

RDBMS-backed Resource

Capstone: Photo Tourist Web Application



In this lecture, we will discuss...

- ✧ Resources and their parts
- ✧ rails-api g scaffold and generated artifacts
- ✧ Migrate DB and inspect generated database table
- ✧ URIs and routing

rails-api g scaffold Foo name

URI/METHOD Routes

```
/api/foos  
GET  
GET :id  
POST  
PUT/PATCH :id  
DELETE :id
```

Controller

```
class FooController  
  :index  
  :show  
  :create  
  :update  
  :delete
```

Model

```
class Foo  
  :name
```

Schema
Migration

index.json.builder

show.json.builder

_foo.json.builder

View

Table:
Foos

```
James-MacBook-Pro:capstone_demoapp jim$ rails-api g scaffold Foo name --orm active_record
Expected string default value for '--rc'; got false (boolean)
Running via Spring preloader in process 20180
Expected string default value for '--jbuilder'; got true (boolean)
Expected boolean default value for '--resource-route'; got :api_resource_route (string)

  invoke  active_record
  create  db/migrate/20161202053811_create_foos.rb
  create  app/models/foo.rb
  invoke  rspec
  create  spec/models/foo_spec.rb
  invoke  api_resource_route
  route   resources :foos, except: [:new, :edit]
  invoke  scaffold_controller
  create  app/controllers/foos_controller.rb
  invoke  rspec
  create  spec/controllers/foos_controller_spec.rb
  create  spec/routing/foos_routing_spec.rb
  invoke  rspec
  create  spec/requests/foos_spec.rb
  invoke  jbuilder
  create  app/views/foos
  create  app/views/foos/index.json.jbuilder
  create  app/views/foos/show.json.jbuilder
  create  app/views/foos/_foo.json.jbuilder
```



```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api g scaffold Foo name --orm active_record
```

```
Expected string default value for '--rc'; got false (boolean)
```

```
Running via Spring preloader in process 20180
```

```
Expected string default value for '--jbuilder'; got true (boolean)
```

```
Expected boolean default value for '--resource-route'; got :api_resource_route (string)
```

```
  invoke  active_record
```

```
  create  db/migrate/20161202053811_create_foos.rb
```

```
  create  app/models/foo.rb
```

```
  invoke  rspec
```

```
  create  spec/models/foo_spec.rb
```

```
  invoke  api_resource_route
```

```
    route  resources :foos, except: [:new, :edit]
```

```
  invoke  scaffold_controller
```

```
  create  app/controllers/foos_controller.rb
```

```
  invoke  rspec
```

```
  create  spec/controllers/foos_controller_spec.rb
```

```
  create  spec/routing/foos_routing_spec.rb
```

```
  invoke  rspec
```

```
  create  spec/requests/foos_spec.rb
```

```
  invoke  jbuilder
```

```
  create  app/views/foos
```

```
  create  app/views/foos/index.json.jbuilder
```

```
  create  app/views/foos/show.json.jbuilder
```

```
  create  app/views/foos/_foo.json.jbuilder
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api d scaffold Foo name --orm active_record
```

```
Expected string default value for '--rc'; got false (boolean)
```

```
create      spec/requests/foos_spec.rb
invoke      jbuilder
create      app/views/foos
create      app/views/foos/index.json.jbuilder
create      app/views/foos/show.json.jbuilder
create      app/views/foos/_foo.json.jbuilder
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api d scaffold Foo name --orm active_record
Expected string default value for '--rc'; got false (boolean)
Running via Spring preloader in process 20206
Expected string default value for '--jbuilder'; got true (boolean)
Expected boolean default value for '--resource-route'; got :api_resource_route (string)
invoke      active_record
remove      db/migrate/20161202053811_create_foos.rb
remove      app/models/foo.rb
invoke      rspec
remove      spec/models/foo_spec.rb
invoke      api_resource_route
route       resources :foos, except: [:new, :edit]
invoke      scaffold_controller
remove      app/controllers/foos_controller.rb
invoke      rspec
remove      spec/controllers/foos_controller_spec.rb
remove      spec/routing/foos_routing_spec.rb
invoke      rspec
remove      spec/requests/foos_spec.rb
invoke      jbuilder
remove      app/views/foos/index.json.jbuilder
remove      app/views/foos/show.json.jbuilder
remove      app/views/foos/_foo.json.jbuilder
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api g scaffold --help
```

```
Expected string default value for '--rc'; got false (boolean)
```

Default: rspec

Rspec options:

<code>--fixture</code> , <code>--no-fixture</code>	# Indicates when to generate fixture
<code>--fixture-replacement=NAME</code>	# Fixture replacement to be invoked
<code>--singleton</code> , <code>--no-singleton</code>	# Supply to create a singleton controller
<code>--controller-specs</code> , <code>--no-controller-specs</code>	# Generate controller specs
	# Default: true
<code>--view-specs</code> , <code>--no-view-specs</code>	# Generate view specs
	# Default: true
<code>--helper-specs</code> , <code>--no-helper-specs</code>	# Generate helper specs
	# Default: true
<code>--routing-specs</code> , <code>--no-routing-specs</code>	# Generate routing specs
	# Default: true
<code>--integration-tool=NAME</code>	# Integration tool to be invoked
	# Default: rspec

ScaffoldController options:

<code>--helper</code> , <code>--no-helper</code>	# Indicates when to generate helper
<code>-e</code> , <code>--template-engine=NAME</code>	# Template engine to be invoked
<code>--jbuilder</code>	# Indicates when to generate jbuilder
	# Default: true

Asset options:

<code>-j</code> , <code>--javascripts</code> , <code>--no-javascripts</code>	# Generate JavaScripts
	# Default: true
<code>-je</code> , <code>--javascript-engine=JAVASCRIPT_ENGINE</code>	# Engine for JavaScripts
	# Default: js


```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api g scaffold Foo name --orm active_record --no-request-specs --no-routing-specs --no-controller-specs
Expected string default value for '--rc'; got false (boolean)
Running via Spring preloader in process 20525
Expected string default value for '--jbuilder'; got true (boolean)
Expected boolean default value for '--resource-route'; got :api_resource_route (string)
  invoke  active_record
  create   db/migrate/20161202054453_create_foos.rb
  create   app/models/foo.rb
  invoke   rspec
  create   spec/models/foo_spec.rb
  invoke   api_resource_route
  route    resources :foos, except: [:new, :edit]
  invoke   scaffold_controller
  create   app/controllers/foos_controller.rb
  invoke   rspec
  invoke   rspec
  invoke   jbuilder
  create   app/views/foos/index.json.jbuilder
  create   app/views/foos/show.json.jbuilder
  create   app/views/foos/_foo.json.jbuilder
Jamess-MacBook-Pro:capstone_demoapp jim$
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails-api g scaffold Foo name --orm active_record --no-request-specs --no-routing-specs --no-controller-specs
Expected string default value for '--rc'; got false (boolean)
Running via Spring preloader in process 20525
Expected string default value for '--jbuilder'; got true (boolean)
Expected boolean default value for '--resource-route'; got :api_resource_route (string)
  invoke  active_record
  create   db/migrate/20161202054453_create_foos.rb
  create   app/models/foo.rb
  invoke   rspec
  create   spec/models/foo_spec.rb
  invoke   api_resource_route
  route    resources :foos, except: [:new, :edit]
  invoke   scaffold_controller
  create   app/controllers/foos_controller.rb
  invoke   rspec
  invoke   rspec
  invoke   jbuilder
  create   app/views/foos/index.json.jbuilder
  create   app/views/foos/show.json.jbuilder
  create   app/views/foos/_foo.json.jbuilder
Jamess-MacBook-Pro:capstone_demoapp jim$ rm spec/models/foo_spec.rb
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rspec
```



```
bin/rake db:migrate RAILS_ENV=test
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:405:in `load_schema_if_pending!'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `block in maintain_test_schema!'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:642:in `suppress_messages'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:416:in `method_missing'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `maintain_test_schema!'
```

```
from /Users/jim/proj/fullstack/capstone_demoapp/spec/rails_helper.rb:27:in `<top (required)>'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/2.2.0/rubygems/core_ext/kernel_require.rb:54:in `require'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/2.2.0/rubygems/core_ext/kernel_require.rb:54:in `require'
```

```
from /Users/jim/proj/fullstack/capstone_demoapp/spec/requests/api_developments_spec.rb:1:in `<top (required)>'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `load'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `block in load_spec_files'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1433:in `each'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1433:in `load_spec_files'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/runner.rb:100:in `setup'
```

```
from /Users/jim/.rbenv/versions/2.2.3/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/runner.rb:86:in `run'
```


James-MacBook-Pro:capstone_demoapp jim\$ vi db/migrate/20161202054453_create_foos.rb



```
1 class CreateFoos < ActiveRecord::Migration
2   def change
3     create_table :foos do |t|
4       t.string :name
5
6       t.timestamps null: false
7     end
8   end
9 end
```

```
James-MacBook-Pro:capstone_demoapp jim$ rake db:migrate
== 20161202054453 CreateFoos: migrating =====
-- create_table(:foos)
   -> 0.0050s
== 20161202054453 CreateFoos: migrated (0.0051s) =====

James-MacBook-Pro:capstone_demoapp jim$
```

```
James-MacBook-Pro:capstone_demoapp jim$ rails db  
psql (9.5.4)  
Type "help" for help.
```

```
capstone_demoapp_development=#
```


James-MacBook-Pro:capstone_demoapp jim\$ rails db
psql (9.5.4)
Type "help" for help.

capstone_demoapp_development=# \d

List of relations

Schema	Name	Type	Owner
public	foos	table	jim
public	foos_id_seq	sequence	jim
public	schema_migrations	table	jim

(3 rows)

capstone_demoapp_development=#

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails db
psql (9.5.4)
Type "help" for help.
```

```
capstone_demoapp_development=# \d
```

List of relations

Schema	Name	Type	Owner
public	foos	table	jim
public	foos_id_seq	sequence	jim
public	schema_migrations	table	jim

(3 rows)

```
capstone_demoapp_development=# \d foos
```

Table "public.foos"

Column	Type	Modifiers
id	integer	not null default nextval('foos_id_seq'::regclass)
name	character varying	
created_at	timestamp without time zone	not null
updated_at	timestamp without time zone	not null

Indexes:

"foos_pkey" PRIMARY KEY, btree (id)

```
capstone_demoapp_development=#
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails db
psql (9.5.4)
Type "help" for help.
```

```
capstone_demoapp_development=# \d
```

List of relations

Schema	Name	Type	Owner
public	foos	table	jim
public	foos_id_seq	sequence	jim
public	schema_migrations	table	jim

(3 rows)

```
capstone_demoapp_development=# \d foos
```

Table "public.foos"

Column	Type	Modifiers
id	integer	not null default nextval('foos_id_seq'::regclass)
name	character varying	
created_at	timestamp without time zone	not null
updated_at	timestamp without time zone	not null

Indexes:

"foos_pkey" PRIMARY KEY, btree (id)

```
capstone_demoapp_development=# \a
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rspec -e RDBMS -fd
Run options: include {:full_description=>/RDBMS/}
```

ApiDevelopments

RDBMS-backed

create RDBMS-backed model

expose RDBMS-backed API resource (FAILED - 1)

Failures:

1) ApiDevelopments RDBMS-backed expose RDBMS-backed API resource

Failure/Error: expect(foos_path).to eq("/api/foos")

expected: "/api/foos"

got: "/foos"

(compared using ==)

./spec/requests/api_developments_spec.rb:19:in `block (3 levels) in <top (required)>'

Finished in 0.03193 seconds (files took 1.39 seconds to load)

2 examples, 1 failure

Failed examples:

rspec ./spec/requests/api_developments_spec.rb:17 # ApiDevelopments RDBMS-backed expose RDBMS-backed API resource


```
Z:\proj\fullstack\capstone_demoapp>rspec -e RDBMS
```

```
■
```

```
Z:\proj\fullstack\capstone_demoapp>rspec -e RDBMS
```

```
C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:392:in `check_pending!': (ActiveRecord::PendingMigrationError)
```

Migrations are pending. To resolve this issue, run:

```
bin/rake db:migrate RAILS_ENV=test
```

```
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:405:in `load_schema_if_pending!'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `block in maintain_test_schema!'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:642:in `suppress_messages'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:416:in `method_missing'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `maintain_test_schema!'
from Z:/proj/fullstack/capstone_demoapp/spec/rails_helper.rb:27:in `'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/site_ruby/2.2.0/rubygems/core_ext/kernel_require.rb:55:in `require'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/site_ruby/2.2.0/rubygems/core_ext/kernel_require.rb:55:in `require'
from Z:/proj/fullstack/capstone_demoapp/spec/models/foo_spec.rb:1:in `'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `load'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `block in load_spec_files'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration
```

Z:\proj\fullstack\capstone_demoapp>rspec -e RDBMS

C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:392:in `check_pending!': (ActiveRecord::PendingMigrationError)

Migrations are pending. To resolve this issue, run:

```
bin/rake db:migrate RAILS_ENV=test
```

```
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:405:in `load_schema_if_pending!'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `block in maintain_test_schema!'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:642:in `suppress_messages'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:416:in `method_missing'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/activerecord-4.2.6/lib/active_record/migration.rb:411:in `maintain_test_schema!'
from Z:/proj/fullstack/capstone_demoapp/spec/rails_helper.rb:27:in `'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/site_ruby/2.2.0/rubygems/core_ext/kernel_require.rb:55:in `require'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/site_ruby/2.2.0/rubygems/core_ext/kernel_require.rb:55:in `require'
from Z:/proj/fullstack/capstone_demoapp/spec/models/foo_spec.rb:1:in `'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `load'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration.rb:1435:in `block in load_spec_files'
from C:/RailsInstaller/Ruby2.2.0/lib/ruby/gems/2.2.0/gems/rspec-core-3.5.4/lib/rspec/core/configuration
```

```
Z:\proj\fullstack\capstone_demoapp>rake db:migrate RAILS_ENV=test
== 20161202054453 CreateFoos: migrating =====
-- create_table(:foos)
   -> 0.0419s
== 20161202054453 CreateFoos: migrated (0.0459s) =====
```

```
Z:\proj\fullstack\capstone_demoapp>rspec -e RDBMS_
```



```
Z:\proj\fullstack\capstone_demoapp>rake db:migrate RAILS_ENV=test
== 20161202054453 CreateFoos: migrating =====
-- create_table(:foos)
   -> 0.0358s
== 20161202054453 CreateFoos: migrated (0.0611s) =====
```

```
Z:\proj\fullstack\capstone_demoapp>rspec -e RDBMS
Run options: include {:full_description=>/RDBMS/}
.F
```

Failures:

- 1) ApiDevelopments RDBMS-backed expose RDBMS-backed API resource

Failure/Error: expect(foos_path).to eq("/api/Foos")

expected: "/api/Foos"

got: "/foos"

(compared using ==)

./spec/requests/api_developments_spec.rb:19:in `block (3 levels) in <top (required)>'

Finished in 0.23437 seconds (files took 14.19 seconds to load)

2 examples, 1 failure

Failed examples:

```
rspec ./spec/requests/api_developments_spec.rb:17 # ApiDevelopments RDBMS-backed expose RDBMS-backed API resource
```



```
1 class FoosController < ApplicationController
2   before_action :set_foo, only: [:show, :update, :destroy]
3
4   # GET /foos
5   # GET /foos.json
6   def index
7     @foos = Foo.all
8
9     render json: @foos
10  end
11
12  # GET /foos/1
13  # GET /foos/1.json
14  def show
15    render json: @foo
16  end
17
18  # POST /foos
19  # POST /foos.json
20  def create
21    @foo = Foo.new(foo_params)
22
23    if @foo.save
24      render json: @foo, status: :created, location: @foo
25    else
26      render json: @foo.errors, status: :unprocessable_entity
27    end
28  end
29
```

```
1 class FoosController < ApplicationController
2   before_action :set_foo, only: [:show, :update, :destroy]
3
4   def index
5     @foos = Foo.all
6     #render json: @foos
7   end
8
9   # GET /foos/1
10  # GET /foos/1.json
11  def show
12    #render json: @foo
13  end
14
15  # POST /foos
16  # POST /foos.json
17  def create
18    @foo = Foo.new(foo_params)
19
20    if @foo.save
21      render json: @foo, status: :created, location: @foo
22    else
23      render json: @foo.errors, status: :unprocessable_entity
24    end
25  end
26
27  # PATCH/PUT /foos/1
28  # PATCH/PUT /foos/1.json
29  def update
```

```
1 class FoosController < ApplicationController
2   before_action :set_foo, only: [:show, :update, :destroy]
3
4   def index
5     @foos = Foo.all
6     #render json: @foos
7   end
8
9   def show
10    #render json: @foo
11  end
12
13  def create
14    @foo = Foo.new(foo_params)
15
16    if @foo.save
17      #render json: @foo, status: :created, location: @foo
18      render :show, status: :created, location: @foo
19    else
20      render json: @foo.errors, status: :unprocessable_entity
21    end
22  end
23
24  def update
25    @foo = Foo.find(params[:id])
26
27    if @foo.update(foo_params)
28      head :no_content
29    else
```



```
Jamess-MacBook-Pro:capstone_demoapp jim$ rspec -e RDBMS
```

```
Run options: include {:full_description=>/RDBMS/}
```

```
.F
```

Failures:

1) ApiDevelopments RDBMS-backed expose RDBMS-backed API resource

```
Failure/Error: expect(foos_path).to eq("/api/foos")
```

```
expected: "/api/foos"
```

```
got: "/foos"
```

```
(compared using ==)
```

```
# ./spec/requests/api_developments_spec.rb:19:in `block (3 levels) in <top (required)>'
```

```
Finished in 0.03315 seconds (files took 1.42 seconds to load)
```

```
2 examples, 1 failure
```

Failed examples:

```
rspec ./spec/requests/api_developments_spec.rb:17 # ApiDevelopments RDBMS-backed expose RDBMS-backed API resource
```

```
Jamess-MacBook-Pro:capstone_demoapp jim$
```

James-MacBook-Pro:capstone_demoapp jim\$ rake routes

Prefix	Verb	URI Pattern	Controller#Action
foos	GET	/foos(.:format)	foos#index
	POST	/foos(.:format)	foos#create
foo	GET	/foos/:id(.:format)	foos#show
	PATCH	/foos/:id(.:format)	foos#update
	PUT	/foos/:id(.:format)	foos#update
	DELETE	/foos/:id(.:format)	foos#destroy

James-MacBook-Pro:capstone_demoapp jim\$

James-MacBook-Pro:capstone_demoapp jim\$ vi config/routes.rb

```
1 Rails.application.routes.draw do
2   resources :foos, except: [:new, :edit]
3   # The priority is based upon order of creation: first created -> highest priority.
4   # See how all your routes lay out with "rake routes".
5
6   # You can have the root of your site routed with "root"
7   # root 'welcome#index'
8
9   # Example of regular route:
10  #   get 'products/:id' => 'catalog#view'
11
12  # Example of named route that can be invoked with purchase_url(id: product.id)
13  #   get 'products/:id/purchase' => 'catalog#purchase', as: :purchase
14
15  # Example resource route (maps HTTP verbs to controller actions automatically):
16  #   resources :products
17
18  # Example resource route with options:
19  #   resources :products do
20  #     member do
21  #       get 'short'
22  #       post 'toggle'
23  #     end
24  #
25  #     collection do
26  #       get 'sold'
27  #     end
28  #   end
29
```

```
1 Rails.application.routes.draw do
2   resources :foos, except: [:new, :edit]
3 end
```

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```
1 Rails.application.routes.draw do
2   scope :api do
3     resources :foos, except: [:new, :edit]
4   end
5 end
```

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```
James-MacBook-Pro:capstone_demoapp jim$ rake routes
Prefix Verb   URI Pattern                      Controller#Action
foos GET      /api/foos(.:format)             foos#index
      POST    /api/foos(.:format)             foos#create
foo GET      /api/foos/:id(.:format)         foos#show
      PATCH   /api/foos/:id(.:format)         foos#update
      PUT      /api/foos/:id(.:format)         foos#update
      DELETE  /api/foos/:id(.:format)         foos#destroy
James-MacBook-Pro:capstone_demoapp jim$
```

Jamess-MacBook-Pro:capstone_demoapp jim\$ rspec -e RDBMS

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rspec -e RDBMS
```

```
Run options: include {:full_description=>/RDBMS/}
```

```
.F
```

Failures:

1) ApiDevelopments RDBMS-backed expose RDBMS-backed API resource

Failure/Error: get foo_path(object.id)

ActionView::MissingTemplate:

Missing template foos/show, application/show with {:locale=>[:en], :formats=>[:html], :variants=>[], :handlers=>[:erb, :builder, :raw, :ruby, :jbuilder]}. Searched in:

* "/Users/jim/proj/fullstack/capstone_demoapp/app/views"

./spec/requests/api_developments_spec.rb:20:in `block (3 levels) in <top (required)>'

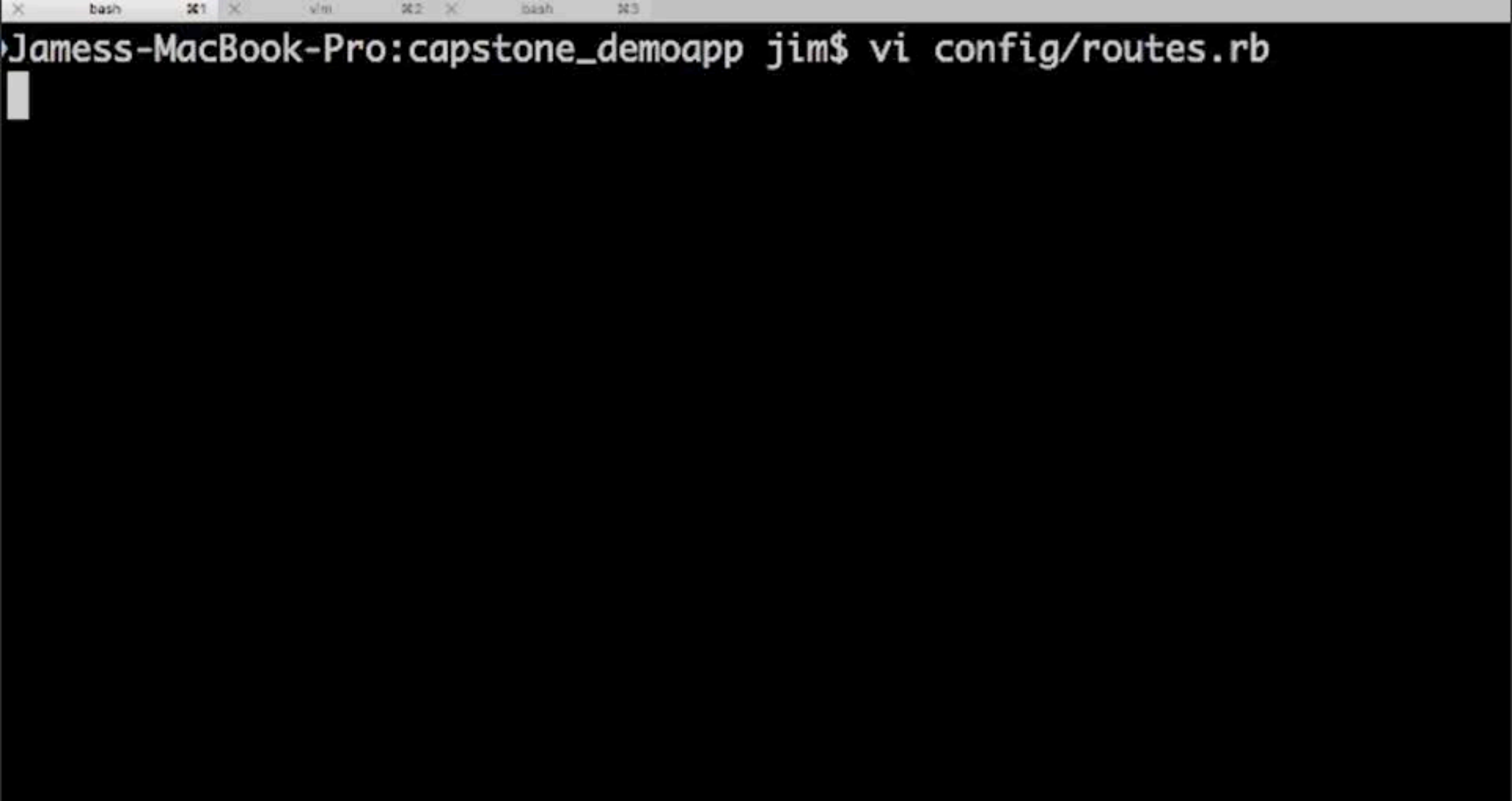
Finished in 0.0407 seconds (files took 1.81 seconds to load)

2 examples, 1 failure

Failed examples:

rspec ./spec/requests/api_developments_spec.rb:17 # ApiDevelopments RDBMS-backed expose RDBMS-backed API resource

```
Jamess-MacBook-Pro:capstone_demoapp jim$
```



```
James-MacBook-Pro:capstone_demoapp jim$ vi config/routes.rb
```



```
1 Rails.application.routes.draw do
2   scope :api do
3     resources :foos, except: [:new, :edit]
4   end
5 end
```

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```
1 Rails.application.routes.draw do
2   scope :api, defaults: {format: :json} do
3     resources :foos, except: [:new, :edit]
4   end
5 end
```

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James-MacBook-Pro:capstone_demoapp jim\$ vi config/routes.rb
James-MacBook-Pro:capstone_demoapp jim\$ rspec -e RDBMS
Run options: include {:full_description=>/RDBMS/}

..

Finished in 0.04568 seconds (files took 1.77 seconds to load)
2 examples, 0 failures

James-MacBook-Pro:capstone_demoapp jim\$

```
Jamess-MacBook-Pro:capstone_demoapp jim$ rails c
Running via Spring preloader in process 22652
Loading development environment (Rails 4.2.6)
irb(main):001:0> █
```

```
James-MacBook-Pro:capstone_demoapp jim$ rails c
Running via Spring preloader in process 22652
Loading development environment (Rails 4.2.6)
irb(main):001:0> Foo.create(:name=>"test")
  (0.1ms) BEGIN
  SQL (7.2ms) INSERT INTO "foos" ("name", "created_at", "updated_at") VALUES ($1, $2, $3) RETURNING "id" [{"na
me", "test"], ["created_at", "2016-12-02 07:16:49.308228"], ["updated_at", "2016-12-02 07:16:49.308228"]]
  (11.6ms) COMMIT
=> #<Foo id: 1, name: "test", created_at: "2016-12-02 07:16:49", updated_at: "2016-12-02 07:16:49">
irb(main):002:0> █
```


James-MacBook-Pro:capstone_demoapp jim\$ rails s
=> Booting WEBrick
=> Rails 4.2.6 application starting in development on http://localhost:3000
=> Run `rails server -h` for more startup options
=> Ctrl-C to shutdown server
█



Welcome aboard

You're riding Ruby on Rails!

[About your application's environment](#)

Getting started

Here's how to get rolling:

1. Use `bin/rails generate` to create your models and controllers

To see all available options, run it without parameters.

2. Set up a root route to replace this page

You're seeing this page because you're running in development mode and you haven't set a root route yet.

Routes are set up in `config/routes.rb`.

3. Configure your database

If you're not using SQLite (the default), edit `config/database.yml` with your username and password.

Browse the documentation

[Rails Guides](#)

[Rails API](#)

[Ruby core](#)

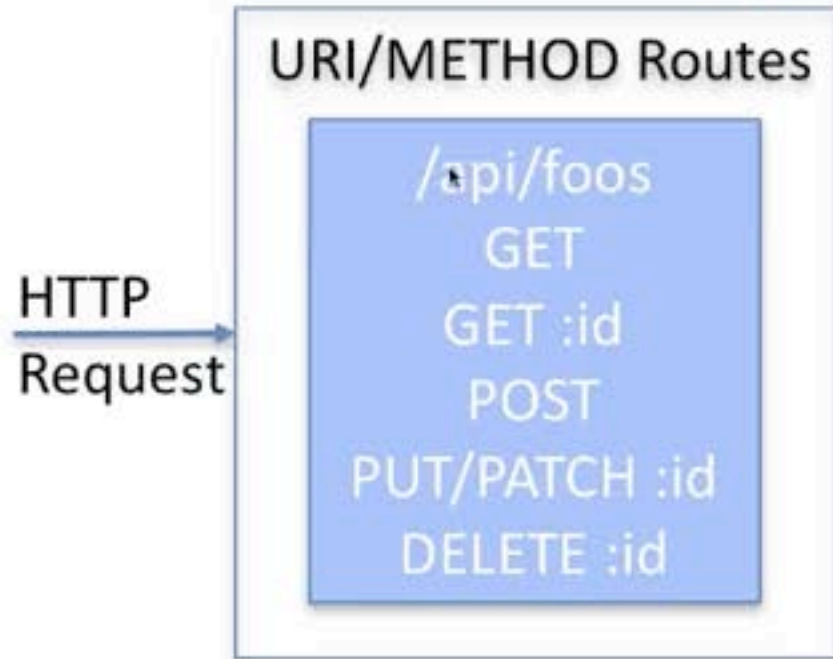
[Ruby standard library](#)

```
[
  {
    "id": 1,
    "name": "test",
    "created_at": "2016-12-02T07:16:49.308Z",
    "updated_at": "2016-12-02T07:16:49.308Z",
    "url": "http://localhost:3000/api/foos/1"
  }
]
```

Raw

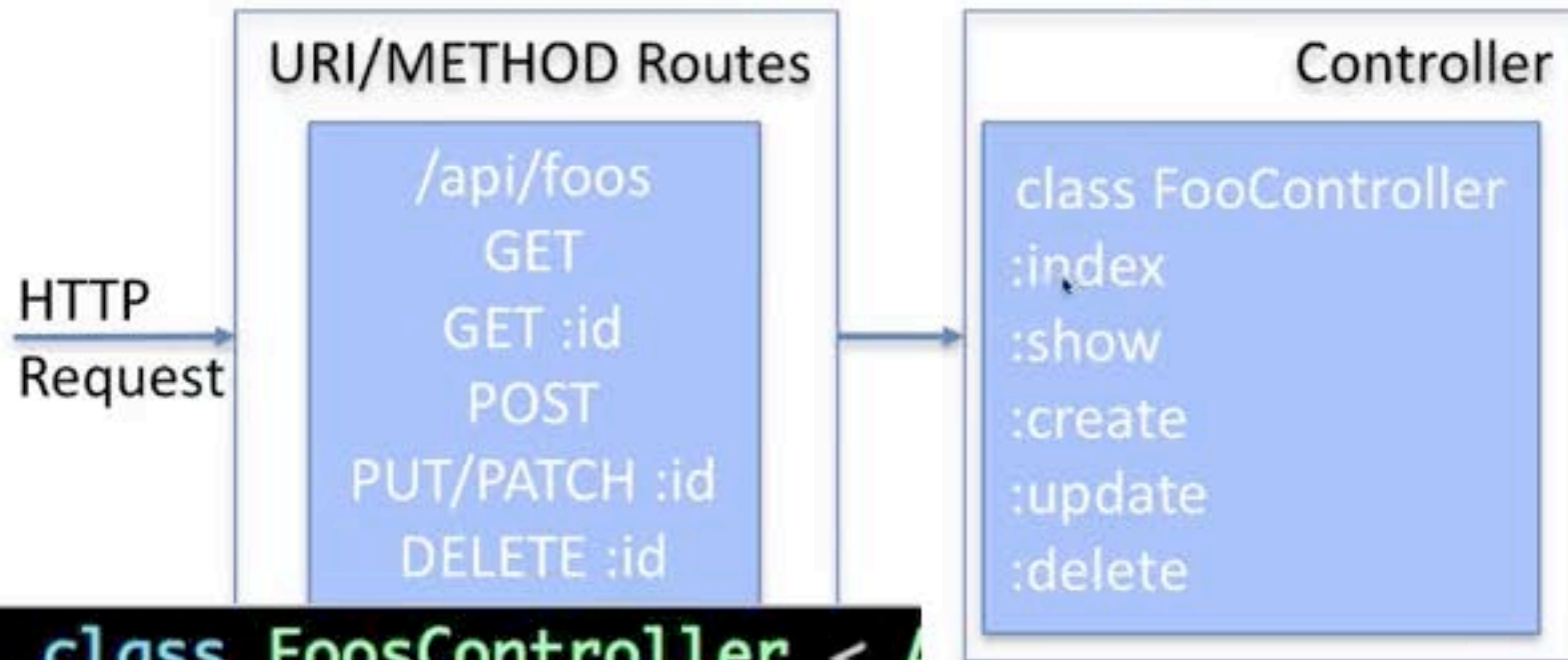
Parsed

Request/Response Flow



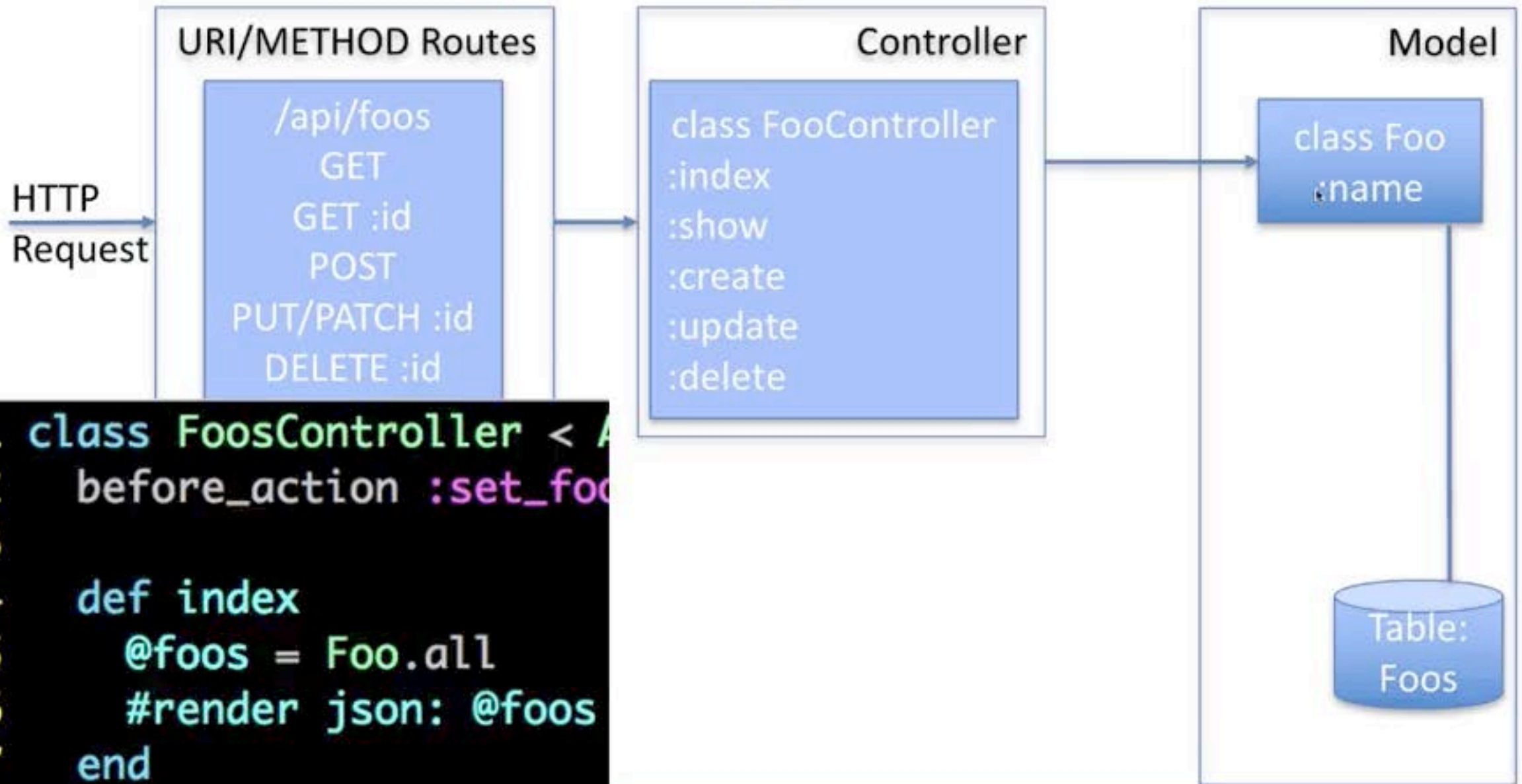
```
1 Rails.application.routes.draw do
2   scope :api, defaults: {format: :json} do
3     resources :foos, except: [:new, :edit]
4   end
5 end
```

Request/Response Flow

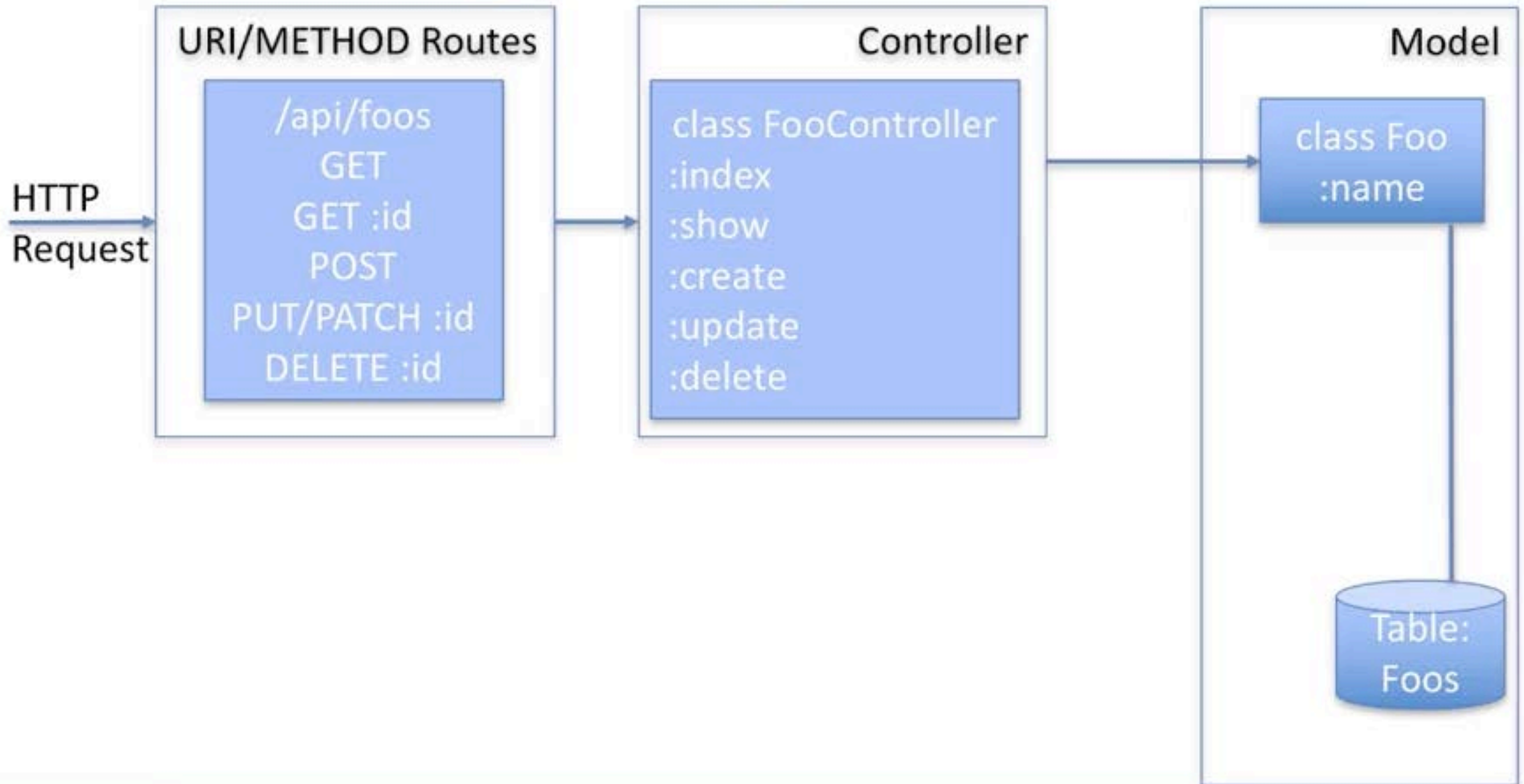


```
1 class FoosController < ActionController::Base
2   before_action :set_foos
3
4   def index
5     @foos = Foo.all
6     #render json: @foos
7   end
```

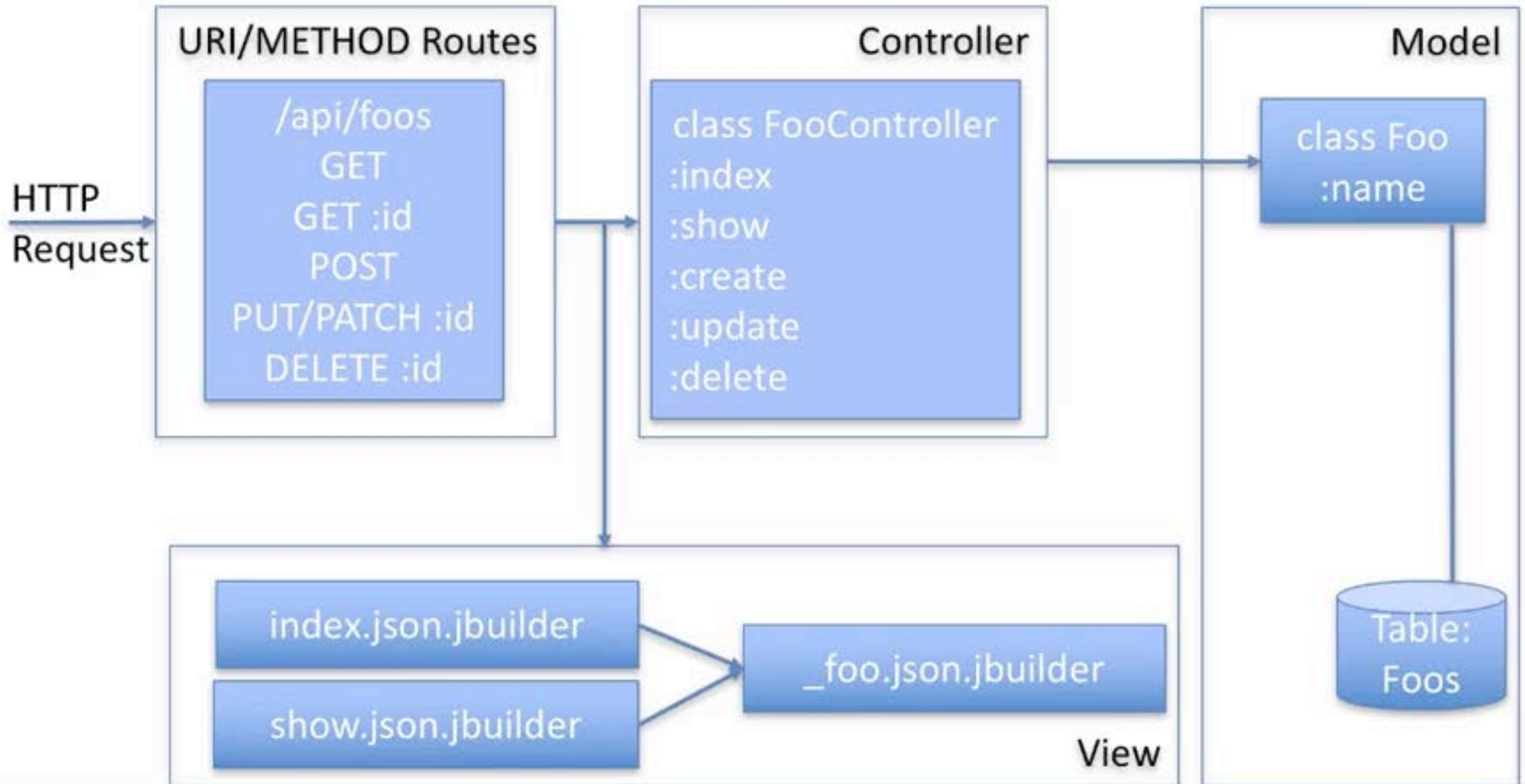
Request/Response Flow



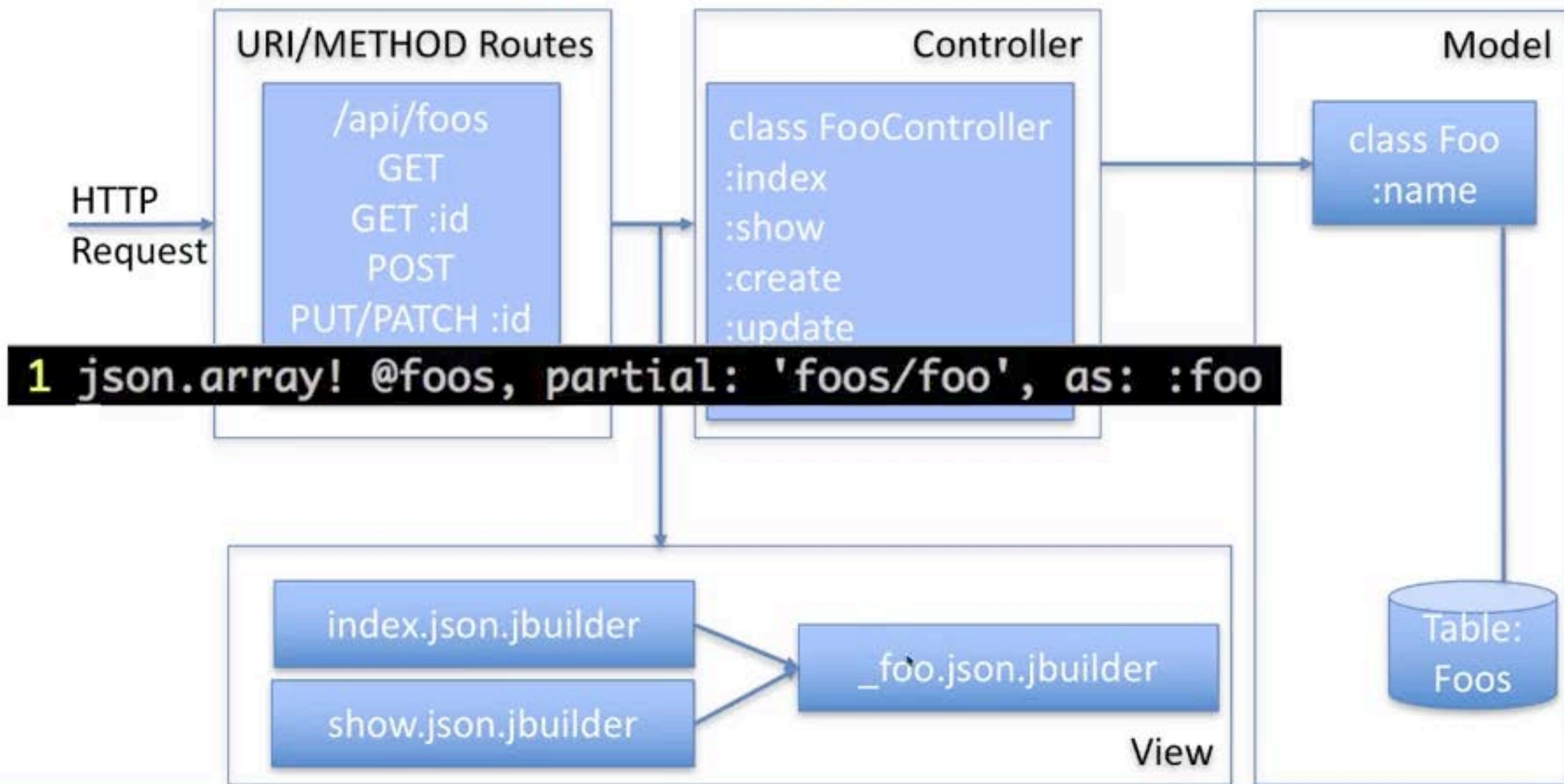
Request/Response Flow



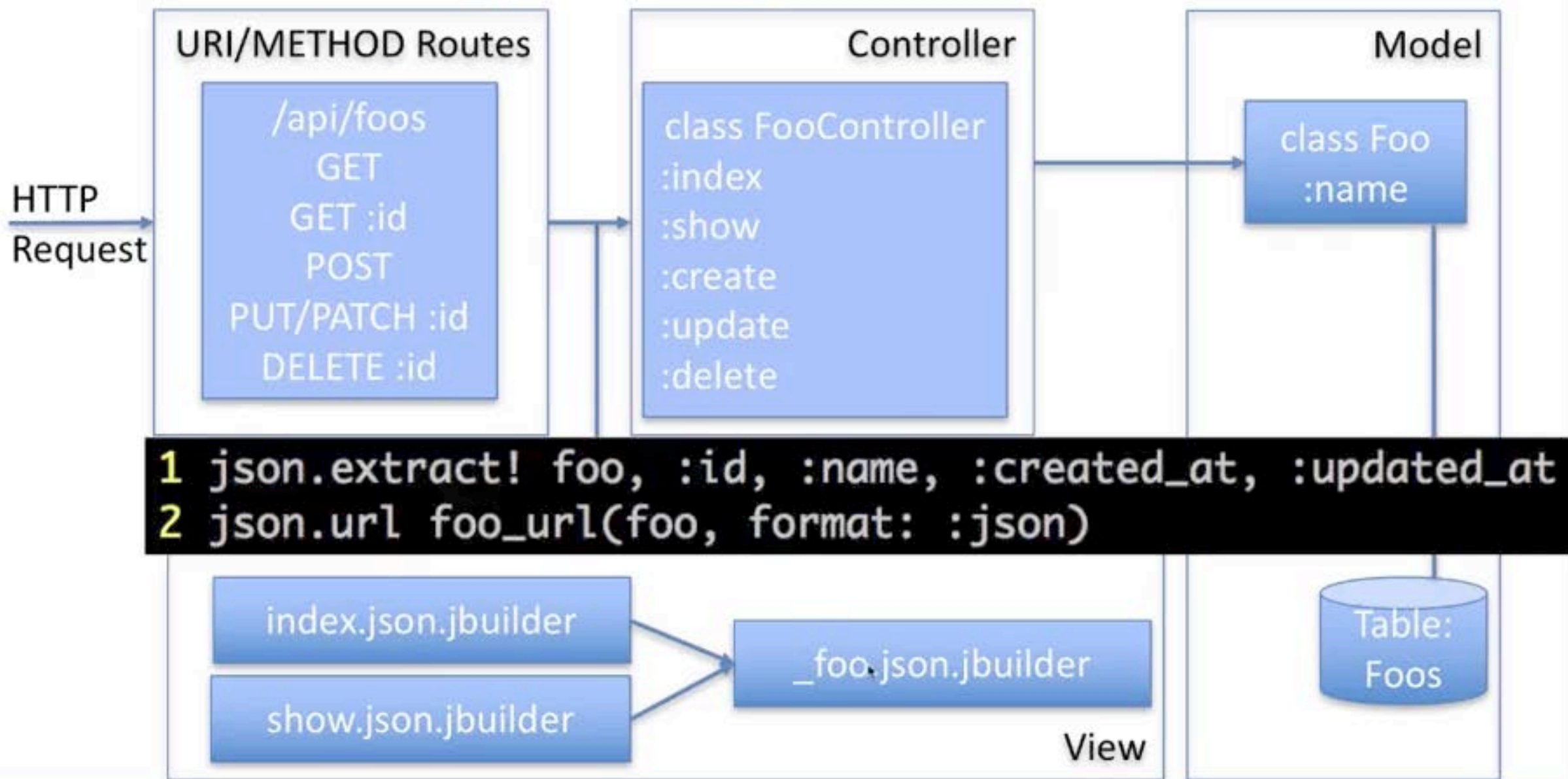
Request/Response Flow



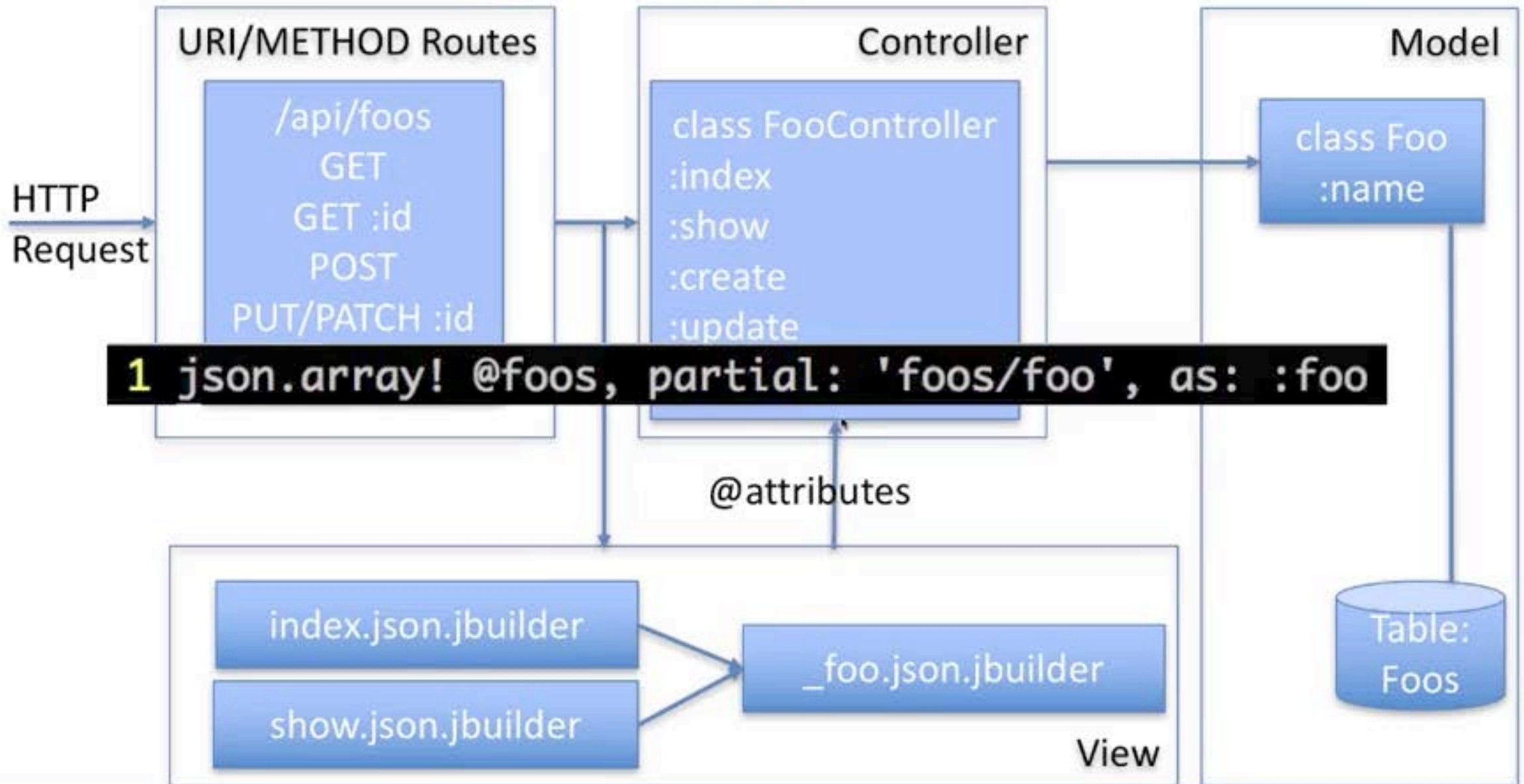
Request/Response Flow



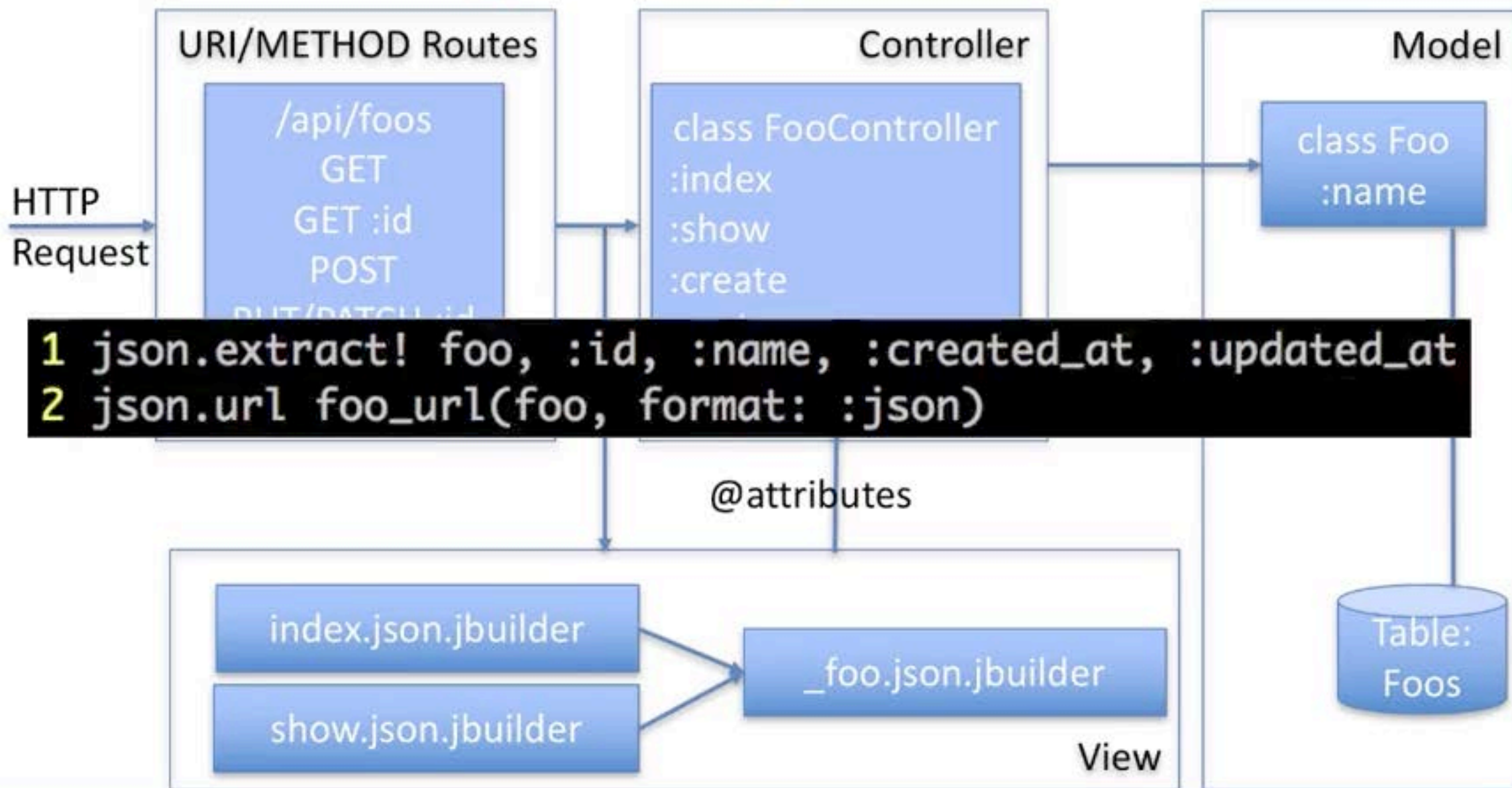
Request/Response Flow



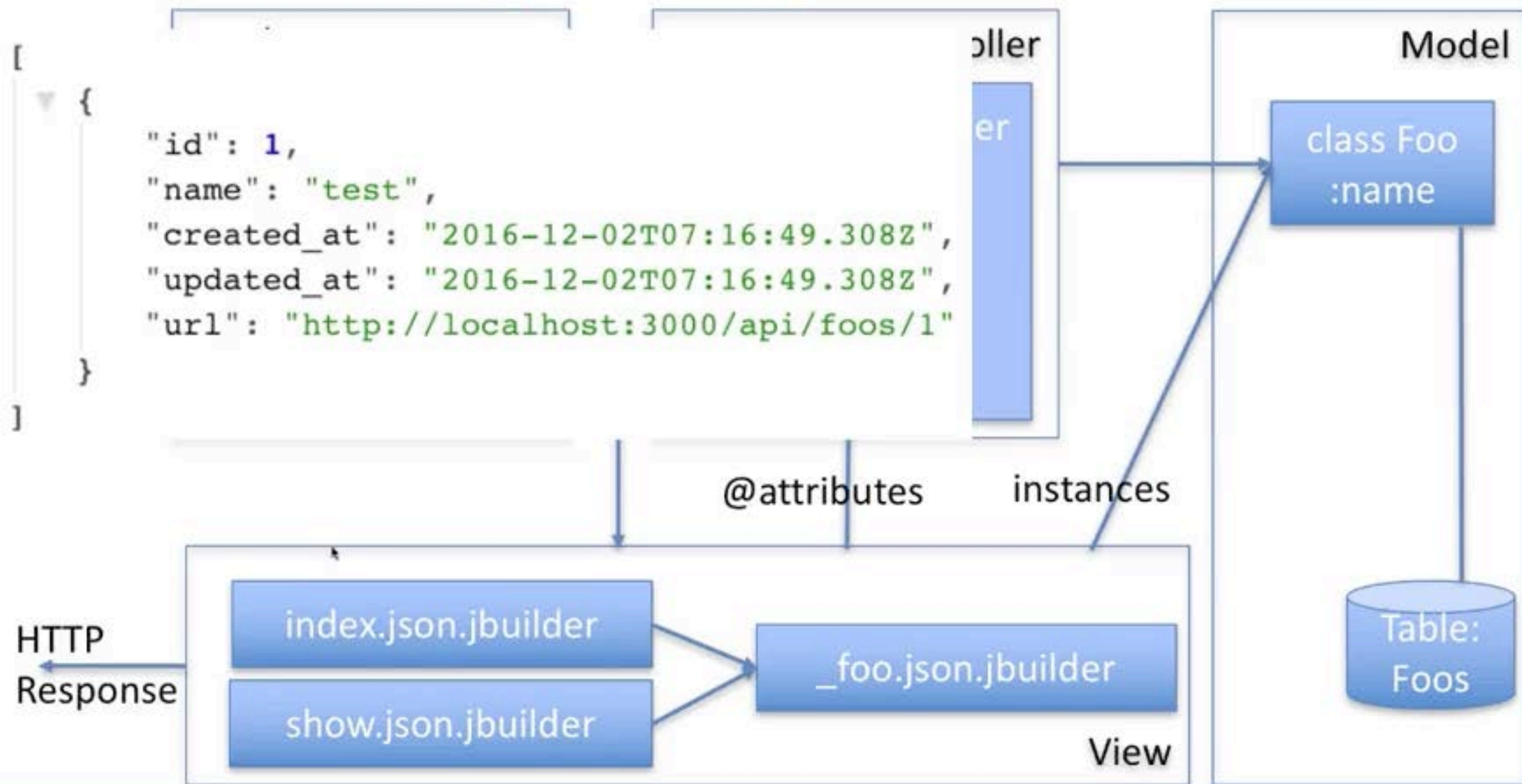
Request/Response Flow



Request/Response Flow



Request/Response Flow



Summary

- ✧ Used scaffold generator to build skeletal resource
- ✧ Updated rails-api controller to delegate to the view
- ✧ Updated the route to scope below /api

What's Next?

- ✧ MongoDB-backed API Resource