19:24:20.158Z",
  "url": "http://www.example.com/pokemons/1.json"
}
```

ADVANCED EXAMPLES

Add query params to URI template

```
index_params = { query: { type: :string, required: :optional, value: 'pika' } }
```

```
document :index do
  action 'Get pokemons' do
    path '/pokemons?query={query}'
    params index_params
  end
end
```

GET `/pokemons?query={query}` **Get pokemons**

Example URI

GET `/pokemons?query=pika`

URI Parameters **Hide**

query	<code>string</code> (optional) Example: pika
--------------	--

Request `gets pokemons` **Show**

Response `200` **Show**

Add enumerations description

```
document :api do
  resource 'Pokemons' do
    endpoint '/pokemons'
    group 'Pokemons'
    desc 'pokemons_desc.md'
  end
end
```



Enums

```
**pokemon_type:**
- electric
- fire
- water
```

Pokemons ¶

POKEMONS

ENUMS

pokemon_type:

- electric
- fire
- water

GET

/pokemons/{id}.json

Get pokemon

Example URI

GET /pokemons/1.json

Add action desc

```
document :show do
  action 'Get pokemon' do
    desc 'This returns a pokemon.'
  end
end
```

GET `/pokemons/{id}.json` Get pokemon

This returns a pokemon.

Example URI

GET /pokemons/1.json

Override everything

```
show_params = { id: { type: :integer, required: :required, value: 144, desc: 'pokemon id' } }
```

```
document :show do
  action 'Get pokemon' do
    desc 'This returns a pokemon.'
    path '/pokemons/{id}'
    verb 'GET'
    params show_params
  end
end
```

GET `/pokemons/{id}` **Get pokemon**

This returns a pokemon.

Example URI

GET `/pokemons/144`

URI Parameters [Hide](#)

id	<code>integer</code> (required) Example: 144
-----------	--

Request `gets a pokemon` [Show](#)

Response `200` [Show](#)

Skip some examples with :nodoc

```
describe 'GET /pokemons/:id' do
  include Documentation::Pokemons::Show

  it 'gets a pokemon' do
    get pokemon_path(pikachu), as: :json
    expect(response).to have_http_status(200)
  end

  it 'returns not found', :nodoc do
    get pokemon_path(123), as: :json
    expect(response).to have_http_status(404)
  end
end
```

Otherwise ...

GET `/pokemons/{id}` Get pokemon

This returns a pokemon.

Example URI

GET `/pokemons/144`

URI Parameters Hide

id	<code>integer</code> (required) Example: 144
-----------	--

Request `gets a pokemon` Show

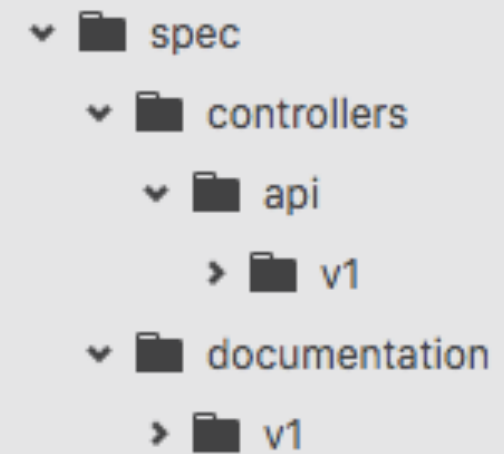
Response `200` Show

Request `returns not found` Show

Response `404` Show

API versioning

- use namespaces for tests and descriptors
- custom shell script



Custom shell script

```
#!/usr/bin/env bash
```

```
bundle exec rspec spec/controllers/v1 --tag apidoc -f Dox::Formatter --order defined --out  
public/api/docs/v1/apispec.md
```

```
aglio --include-path / -i public/api/docs/v1/apispec.md -o public/api/docs/v1/index.html
```

CONFIGURATION

Configuration options

```
Dox.configure do |config|  
  config.header_file_path = Rails.root.join('spec/documentation/api.md')  
  config.desc_folder_path = Rails.root.join('spec/documentation/descriptions')  
end
```

CONCLUSION

SIMPLE

- when the defaults are enough
- minimalistic documentation

HIGHLY EXTENSIBLE

- when you want more control
- rich documentation with custom descriptions

DOCUMENT



ALL THE THINGS!

memes.com



Questions? Ideas?

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