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Why Merb?

What is Merb?

Web framework for the VC in MVC

ORM agnostic

Merb is thread-safe

No CGI.rb!

A small core, enhanced with plug-ins

Merb is a hacker’s framework

Stay small
Stay hackable

Kitchen sink not included

Some Historical Facts

Merb was started in October of 2006 by Ezra Zygmuntowicz

Originally designed as a hack for uploading files for Ruby on Rails

... but has since grown into a full-fledged framework

Merb == Mongrel + Erb

Merb == Rack +
Template Language
Agnostic

The Merb Philosophy

No code is faster than no code

Simplicity and clarity trumps magic every time

… so prefer simple code
over magic code

Don’t be clever!

Things I like about Merb

Compiled routes

Merb::Router.
compiled_statement
outputs the compiled
match method

Some controller stuff

Merb renders the return value from each action

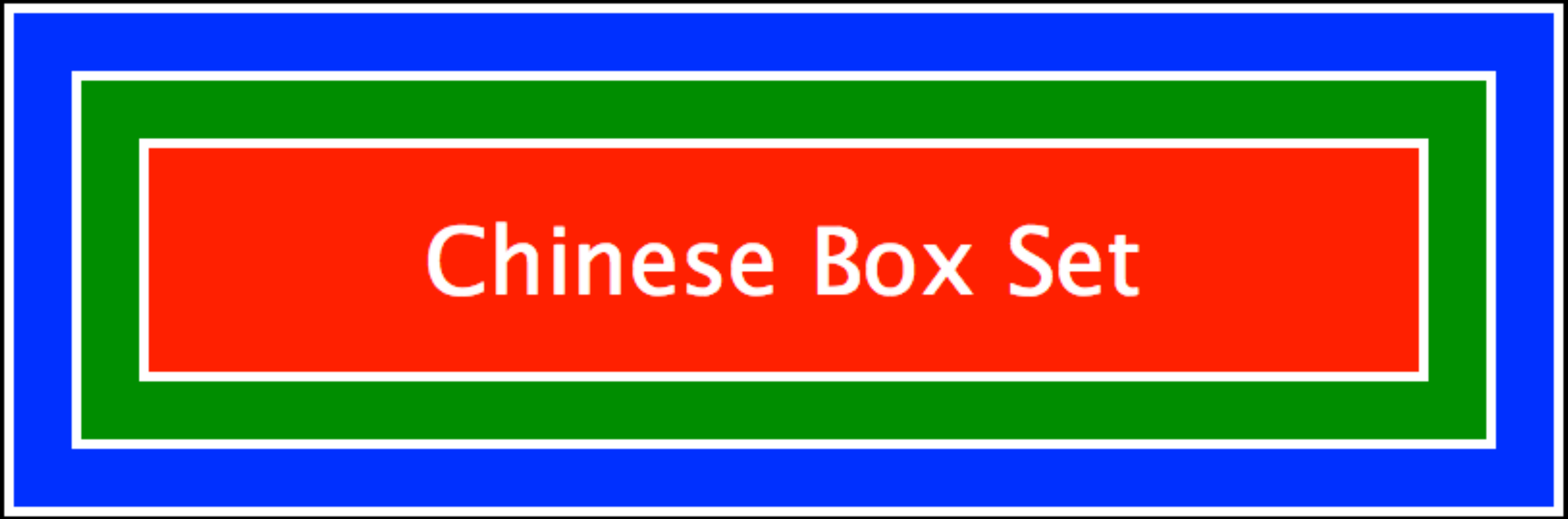
- String objects
- IO objects
- Proc objects

```
class Hello < Application

  def index
    "Hello RubyFools!"
  end

end
```

```
class Pid < Application

  def index
    File.open Merb.root +
      "/log/merb.#{request.port}.pid"
  end

end
```

The render method returns a String

```ruby
class ChineseBox < Application

  def index
    txt = "Chinese Box Set"
    red = render txt, :layout => "red"
    green = render red, :layout => "green"
    blue = render green, :layout => "blue"
    render blue
  end

end
```



Chinese Box Set

The `provides` and `display` methods for rendering objects

The `provides` method for registering mime-types to render

The `display` method for rendering objects

```
class Regions < Application
  provides :yaml, :json

  def index
    @regions = Region.all
    display @regions
  end

  def show
    @region = Region[params[:id]]
    display @region
  end
```

The `display` method returns a String

The `render_then_call` methods do work after the respond is send

```ruby
class ThenCall < Application

  def index
     content = render
     render_then_call content do
       worker = Worker.new
       worker.work
     end
  end

end
```

Merb is build on top of Rack

Rack provides an minimal interface between web servers and web frameworks.

A Rack application is a Ruby object (not a class) that responds to `call`.

It takes exactly one argument, the environment

... and returns an Array of exactly three values: The status, the headers, and the body.

```ruby
# config/rack.rb

run Merb::Rack::Application.new
```

```
class MyRackHandler

  def initialize(app)
    @app = app
  end

  def call(env)
    @app.call env
  end

end

use MyRackHandler
run Merb::Rack::Application.new
```

```
def call(env)
  request = Merb::Request.new env
  if request.path =~ %r{/api/(.*)}
    [200,
      {"Content-Type" => "text/json"},
      Api.create_json($1)]
  else
    @app.call env
  end
end
```

Supported Handlers

- Mongrel
- evented_mongrel
- Ebb
- Thin
- WEBrick
- and many more

Supported Adapters

- Ruby on Rails
- Camping
- Ramaze
- Merb
- and many more

Merb Structure

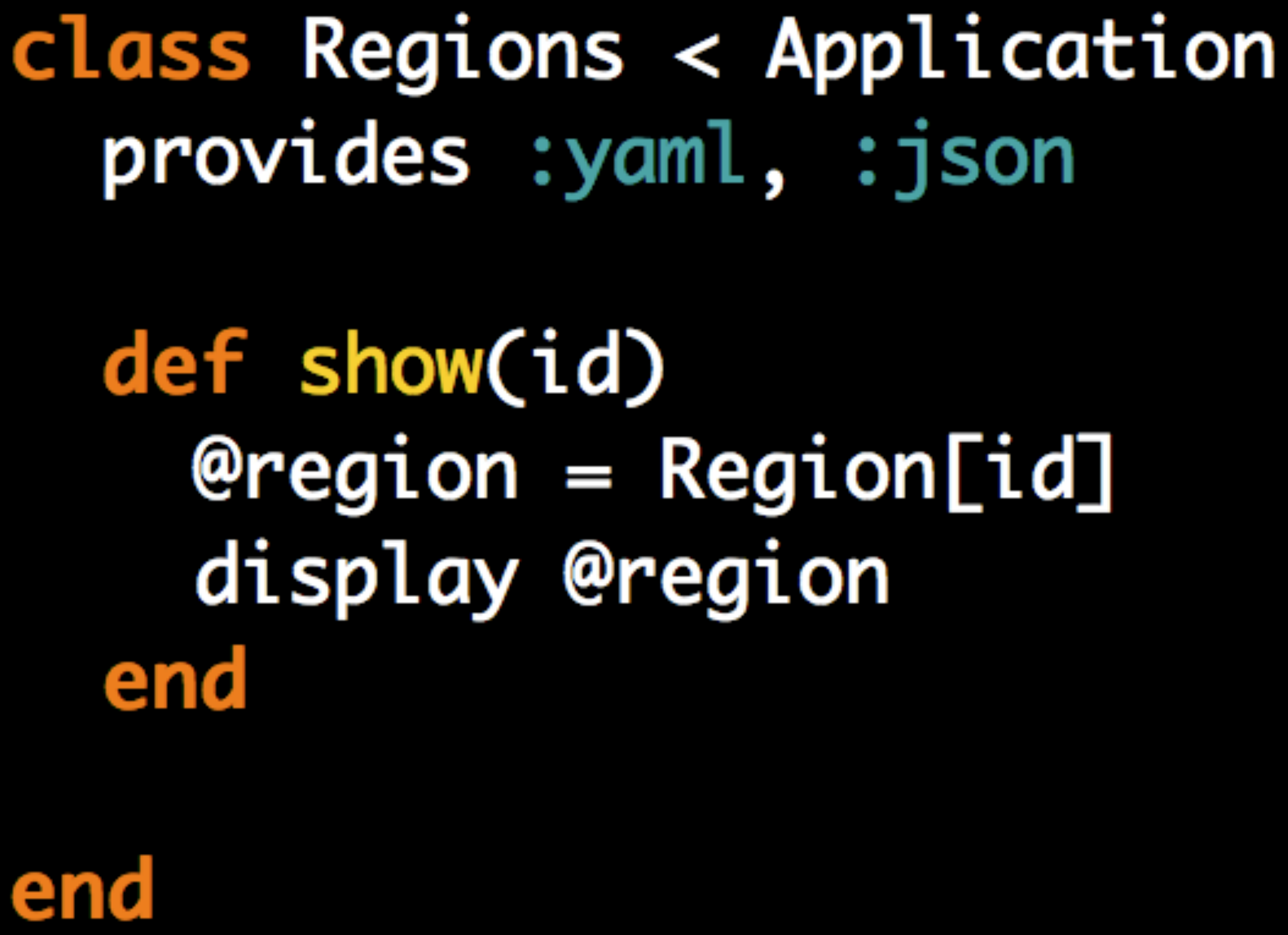
- Merb Core
- Merb More
- Merb Plug-ins

Merb Core is the essential parts of Merb

Merb More is a collection of very often used plug-ins

- merb-action-args
- merb-assets
- merb-gen
- merb-haml
- merb-builder
- merb-mailer
- merb-parts
- merb-cache

merb-action-args



```
class Regions < Application
  provides :yaml, :json

  def show(id)
    @region = Region[id]
    display @region
  end

end
```

merb-assets

- `require_css`
- `require_js`
- `include_required_css`
- `include_required_js`
- and more

Official Plug-ins

- merb_activerecord
- merb_datamapper
- merb_sequel
- merb_helpers
- merb_param_protection
- merb_stories
- merb_test_unit

The `dependency` and `dependencies` methods includes dependent gems

They try to load the file via ROOT/gems first before moving off to the system gems

```
# These are some examples of how you might
# specify dependencies.
#
# dependencies "RedCloth", "merb_helpers"
# OR
# dependency "RedCloth", "> 3.0"
# OR
# dependencies "RedCloth" => "> 3.0",
#              "ruby-aes-cext" => "= 1.0"

dependency "merb-parts"
```

Using an ORM

Merb supports three different ORM’s through official plug-ins

- Active Record
- DataMapper
- Sequel

The use_orm method is used to select an ORM

```
### Uncomment for DataMapper ORM
# use_orm :datamapper

### Uncomment for ActiveRecord ORM
# use_orm :activerecord

### Uncomment for Sequel ORM
use_orm :sequel
```

Why Sequel?

Sequel provides thread safety, connection pooling

... and a concise DSL for constructing queries and table schemas.

Sequel also includes a lightweight but comprehensive ORM layer for mapping records to Ruby objects using the ActiveRecord pattern.

```
class PlayerMigration < Sequel::Migration

  def up
    create_table :players do
      primary_key :id
      varchar :name
      foreign_key :team_id, :table => :teams
    end
  end

  def down
    drop_table :players
  end

end
```

```ruby
class Player < Sequel::Model
  many_to_one :team
  one_to_many :goals
end
```

```ruby
class Players < Application
  provides :yaml, :json

  def index
    @players = Player.all
    display @players
  end

  def show(id)
    @player = Player[id]
    display @player
  end

end
```

http://www.merbivore.org/

http://github.com/drnic/
merb-tmbundle/tree/master

Questions?