

In this lecture, we will discuss...

- ✧ REST
- ✧ How Rails adapted RESTful principles

REST



- ✧ Representational State Transfer
- ✧ Roy T. Fielding's Ph.D. dissertation

"Representational State Transfer is intended to evoke an image of how a well-designed Web application behaves: a network of web pages (a virtual state-machine), where the user progresses through an application by selecting links (state transitions), resulting in the next page (representing the next state of the application) being transferred to the user and rendered for their use."

Check out the following great resource on REST
<http://www.xfront.com/REST-Web-Services.html>

REST = Resources

- ✧ REST is all about resources
- ✧ You should be able to:
 1. **List** available resources
 2. **Show** a specific resource
 3. **Destroy** an existing resource
 4. **Provide a way to create** a new resource
 5. **Create** a new resource
 6. **Provide a way to update** an existing resource
 7. **Update** an existing resource



REST: A Simple Rails Convention

```
class PostsController < ApplicationController

  # GET /posts
  def index

  # GET /posts/1
  def show

  # DELETE /posts/1
  def destroy

  # GET /posts/new
  def new

  # GET /posts/1/edit
  def edit

  # POST /posts
  def create

  # PATCH/PUT /posts/1
  def update

end
```



Named Routes From 'Resources :Posts'

HTTP Method	Named Routes	Parameters	Controller Action	Purpose
GET	posts_path		index	List all
GET	post_path	ID	show	Show one
GET	new_post_path		new	Provide form to input new post
POST	posts_path	Record hash	create	Create new record (in DB)
GET	edit_post_path	ID	edit	Provide form to edit post
PUT/PATCH	post_path	ID and Record hash	update	Update record (in DB)
DELETE	post_path	ID	destroy	Remove record



\$rake routes

- ✧ If you forget the chart on the previous page, you can always just run **\$rake routes**

```
~/my_blog$ rake routes
```

Prefix	Verb	URI Pattern	Controller#Action
posts	GET	/posts(.:format)	posts#index
	POST	/posts(.:format)	posts#create
new_post	GET	/posts/new(.:format)	posts#new
edit_post	GET	/posts/:id/edit(.:format)	posts#edit
post	GET	/posts/:id(.:format)	posts#show
	PATCH	/posts/:id(.:format)	posts#update
	PUT	/posts/:id(.:format)	posts#update
	DELETE	/posts/:id(.:format)	posts#destroy

Named routes column

Summary

- ✧ Think of your application in terms of resources
- ✧ Think of the 7 RESTful actions that need to be done with those resources

What's Next?

- ✧ Restful Actions: index

