Resources

What are resources?

What are resources?

Resource routing is a way to define all of the routes that we've just created in a much easier to read and short syntax.

Why resources?

Resource routing was created because the routes and actions we've just built are very common.

Why resources?

So common in fact, that Rails has built their tooling to support these conventions by default.

IRON
HACK

How to

How To

Take a look at all of the routes that we've manually built so far.

IRON HACK

```ruby
get '/no_projects_found', to: "projects#notfound"
get '/projects', to: 'projects#index'
get '/projects/:id', to: 'projects#show'
get '/projects/new', to: 'projects#new'
post '/projects', to: 'projects#create'

get '/projects/:project_id/time_entries', to: 'time_entries#index'
get '/projects/:project_id/time_entries/new', to: 'time_entries#new'
post '/projects/:project_id/time_entries', to: 'time_entries#post', as: :project_time_entries
get '/projects/:project_id/time_entries/:id/edit', to: 'time_entries#edit'
patch '/projects/:project_id/time_entries/:id', to: 'time_entries#update',
     as: :project_time_entry
delete '/projects/:project_id/time_entries/:id', to: 'time_entries#destroy',
     as: :project_time_entry
```

How To

Big applications have a lot of routes, lots and lots of routes.

How To

We only have 2 models, with only the CRUD actions defined, yet we already have had to manually define 11 routes.

How To

Let's shorten that up a bit

How To

```
resources :projects
```

How To

That's it.

How To

Kidding, let's jump into our terminal and run rake routes to see what this creates.

```
$ rake routes

        Prefix  Verb   URI                        Controller#Action

      projects  GET    /projects(.:format)          projects#index

                POST   /projects(.:format)          projects#create

   new_project  GET    /projects/new(.:format)      projects#new

  edit_project  GET    /projects/:id/edit(.:format) projects#edit

       project  GET    /projects/:id(.:format)      projects#show

                PATCH  /projects/:id(.:format)      projects#update

                PUT    /projects/:id(.:format)      projects#update

                DELETE /projects/:id(.:format)      projects#destroy
```

How To

Resources simply creates all of the routes we did, with path helpers included.

How To

One problem, where are the entries?

How To

We have to create those, but those routes depend on the projects as well.

```
get '/projects/:project_id/entries', to: 'time_entries#index'
```

Nested Resources

Nested Resources

/config/routes.rb

```ruby
resources :projects do
  resources :time_entries
end
```

```
          Prefix        Verb    URI Pattern                                    Controller#Action

project_time_entries GET    /projects/:project_id/time_entries(.:format)        time_entries#index

                     POST   /projects/:project_id/time_entries(.:format)        time_entries#create

new_project_time_entry GET  /projects/:project_id/time_entries/new(.:format)    time_entries#new

edit_project_time_entry GET /projects/:project_id/time_entries/:id/edit(.:format) time_entries#edit

project_time_entry GET      /projects/:project_id/time_entries/:id(.:format)    time_entries#show

                   PATCH    /projects/:project_id/time_entries/:id(.:format)    time_entries#update

                   PUT      /projects/:project_id/time_entries/:id(.:format)    time_entries#update

                   DELETE   /projects/:project_id/time_entries/:id(.:format)    time_entries#destroy

              [...]
```

How To

We need to customize our routes though, we don't have an edit / update / destroy for our project, or a show for our entries.

How To

We should only create routes that we actually use, with no extras.

Nested Resources

/config/routes.rb

```ruby
resources :projects, only: [:index, :show, :new, :create] do
  resources :time_entries
end
```

Nested Resources

/config/routes.rb

```ruby
resources :projects, only: [:index, :show, :new, :create] do
  resources :time_entries, except: [:show]
end
```

How To

Run rake routes and check what's there now. Much better.

More Info

More Info

There's dozens of other options and ways to customize your routes. Be sure to check out the glorious <u>Rails Routing Guide</u> for more details.

Resources