# An Introduction to Ruby Web Frameworks

Ryan Carmelo Briones Server Monkey / Code Samurai, Edgecase, LLC



#### Commanding Your SSH Universe with Capistrano

### Thurs 5/24 5:20 PM in Portland 25 I

# An Introduction to Ruby Web Frameworks

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#### 0 to Ruby in 45 minutes











#### Define: Framework

#### Framework Resuable

# Framework Encapsulated

# Framework Domain Specific!

#### Why Ruby?

# Ruby Ready to lead Object Oriented since day I

```
User.all.reject { |user| user.admin? }.each do |user|
  user.expire 1.days.from_now
  user.save
end
```

### Ruby Fine-grained Control

```
User.all.reject { |user| user.admin? }.each do |user|
  user.expire 1.days.from_now
  user.save
end
```

#### Ruby Promotes Beautiful Code

```
User.all.reject { |user| user.admin? }.each do |user|
  user.expire 1.days.from_now
  user.save
end
```

# Ruby MRI has performance issues

#### Ruby Libraries?

# Ruby Alternative Implementations







#### Ruby Frameworks

#### Rack

### Rack Responding to the #call

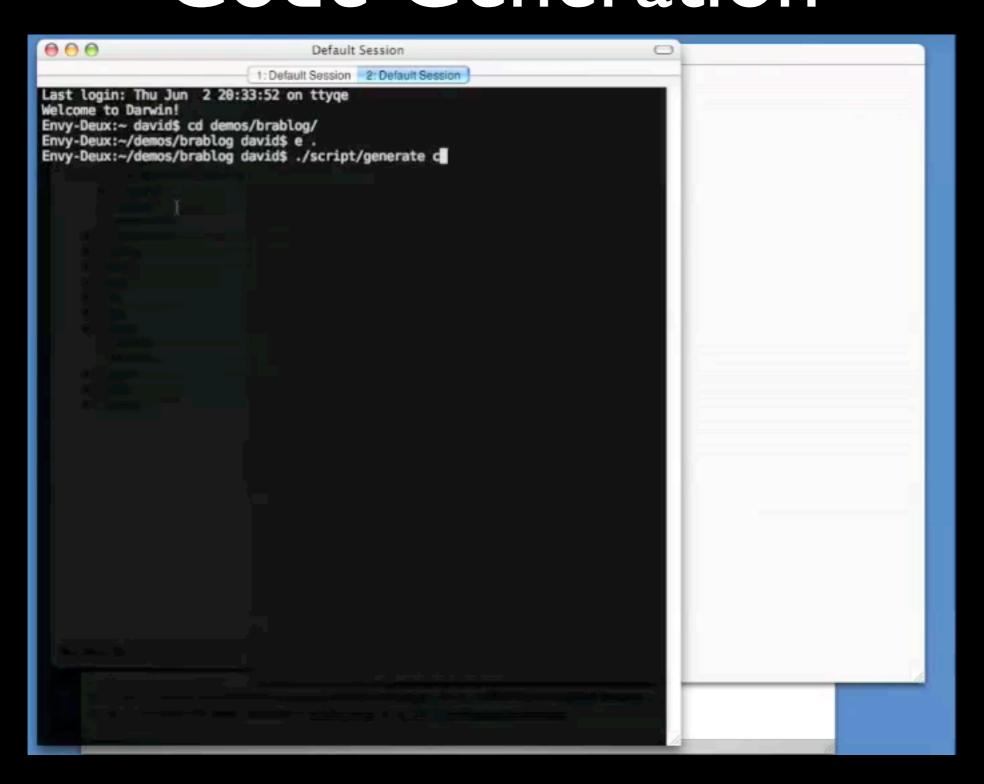
```
class HelloWorld
  def call(env)
    [200, {"Content-Type" => "text/plain"}, ["Hello world!"]]
  end
end
```

# Rack Let the handlers do the work

#### Ruby on Rails

### Rails Code Generation

### Rails Code Generation



#### Rails

#### Convention over Configuration

- Naming Conventions
  - conference\_registrations
  - conference\_registration.rb
  - ConferenceRegistration < ActiveRecord::Base
- Load Paths

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Opinionated Software / "The Golden Path"

#### Rails

#### Domain Specific Languages

```
# models
class Publication < ActiveRecord::Base</pre>
  has_many :subscriptions
  has_many :subscribers, :through => :subscriptions,
          :class_name => 'User'
end
# rails router
ActionController::Routing::Routes.draw do | map |
  map.resources :publications, :has_many => [:subscriptions]
  map.resources :users
  map.login '/login', :controller => 'sessions', :action => 'login'
  map.connect ':controller/:action/:id'
end
```

# Rails First-class Testing

## Rails Too much magic

# Rails Moving to fast?

#### Merb

# Merb All you need, nil you don't

# Merb Eschews "magic"

# Merb Challenge: Benchmark and Profile

### Merb Flexible == Unproductive?

### Merb Resources / Documentation

#### Camping



#### Camping All in one file / Rapid Prototypes

```
#!/usr/bin/env ruby
require 'rubygems'
require 'camping'
Camping.goes :Foo
module Foo::Controllers
  class Home < R '/'</pre>
    def get
      render :home_index
    end
  end
end
module Foo::Views
  def home_index
    h1 'Home'
  end
end
```

```
#!/usr/bin/env ruby
require 'rubygems'
require 'camping'
                           # setup app namespace
Camping.goes :Foo
module Foo::Controllers
  class Home < R '/'
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Camping.goes :Foo
                           # setup app namespace
module Foo::Controllers
                     # route request to http://app/
  class Home < R '/'</pre>
   def get
     render :home_index
   end
 end
end
module Foo::Views
 def home_index
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Camping.goes :Foo
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module Foo::Controllers
                               # route request to http://app/
  class Home < R '/'</pre>
                               # route get requests to <a href="http://app/">http://app/</a>
    def get
      render :home_index
    end
  end
end
module Foo::Views
  def home_index
    h1 'Home'
  end
```

end

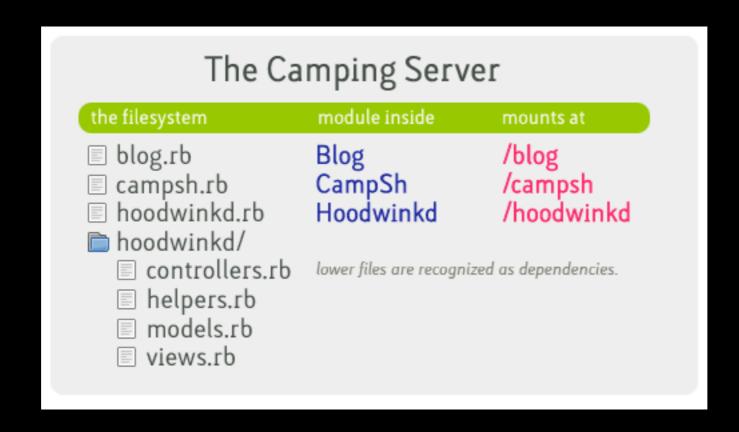
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  class Home < R '/'</pre>
                               # route get requests to <a href="http://app/">http://app/</a>
    def get
      render :home_index
                               # render home_index view
    end
  end
end
module Foo::Views
  def home_index
```

h1 'Home'

end

end

# Camping Small apps, Many mounts



# Camping Structure translates to other popular MVCs

## Camping No standard test framework

#### Sinatra

### Sinatra Simple. Fast. Effective.

```
#!/usr/bin/env ruby
require 'rubygems'
require 'sinatra'

get '/' do
    "Hello, World!"
end
```

#### Extra Credit

IOWA

Ramaze

Waves

Maveric

Mack

Nitro

Wuby

#### Questions?

#### Thank You

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