Introduction to
Ruby on Rails

June 2014

- Why Rails?

- Request lifecycle and MVC

- The Ruby language

- Rails generators: models, controllers, scaffolds
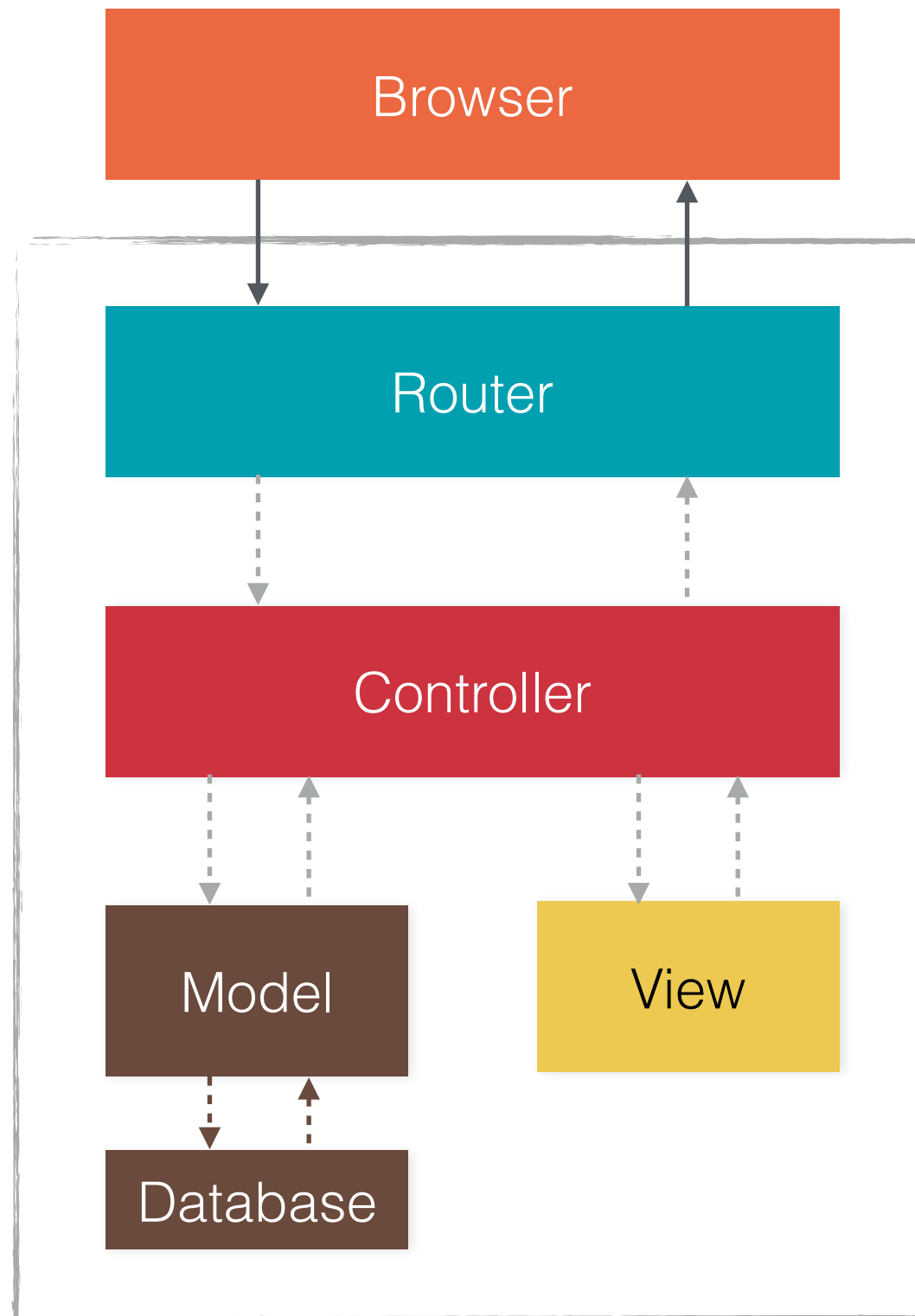
- Community Gems

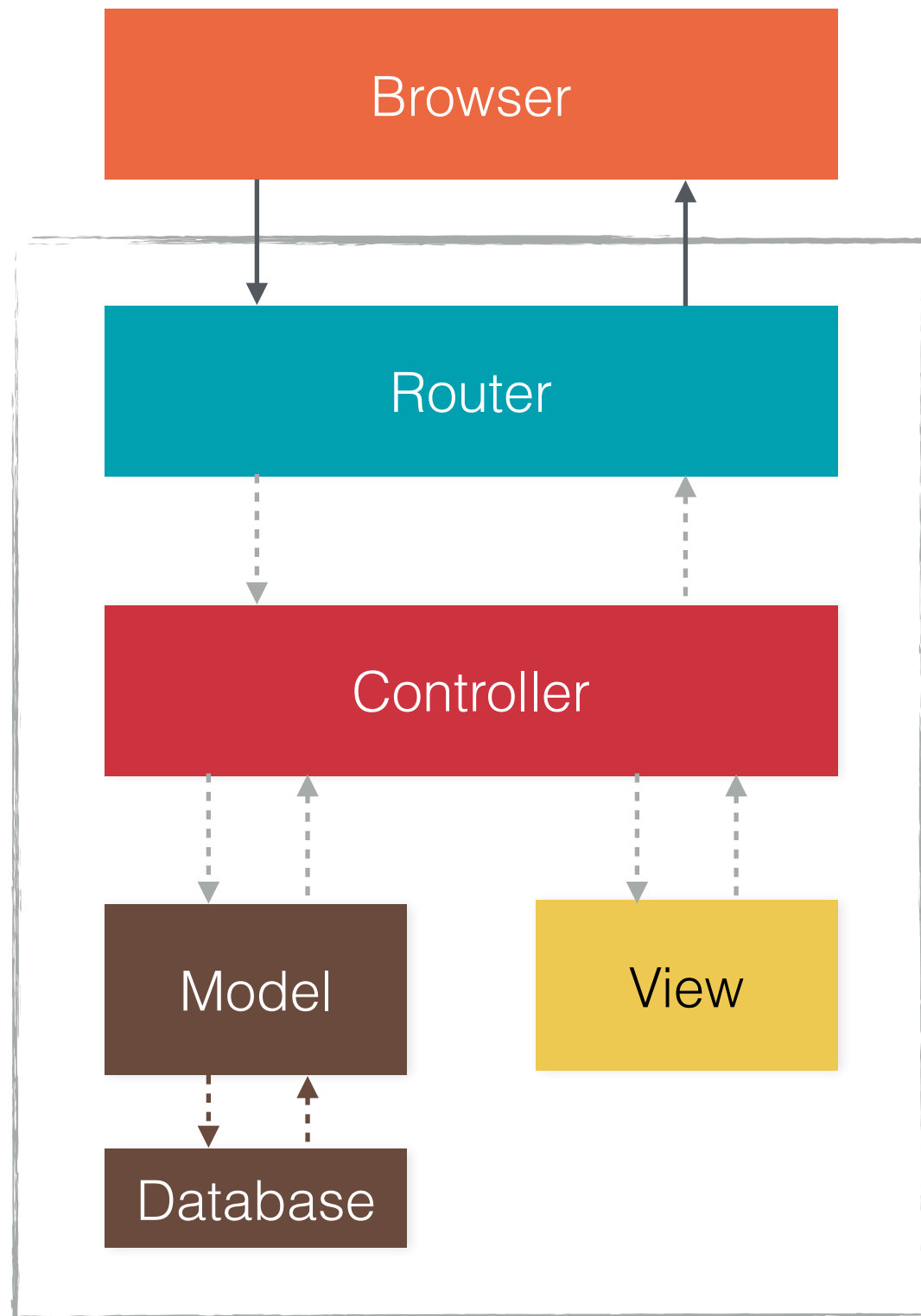# Conventions over configuration

Meet Ruby

Basic syntax

Classes

Request lifecycle

Request lifecycle

GET /posts/7

get "/posts/:id" => "posts#show"

@post = Post.find(7)

Title: <%= @post.title %>
Body: <%= @post.body %>

Create a new Rails application

```
→   dev   rails new my_first_app

        create
        create   Gemfile
        create   app
        create   app/assets/images/rails.png
        create   app/assets/javascripts/application.js
        create   app/assets/stylesheets/application.css
        create   app/controllers/application_controller.rb
        create   app/helpers/application_helper.rb
        create   app/views/layouts/application.html.erb
        create   config
        create   config/routes.rb
        create   config/database.yml
        create   db
        create   public
        create   public/404.html
        create   public/422.html
        create   public/500.html
        create   public/favicon.ico
        create   public/index.html
        create   public/robots.txt
           run   bundle install
```

Create a new Rails application

```
→  dev  cd my_first_app/app
→  app  ls

assets      controllers      models      views      ...
```

Generate a Model

```
→  my_first_app   rails generate model breed name:string

      invoke  active_record
      create    db/migrate/20140621195618_create_breeds.rb
      create    app/models/breed.rb
      invoke    test_unit
      create      test/unit/breed_test.rb
      create      test/fixtures/breeds.yml
```

breed.rb

```ruby
class Breed < ActiveRecord::Base
  attr_accessible :name
end
```

Migrate the Database

20140621195618_create_breeds.rb

```ruby
class CreateBreeds < ActiveRecord::Migration
  def change
    create_table :breeds do |t|
      t.string :name

      t.timestamps
    end
  end
end
```

```
→  my_first_app  rake db:migrate

==  CreateBreeds: migrating ========================
-- create_table(:breeds)
   -> 0.0010s
==  CreateBreeds: migrated (0.0011s) =============
```

Generate a Controller

```
→  my_first_app   rails generate controller breeds index

    create   app/controllers/breeds_controller.rb
     route   get "breeds/index"
    invoke   erb
    create     app/views/breeds
    create     app/views/breeds/index.html.erb
    invoke   test_unit
    create     test/functional/breeds_controller_test.rb
    invoke   helper
    create     app/helpers/breeds_helper.rb
    invoke     test_unit
    create       test/unit/helpers/breeds_helper_test.rb
    invoke   assets
    invoke     coffee
    create       app/assets/javascripts/breeds.js.coffee
    invoke     scss
    create       app/assets/stylesheets/breeds.css.scss
```

Create the Index Action

breeds_controller.rb

```ruby
class BreedsController < ApplicationController
  def index
  end
end
```

```ruby
class BreedsController < ApplicationController
  def index
    @breeds = Breed.all
  end
end
```

Tweak the Route

config/routes.rb

```ruby
MyFirstApp::Application.routes.draw do
  get "breeds/index"
end
```

```ruby
MyFirstApp::Application.routes.draw do
  get "breeds" => "breeds#index"
end
```

Create the View

views/breeds/index.html.erb

```erb
<h1>Breeds#index</h1>
<p>Find me in app/views/breeds/index.html.erb</p>
```

```erb
<h1>Breeds</h1>
<p>This is my awesome list of breeds!</p>

<% @breeds.each do |breed| %>
  <%= breed.name %><br>
<% end %>
```

GET /breeds

config/routes.rb

```ruby
get "breeds" => "breeds#index"
```
Router

controllers/breeds_controller.rb

```ruby
class BreedsController < ApplicationController
  def index
    @breeds = Breed.all
  end
end
```
Controller

models/breed.rb

```ruby
class Breed < ActiveRecord::Base
  attr_accessible :name
end
```
Model

views/breeds/index.html.erb

```erb
<h1>Breeds</h1>
<p>This is my awesome list of breeds!</p>

<% @breeds.each do |breed| %>
  <%= breed.name %><br>
<% end %>
```
View

Start the Rails Server

```
→  my_first_app   rails server

=> Booting WEBrick
=> Rails 3.2.11 application starting in development on http://0.0.0.0:3000
=> Call with -d to detach
=> Ctrl-C to shutdown server
[2014-06-22 01:34:01] INFO  WEBrick 1.3.1
[2014-06-22 01:34:01] INFO  ruby 2.1.1 (2014-02-24) [x86_64-darwin12.0]
[2014-06-22 01:34:01] INFO  WEBrick::HTTPServer#start: pid=1365 port=3000
```

>_

localhost:3000/breeds

Breeds

```
This is my awesome list of breeds!
```

www

Using the Console

```
→  my_first_app   rails console

Loading development environment (Rails 3.2.11)

2.1.1 :001 > Breed.create(name: "Labrador")

   (0.2ms)  begin transaction
  SQL (8.6ms)   INSERT INTO "breeds" ("created_at", "name",
"updated_at") VALUES (?, ?, ?)  [["created_at", Sat, 21 Jun 2014
22:47:55 UTC +00:00], ["name", "Labrador"], ["updated_at", Sat, 21
Jun 2014 22:47:55 UTC +00:00]]
   (0.5ms)  commit transaction
 => #<Breed id: 1, name: "Labrador", created_at: "2014-06-21
```

---

localhost:3000/breeds

Breeds

This is my awesome list of breeds!

Labrador
Beagle
Poodle
Boxer

REST

Create another model with a scaffold

Review the scaffold

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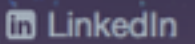## Claim your Go Development Box in 60 seconds.

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