

- ❖ **RESTful Routes**
- ❖ **Rails Models, Part 1**
- ❖ **View Layouts**
- ❖ **HTTP response formats**
- ❖ **Rails Resources**

Models

Models are software objects that represent real-world objects.

We use Ruby classes to define models.

Models

Models go in the *models* folder.

app/models

Naming Conventions

app/models/landmark.rb

```
class Landmark  
end
```

Naming Conventions

app/models/orange_tree.rb

```
class OrangeTree  
end
```

Database-Backed Models

Movie

```
class Movie < ActiveRecord::Base
  # ...
end
```

id	title	year
1	Apollo 13	2004
2	Star Wars	1977
3	Lincoln	2012

Migrations

`rails generate migration [name] [cols...]`

`rake db:version`

`rake db:migrate:status`

`rake db:migrate`

`rake db:migrate:reset`

Database-Backed Models

new
save
create

update_attribute(...)
update_attributes(...)

destroy

find_by_id

all
first
last

count

Database-Backed Models

new
save
create

update_attribute(...)
update_attributes(...)

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find_by_id

all
first
last

count

CREATE. READ. UPDATE. DELETE.

Database-Backed Models

`new`
`save`
`create`

`update_attribute(...)`
`update_attributes(...)`

`destroy`

`find_by_id`

`all`
`first`
`last`

`count`

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Demo + Lab

rails console

READ. CREATE. UPDATE. DELETE.

`.all`
`.first`
`.last`
`.find_by_id`

`.new`
`.save`

`.find_by_id`
`.save`

`.destroy`

Challenge

As a visitor, I want to see the list of movies in the database by going to `/movies`

Challenge

As a user, I want to add a movie to the list.

`/movies/new`

Challenge

As a user, I want to edit the details about a movie.

`/movies/edit/6`

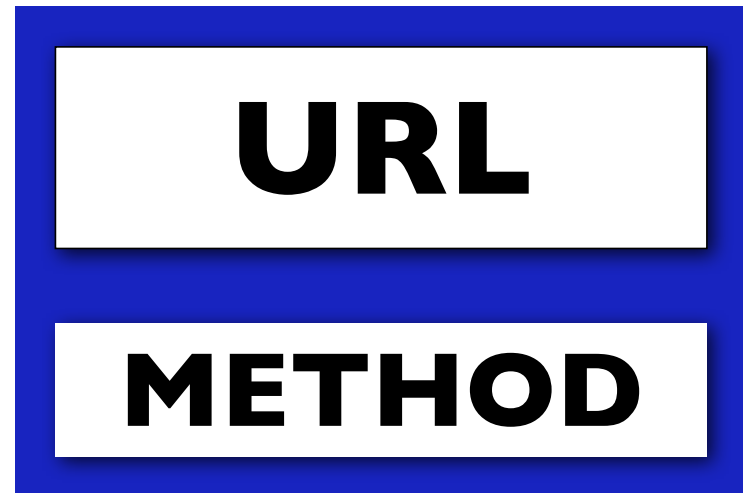
Agile Principles

Single Responsibility

Clear Intention

DRY

RESTful Routes



GET POST PUT DELETE

RESTful Routes

URL	VERB
/directors	GET
/directors	POST
/directors/1	GET
/directors/1	PUT
/directors/1	DELETE
/directors/new	GET
/directors/1/edit	GET

RESTful Routes

URL	VERB	ACTION
/directors	GET	index
/directors	POST	create
/directors/1	GET	show
/directors/1	PUT	update
/directors/1	DELETE	destroy
/directors/new	GET	new
/directors/1/edit	GET	edit

RESTful Routes

URL	VERB	ACTION	NAMED ROUTE EXAMPLE
/directors	GET	index	directors_url
/directors	POST	create	directors_url
/directors/1	GET	show	director_url(@director)
/directors/1	PUT	update	director_url(@director)
/directors/1	DELETE	destroy	director_url(@director)
/directors/new	GET	new	new_director_url
/directors/1/edit	GET	edit	edit_director_url(@director)

Mass Assignment

```
class Movie < ActiveRecord::Base  
  attr_accessible :title, :year  
end
```