

Curso de Ruby on Rails como API

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Aula 1 - Apresentação

Vídeo inicial do curso de Ruby on Rails 6 como API mostrando o que será aprendido e construído.

SITE DO RUBY E RUBY ON RAILS

<https://www.ruby-lang.org/pt/>

<https://rubyonrails.org/>

HISTÓRIA

https://pt.wikipedia.org/wiki/Ruby_on_Rails#:~:text=7%20Liga%C3%A7%C3%B5es%20externas-,Hist%C3%B3ria,pela%20primeira%20vez%20em%202003

<https://www.akitaonrails.com/2019/08/21/akitando-59-a-historia-de-ruby-on-rails-por-que-deu-certo>

SOFTWARE PARA TESTAR API

<https://insomnia.rest/>

O que iremos aprender

- Criar um projeto Ruby on Rails (RoR) servindo como API
- Criar um CRUD de Heroes
- Conhecer os conceitos básicos do RoR como API
- Criar os testes para validar o que foi construído
- Comandos básicos do Git
- Salvar seu código no repositório GitHub
- Fazer CI (integração contínua) antes de fazer o deploy usando CircleCI
- Fazer a implementação em produção usando Heroku

Aula 2 - Instalações

Mostro tudo que será instalado para se desenvolver em Ruby on Rails 6 como API.

Site do Ruby

<https://www.ruby-lang.org/pt/>

Site do Ruby on Rails

<https://rubyonrails.org/>

Site do Git

<https://git-scm.com/>

Site do Node.js

<https://nodejs.org/en/>

Site do Yarn

<https://classic.yarnpkg.com/en/>

Site do Visual Studio Code

<https://code.visualstudio.com/>

Site do DBeaver

<https://dbeaver.io/>

- Ruby: 2.7.2 (<https://www.ruby-lang.org/pt>)
- Rails: 6.1.0 (<https://rubyonrails.org/>)
- SQLite
- Node.js 14.15.3 LTS (<https://nodejs.org>)
- Yarn: 1.22.5 (<https://classic.yarnpkg.com/en/>)
- Git: 2.29.2 (<https://git-scm.com/>)
- IDE: **VSCode** (<https://code.visualstudio.com/>), Sublime, Atom, RubyMine, etc.
- DBeaver (<https://dbeaver.io/>) – ferramenta para banco de dados

Aula 2.1 - Instalações no Windows

Mostro tudo que deverá ser instalado para se desenvolver em Ruby on Rails no Windows.

Blog para servir de apoio:

<https://medium.com/@peimelo/instala%C3%A7%C3%A3o-do-ruby-on-rails-6-no-windows-10-38292f8979e4>

Vídeo para servir de apoio, esse é com versões mais antigas:

https://www.youtube.com/watch?v=0VOCKs_T6Sw&t=0s

Site do Ruby

<https://www.ruby-lang.org/pt/>

Site do Ruby on Rails

<https://rubyonrails.org/>

Site do Git

<https://git-scm.com/>

Site do Node.js

<https://nodejs.org/en/>

Site do Yarn

<https://classic.yarnpkg.com/en/>

Site do SQLite3:

<https://rubygems.org/gems/sqlite3>

<https://rubyinstaller.org/downloads/>

- Baixar e instalar a versão Ruby+Devkit 2.7.2-1 (X64). Depois de instalar, reinicie o computador.

- Instale o node.js

- Instale o yarn

`npm install --global yarn`

```
C:\laragon\www
λ npm install --global yarn
> yarn@1.22.10 preinstall C:\laragon\bin\nodejs\node-v12\node_modules\yarn
> :; (node ./preinstall.js > /dev/null 2>&1 || true)

C:\laragon\bin\nodejs\node-v12\yarn -> C:\laragon\bin\nodejs\node-v12\node_modules\yarn\bin\yarn.js
C:\laragon\bin\nodejs\node-v12\yarncfg -> C:\laragon\bin\nodejs\node-v12\node_modules\yarn\bin\yarn.js
+ yarn@1.22.10
added 1 package in 4.795s
```

Verificando as instalações realizadas

```
C:\laragon\www
λ ruby -v
ruby 2.7.2p137 (2020-10-01 revision 5445e04352) [x64-mingw32]
```

```
C:\laragon\www
λ yarn --version
1.22.10
```

```
C:\laragon\www
λ node -v
v12.5.0
```

```
C:\laragon\www
λ git --version
git version 2.19.2.windows.1
```

Configurando o GIT

```
git config --global user.name "Roberto Pinheiro"
git config --global user.email betopinheiro1005@yahoo.com.br
```

Instalação do RAILS

```
gem install rails
```

```
rails -v
```

```
C:\laragon\www
λ rails -v
Rails 6.1.3
```

Instalação do SQLite3

```
gem install sqlite3 -v '1.4.2' --source 'https://rubygems.org/'
```

```
C:\laragon\www
λ gem install sqlite3 -v '1.4.2' --source 'https://rubygems.org/'
Fetching sqlite3-1.4.2.gem
Temporarily enhancing PATH for MSYS/MINGW...
Installing required msys2 packages: mingw-w64-x86_64-sqlite3
Building native extensions. This could take a while...
Successfully installed sqlite3-1.4.2
Parsing documentation for sqlite3-1.4.2
Installing ri documentation for sqlite3-1.4.2
Done installing documentation for sqlite3 after 6 seconds
1 gem installed
```

Criando um projeto para testes

```
cd\sites
```

```
rails new tour-of-heroes
```

```
cd tour-of-heroes
```

```
rails g scaffold Hero name:string
```

```
C:\Sites\tour-of-heroes (master)
λ rails g scaffold Hero name:string
      invoke  active_record
      create   db/migrate/20210319023448_create_heros.rb
      create   app/models/hero.rb
      invoke  test_unit
      create   test/models/hero_test.rb
      create   test/fixtures/heros.yml
      invoke  resource_route
      route    resources :heros
      invoke  scaffold_controller
      create   app/controllers/heros_controller.rb
      invoke  erb
      create   app/views/heros
      create   app/views/heros/index.html.erb
      create   app/views/heros/edit.html.erb
      create   app/views/heros/show.html.erb
      create   app/views/heros/_new.html.erb
      create   app/views/heros/_form.html.erb
      invoke  resource_route
      invoke  test_unit
      create   test/controllers/heros_controller_test.rb
      create   test/system/heros_test.rb
      invoke  helper
      create   app/helpers/heros_helper.rb
      invoke  test_unit
      invoke  jbuilder
      create   app/views/heros/index.json.jbuilder
      create   app/views/heros/show.json.jbuilder
      create   app/views/heros/_hero.json.jbuilder
      invoke  assets
      invoke  scss
      create   app/assets/stylesheets/heros.scss
      invoke  scss
      create   app/assets/stylesheets/scaffolds.scss
```

```
rails db:create
```

```
C:\Sites\tour-of-heroes (master)
λ rails db:create
Created database 'db/development.sqlite3'
Created database 'db/test.sqlite3'
```

```
rails db:migrate
```

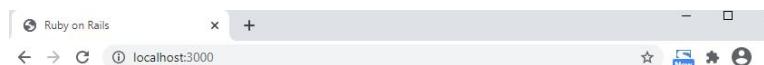
```
C:\Sites\tour-of-heroes (master)
λ rails db:migrate
== 20210319023448 CreateHeros: migrating =====
-- create_table(:heros)
-> 0.0112s
== 20210319023448 CreateHeros: migrated (0.0123s) =====
```

Levantando o servidor

```
rails s
```

```
C:\Sites\tour-of-heroes (master)
λ rails s
=> Booting Puma
=> Rails 6.1.3 application starting in development
=> Run `bin/rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR1 not implemented, signal based restart unavailable!
*** SIGHUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Puma version: 5.2.2 (ruby 2.7.2-p137) ("Fettisdagsbulle")
* Min threads: 5
* Max threads: 5
* Environment: development
* PID: 12004
* Listening on http://[::1]:3000
* Listening on http://127.0.0.1:3000
Use Ctrl-C to stop
|
```

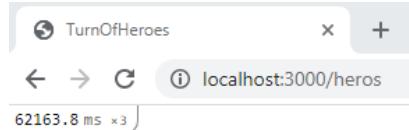
localhost:3000



Yay! You're on Rails!



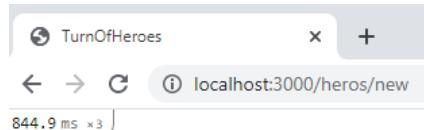
localhost:3000/heros



Heros

Name

[New Hero](#)

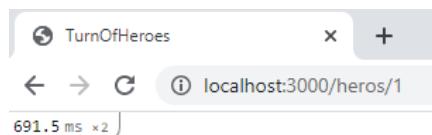


New Hero

Name

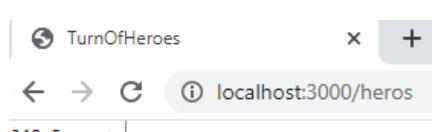
[Create Hero](#)

[Back](#)



Name: Thor

[Edit](#) | [Back](#)



Heros

Name

Thor [Show](#) [Edit](#) [Destroy](#)

[New Hero](#)

Aula 3 - Git e GitHub

Nesse vídeo eu mostro como usar o Git e salvar o código-fonte no GitHub via SSH.

Site do Git

<https://git-scm.com/>

Site do livro do Git em português

<https://git-scm.com/book/pt-br/v2>

Site do GitHub

<https://github.com/>

Outras opções ao GitHub

<https://gitlab.com/>

<https://bitbucket.org/>

Gerar uma nova chave SSH

<https://docs.github.com/pt/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>

Adicionar chave SSH no Github

<https://docs.github.com/pt/github/authenticating-to-github/adding-a-new-ssh-key-to-your-github-account>

Site do Markdown

<https://www.markdownguide.org/basic-syntax/>

Site do Notion

<https://www.notion.so/>

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

O Git é um repositório de códigos.

Referência dos comandos do Git

<https://git-scm.com/book/pt-br/v2>

BitBucket:

<https://bitbucket.org/>

Criando um novo repositório

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)

Owner * Repository name *

 betopinheiro1005 / tour_of_heroes ✓

Great repository names are short and memorable. Need inspiration? How about [glowing-octo-journey?](#)

Description (optional)

Projeto de testes tour_of_heroes (Ruby on Rails como API)

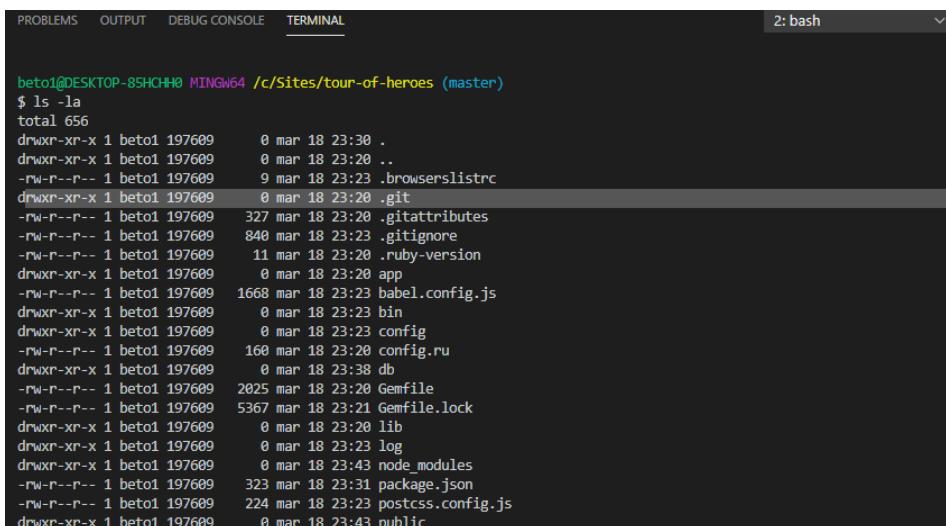
 Public
Anyone on the internet can see this repository. You choose who can commit.

 Private
You choose who can see and commit to this repository.

Há duas formas de fazer a conexão:

1. HTTPS: A cada push é necessário entrar com usuário e senha.
2. SSH: Criando e usando chave pública e privada não é necessário entrar com usuário e senha.

Usando o Visual Studio Code



```
bet01@DESKTOP-8SHCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ ls -la
total 656
drwxr-xr-x 1 bet01 197609 0 mar 18 23:30 .
drwxr-xr-x 1 bet01 197609 0 mar 18 23:20 ..
-rw-r--r-- 1 bet01 197609 9 mar 18 23:23 .browserslistrc
drwxr-xr-x 1 bet01 197609 0 mar 18 23:20 .git
-rw-r--r-- 1 bet01 197609 327 mar 18 23:20 .gitattributes
-rw-r--r-- 1 bet01 197609 840 mar 18 23:23 .gitignore
-rw-r--r-- 1 bet01 197609 11 mar 18 23:20 .ruby-version
drwxr-xr-x 1 bet01 197609 0 mar 18 23:20 app
-rw-r--r-- 1 bet01 197609 1668 mar 18 23:23 babel.config.js
drwxr-xr-x 1 bet01 197609 0 mar 18 23:23 bin
drwxr-xr-x 1 bet01 197609 0 mar 18 23:23 config
-rw-r--r-- 1 bet01 197609 160 mar 18 23:28 config.ru
drwxr-xr-x 1 bet01 197609 0 mar 18 23:38 db
-rw-r--r-- 1 bet01 197609 2025 mar 18 23:28 Gemfile
-rw-r--r-- 1 bet01 197609 5367 mar 18 23:21 Gemfile.lock
drwxr-xr-x 1 bet01 197609 0 mar 18 23:20 lib
drwxr-xr-x 1 bet01 197609 0 mar 18 23:23 log
drwxr-xr-x 1 bet01 197609 0 mar 18 23:43 node_modules
-rw-r--r-- 1 bet01 197609 323 mar 18 23:31 package.json
-rw-r--r-- 1 bet01 197609 224 mar 18 23:23 postcss.config.js
drwxr-xr-x 1 bet01 197609 0 mar 18 23:43 public
```

Dentro da pasta oculta “.git” é salvo todo o controle de versão (toda a estrutura do git para tratar o projeto fica nesta pasta).

[git status](#)

```
bet01@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .browserslistrc
    .gitattributes
    .gitignore
    .ruby-version
    Gemfile
    Gemfile.lock
    README.md
    Rakefile
    app/
    babel.config.js
    bin/
    config.ru
    config/
    db/
    lib/
    log/
    package.json
```

git add .

```
bet01@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git add .
warning: LF will be replaced by CRLF in .browserslistrc.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in .gitattributes.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in .gitignore.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in .ruby-version.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in Gemfile.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in Gemfile.lock.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in README.md.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in Rakefile.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in app/assets/config/manifest.js.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in app/assets/stylesheets/application.css.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in app/assets/stylesheets/heros.scss.
```

git status

```
bet01@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
    new file:  .browserslistrc
    new file:  .gitattributes
    new file:  .gitignore
    new file:  .ruby-version
    new file:  Gemfile
    new file:  Gemfile.lock
    new file:  README.md
    new file:  Rakefile
    new file:  app/assets/config/manifest.js
    new file:  app/assets/images/.keep
    new file:  app/assets/stylesheets/application.css
    new file:  app/assets/stylesheets/heros.scss
    new file:  app/assets/stylesheets/scaffolds.scss
    new file:  app/channels/application_cable/channel.rb
    new file:  app/channels/application_cable/connection.rb
    new file:  app/controllers/application_controller.rb
```

Agora todos os arquivos foram colocados na área de stage (que permitirá fazer um commit).

```
git commit -m "Adiciona os arquivos iniciais do projeto"
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git commit -m "Adiciona os arquivos iniciais do projeto"
[master (root-commit) 3b94a4e] Adiciona os arquivos iniciais do projeto
 110 files changed, 9697 insertions(+)
 create mode 100644 .browserslistrc
 create mode 100644 .gitattributes
 create mode 100644 .gitignore
 create mode 100644 .ruby-version
 create mode 100644 Gemfile
 create mode 100644 Gemfile.lock
 create mode 100644 README.md
 create mode 100644 Rakefile
 create mode 100644 app/assets/config/manifest.js
 create mode 100644 app/assets/images/.keep
 create mode 100644 app/assets/stylesheets/application.css
 create mode 100644 app/assets/stylesheets/heros.scss
 create mode 100644 app/assets/stylesheets/scaffolds.scss
 create mode 100644 app/channels/application_cable/channel.rb
 create mode 100644 app/channels/application_cable/connection.rb
 create mode 100644 app/controllers/application_controller.rb
 create mode 100644 app/controllers/concerns/.keep
 create mode 100644 app/controllers/heros_controller.rb
```

```
git log
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git log
commit 3b94a4e9d4d14f5e3a3d229d0f22d44f2c03143d (HEAD -> master)
Author: betopinheiro1005 <betopinheiro1005@yahoo.com.br>
Date:   Fri Mar 19 01:04:12 2021 -0300

    Adiciona os arquivos iniciais do projeto
```

Para sair pressione a tecla <q>.

Adicionando o repositório remoto no repositório local

Usando HTTPS

Quick setup — if you've done this kind of thing before

[Set up in Desktop](#) or [HTTPS](#) [SSH](#) https://github.com/betopinheiro1005/tour_of_heroes.git

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# tour_of_heroes" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/betopinheiro1005/tour_of_heroes.git
git push -u origin main
```

```
git remote add origin https://github.com/betopinheiro1005/tour_of_heroes.git
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git remote add origin https://github.com/betopinheiro1005/tour_of_heroes.git
```

```
git remote -v
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git remote -v
origin  https://github.com/betopinheiro1005/tour_of_heroes.git (fetch)
origin  https://github.com/betopinheiro1005/tour_of_heroes.git (push)
```

Criou um nome chamado origin que aponta para o repositório do git

Quando se cria um repositório git, o padrão é que o branch que você está é o branch master (branch principal).

Para saber o branch em que se está:

```
git branch
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git branch
* master
```

Fazendo o push no GitHub

No primeiro push (apenas):

```
git push -u origin master
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git push -u origin master
Enumerating objects: 128, done.
Counting objects: 100% (128/128), done.
Delta compression using up to 2 threads.
Compressing objects: 100% (111/111), done.
Writing objects: 100% (128/128), 156.05 KiB | 750.00 KiB/s, done.
Total 128 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), done.
To https://github.com/betopinheiro1005/tour_of_heroes.git
 * [new branch]      master -> master
Branch 'master' set up to track remote branch 'master' from 'origin'.
```

Agora o branch master está vinculado ao branch local.

Atualizando a página no GitHub:

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

master 1 branch 0 tags Go to file Add file Code

betopinheiro1005 Adiciona os arquivos iniciais do projeto 3b94a4e 31 minutes ago 1 commit

app	Adiciona os arquivos iniciais do projeto	31 minutes ago
bin	Adiciona os arquivos iniciais do projeto	31 minutes ago
config	Adiciona os arquivos iniciais do projeto	31 minutes ago
db	Adiciona os arquivos iniciais do projeto	31 minutes ago
lib	Adiciona os arquivos iniciais do projeto	31 minutes ago
log	Adiciona os arquivos iniciais do projeto	31 minutes ago
public	Adiciona os arquivos iniciais do projeto	31 minutes ago
storage	Adiciona os arquivos iniciais do projeto	31 minutes ago
test	Adiciona os arquivos iniciais do projeto	31 minutes ago

Usando SSH

Vamos criar uma chave local (um par de chaves: uma pública e outra privada).

A chave pública se coloca no GitHub e a chave privada fica no computador.

Gerar uma nova chave SSH

<https://docs.github.com/pt/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent>

docs.github.com/pt/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent

Gerar uma nova chave SSH e adicioná-la ao ssh-agent

Depois de verificar a existência de chaves SSH, é possível gerar uma nova chave SSH para autenticação e adicioná-la ao ssh-agent.

Mac Windows Linux

Se você ainda não tem uma chave SSH, você deve [gerar uma nova chave SSH](#). Caso não tenha certeza de que já tem uma chave SSH, procure por [chaves existentes](#).

Caso não queira reinserir sua frase secreta cada vez que usa a chave SSH, é possível [adicionar sua chave ao SSH agent](#), que poderá gerenciar suas chaves SSH e lembrar sua frase secreta.

Gerar uma nova chave SSH

- 1 Abra Git Bash.
- 2 Cole o texto abaixo, substituindo o endereço de e-mail pelo seu GitHub.

```
$ ssh-keygen -t ed25519 -C "your_email@example.com"
```

`ssh-keygen -t ed25519 -C "betopinheiro1005@yahoo.com.br"`

```

$ ssh-keygen -t ed25519 -C "betopinheiro1005@yahoo.com.br"
Generating public/private ed25519 key pair.
Enter file in which to save the key (/c/Users/beto1/.ssh/id_ed25519):
Created directory '/c/Users/beto1/.ssh'.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /c/Users/beto1/.ssh/id_ed25519
Your public key has been saved in /c/Users/beto1/.ssh/id_ed25519.pub
The key fingerprint is:
SHA256:vfHVsX0+YA3G/TYs+LSWqwTx12ihY5JkqpBKCH0Vnu8 betopinheiro1005@yahoo.com.br
The key's randomart image is:
+--[ED25519 256]--+
|   o.          |
| . o .        |
|... o + ...   |
|o .. .+.+.++|
|.. o .S+=o++..|
|... . .+=+=+o |
|. . E .. =o.  |
|       *oo.    |
|       .oo=+o   |
+---[SHA256]----+

```

Nome	Data de modificação	Tipo	Tamanho
.bundle	18/03/2021 02:23	Pasta de arquivos	
.cache	15/01/2021 19:24	Pasta de arquivos	
.config	03/01/2021 17:07	Pasta de arquivos	
.gem	18/03/2021 01:55	Pasta de arquivos	
.ssh	19/03/2021 01:50	Pasta de arquivos	
.vscode	01/01/2021 07:34	Pasta de arquivos	
AppData	07/01/2021 23:45	Pasta de arquivos	
Área de Trabalho	19/03/2021 01:51	Pasta de arquivos	

Nome	Data de modificação	Tipo	Tamanho
id_ed25519	19/03/2021 01:50	Arquivo	1 KB
id_ed25519.pub	19/03/2021 01:50	Arquivo PUB	1 KB

Verificar se há chaves SSH

ls -al ~/.ssh

```

beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ ls -al ~/.ssh
total 18
drwxr-xr-x 1 beto1 197609 0 mar 19 01:50 .
drwxr-xr-x 1 beto1 197609 0 mar 19 01:50 ..
-rw-r--r-- 1 beto1 197609 419 mar 19 01:50 id_ed25519
-rw-r--r-- 1 beto1 197609 111 mar 19 01:50 id_ed25519.pub

```

Adicionar chave SSH no Github

<https://docs.github.com/pt/github/authenticating-to-github/adding-a-new-ssh-key-to-your-github-account>

Para copiar para a área de transferência do Windows o conteúdo do arquivo id_ed25519.pub:

clip < ~/.ssh/id_ed25519.pub

No menu do usuário do GitHub, clique em Settings e no menu que será aberto do lado esquerdo da tela clique em SSH and GPG Keys:

Clique no botão "New SSH Key":

Entre com um título e no campo Key cole o conteúdo da área de transferência.

SSH keys / Add new

Title

Chave do meu notebook

Key

Begins with 'ssh-rsa', 'ssh-ed25519', 'ecdsa-sha2-nistp256', 'ecdsa-sha2-nistp384', or 'ecdsa-sha2-nistp521'

Add SSH key

Clique no botão "Add SSH key".

SSH keys

New SSH key

This is a list of SSH keys associated with your account. Remove any keys that you do not recognize.



Chave do meu notebook

SHA256:vfHvsx0+YA3G/TYs+LSIqWTx12ihY5JkqpBKCH0Vnu8

SSH

Added on 19 Mar 2021

Never used — Read/write

Delete

Check out our guide to [generating SSH keys](#) or troubleshoot common SSH Problems.

GPG keys

New GPG key

There are no GPG keys associated with your account.

Learn how to [generate a GPG key](#) and add it to your account.

git remote set-url origin git@github.com:betopinheiro1005/tour_of_heroes.git

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git remote set-url origin git@github.com:betopinheiro1005/tour_of_heroes.git
```

git remote -v

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git remote -v
origin  git@github.com:betopinheiro1005/tour_of_heroes.git (fetch)
origin  git@github.com:betopinheiro1005/tour_of_heroes.git (push)
```

Alterando o arquivo README.md

Tour of Heroes

Projeto Ruby on Rails 6.1.

```
git status
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
      modified: README.md

no changes added to commit (use "git add" and/or "git commit -a")
```

```
git commit -am "Atualiza a documentação do projeto"
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git commit -am "Atualiza a documentação do projeto"
warning: LF will be replaced by CRLF in README.md.
The file will have its original line endings in your working directory
[master fb5d9f9] Atualiza a documentação do projeto
 1 file changed, 2 insertions(+), 23 deletions(-)
```

```
git push
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git push
Warning: Permanently added the RSA host key for IP address '140.82.112.3' to the list of known hosts.
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 2 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 331 bytes | 110.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:betopinheiro1005/tour_of_heroes.git
 fb5d9f9..09513f6  master -> master
```

The screenshot shows a GitHub repository page for 'tour_of_heroes'. At the top, there's a dropdown menu showing 'master' and a link to 'README.md'. Below that is a card for a commit from user 'betopinheiro1005' with the message 'Atualiza a documentação do projeto'. It shows '1 contributor'. Further down, there's a summary of the file 'README.md': '3 lines (2 sloc) | 44 Bytes'. The main content area features a large heading 'Tour of Heroes' and a brief description: 'Projeto Ruby on Rails 6.1.'

 master ▾

-o Commits on Mar 19, 2021

Atualiza a documentação do projeto

 betopinheiro1005 committed 4 minutes ago

Atualiza a documentação do projeto

 betopinheiro1005 committed 13 minutes ago

Adiciona os arquivos iniciais do projeto

 betopinheiro1005 committed 2 hours ago

Aula 4 – Deploy no Heroku

Nesse vídeo eu mostro como fazer o deploy de uma aplicação Ruby on Rails no Heroku.

Site do Heroku

<https://www.heroku.com/>

Documentação do Heroku para deploy de RoR 6

<https://devcenter.heroku.com/articles/getting-started-with-rails6>

Documentação do Heroku sobre deploy via linha de comando (CLI)

<https://devcenter.heroku.com/articles/heroku-cli>

Site do Bundle, usado para adicionar gem

<https://bundler.io/man/bundle-add.1.html>

Guia do site RoR para configurar a rota inicial

<https://guides.rubyonrails.org/routing.html#using-root>

Guia do site RoR para configurar autenticação básica

https://guides.rubyonrails.org/getting_started.html#basic-authentication

Guia do site RoR sobre Credentials

<https://guides.rubyonrails.org/security.html#environmental-security>

Meu repositório Tour of Heroes no GitHub

https://github.com/peimelo/tour_of_heroes

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

Deploy:

1. Linha de comando;
2. GitHub;
3. Container Docker

Criando uma aplicação

The screenshot shows the Heroku dashboard at dashboard.heroku.com/new-app. A purple bar at the top says "Create New App". Below it, there's a form for entering the app name "tour-of-heroes-2", which is highlighted as available. The region is set to "United States". There's a "Create app" button at the bottom.

The screenshot shows the Heroku dashboard at dashboard.heroku.com/apps/tour-of-heroes-2/deploy/heroku-git. The app "tour-of-heroes-2" is selected. The "Deploy" tab is active. It shows sections for adding the app to a pipeline and choosing a deployment method. Deployment methods listed include "Heroku Git", "GitHub", "Container Registry", and "Use Heroku CLI".

Deploy via linha de comando

Faça o download do Heroku CLI.

Install the Heroku CLI

Download and install the [Heroku CLI](#).

If you haven't already, log in to your Heroku account and follow the prompts to create a new SSH public key.

```
$ heroku login
```

Create a new Git repository

Initialize a git repository in a new or existing directory

```
$ cd my-project/
$ git init
$ heroku git:remote -a tour-of-heroes-2
```

Deploy your application

Commit your code to the repository and deploy it to Heroku using Git.

```
$ git add .
$ git commit -am "make it better"
$ git push heroku master
```

[heroku login](#)

[heroku git:remote -a tour-of-heroes-2](#)

```
bet01@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ heroku git:remote -a tour-of-heroes-2
» Warning: heroku update available from 7.50.0 to 7.51.0.
set git remote heroku to https://git.heroku.com/tour-of-heroes-2.git
```

[git remote -v](#)

```
bet01@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git remote -v
heroku  https://git.heroku.com/tour-of-heroes-2.git (fetch)
heroku  https://git.heroku.com/tour-of-heroes-2.git (push)
origin  git@github.com:betopinheiro1005/tour_of_heroes.git (fetch)
origin  git@github.com:betopinheiro1005/tour_of_heroes.git (push)
```

Configurando

Em desenvolvimento (development) vamos usar o sqlite3

Em produção (production) vamos usar o postgresql

Adicionando a gem do postgresql (pg)

[bundle add pg -g "production"](#)

```
C:\Sites\tour-of-heroes (master)
\ bundle add pg -g "production"
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Using rake 13.0.3
Using concurrent-ruby 1.1.8
Using i18n 1.8.9
Using minitest 5.14.4
Using tzinfo 2.0.4
Using zeitwerk 2.4.2
Using activesupport 6.1.3
Using builder 3.2.4
Using erubi 1.10.0
Using rack 1.5.2
Using nokogiri 1.11.2 (x64-mingw32)
Using rails-dom-testing 2.0.3
Using crass 1.0.6
Using loofah 2.9.0
Using rails-html-sanitizer 1.3.0
Using actionview 6.1.3
Using rack 2.2.3
Using rack-test 1.1.0
Using actionpack 6.1.3
Using nio4r 2.5.7
Using websocket-extensions 0.1.5
Using websocket-driver 0.7.3
Using actioncable 6.1.3
Using globalid 0.4.2
Using activejob 6.1.3
Using activemodel 6.1.3
Using activerecord 6.1.3
Using mimemagic 0.3.5
Using marcel 0.3.3
```

Gemfile

```
source 'https://rubygems.org'
git_source(:github) { |repo| "https://github.com/#{repo}.git" }

ruby '2.7.2'

gem 'rails', '~> 6.1.3'
gem 'puma', '~> 5.0'
gem 'sass-rails', '>= 6'
gem 'webpacker', '~> 5.0'
gem 'turbolinks', '~> 5'
gem 'jbuilder', '~> 2.7'
gem 'bootsnap', '>= 1.4.4', require: false

group :development, :test do
  gem 'sqlite3', '~> 1.4'
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]
end

group :development do
  gem 'web-console', '>= 4.1.0'
  gem 'rack-mini-profiler', '~> 2.0'
end

group :test do
  gem 'capybara', '>= 3.26'
  gem 'selenium-webdriver'
  gem 'webdrivers'
end

gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]

gem "pg", "~> 1.2", :group => :production
```

- No diretório raiz, crie um arquivo chamado **Procfile** com o seguinte conteúdo.

Documentação do Heroku

<https://devcenter.heroku.com/articles/getting-started-with-rails6>

Create a Procfile

Change the command used to launch your web process by creating a file called **Procfile** and entering this:

In file **Procfile** Write:

```
web: bundle exec puma -t 5:5 -p ${PORT:-3000} -e ${RACK_ENV:-development}
```

Note: This file must be named **Procfile** exactly.

Procfile

```
release: rails db:migrate  
web: bundle exec puma -t 5:5 -p ${PORT:-3000} -e ${RACK_ENV:-development}
```

git status

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)  
$ git status  
On branch master  
Your branch is up to date with 'origin/master'.  
  
Changes not staged for commit:  
(use "git add <file>..." to update what will be committed)  
(use "git restore <file>..." to discard changes in working directory)  
      modified:   Gemfile  
      modified:   Gemfile.lock  
  
Untracked files:  
(use "git add <file>..." to include in what will be committed)  
      Procfile  
  
no changes added to commit (use "git add" and/or "git commit -a")
```

git add .

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)  
$ git add .  
warning: LF will be replaced by CRLF in Gemfile.  
The file will have its original line endings in your working directory  
warning: LF will be replaced by CRLF in Gemfile.lock.  
The file will have its original line endings in your working directory
```

git commit -m "Configura para deploy no Heroku"

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)  
$ git commit -m "Configura para deploy no Heroku"  
[master ace22c9] Configura para deploy no Heroku  
 3 files changed, 36 insertions(+), 53 deletions(-)  
 rewrite Gemfile (68%)  
 create mode 100644 Procfile
```

Fazendo o deploy

git push heroku master

Deploy via Git

The screenshot shows the Heroku Deploy via Git interface. At the top, there are three connection options: Heroku Git (Use Heroku CLI), GitHub (Connected), and Container Registry (Use Heroku CLI). The GitHub section is highlighted with a green 'Connected' status and a checkmark icon. Below this, a message box indicates a connection to the repository `betopInhelro1005/tour_of_heroes` by user `betopInhelro1005`, with a 'Disconnect...' button. A note below says 'Releases In the [activity feed](#) link to GitHub to view commit diffs'.

The screenshot shows the Heroku Deploy via Git interface. A message box at the top right says 'You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the [Instructions here](#)'. Below this, a section titled 'Enable automatic deploys from GitHub' explains that every push to the specified branch will trigger a deployment. It includes a dropdown menu set to 'master', a checkbox for 'Wait for CI to pass before deploy' (unchecked), and a note about CI services. A large 'Enable Automatic Deploys' button is prominently displayed.

- Clique no botão "Enable Automatic Deploys"

The screenshot shows the Heroku Deploy via Git interface after enabling automatic deploys. A message box at the top right says 'Automatic deploys from `master` are enabled'. Below this, it shows the repository is connected to `betopInhelro1005/tour_of_heroes` by `betopInhelro1005`. A note says 'Releases In the [activity feed](#) link to GitHub to view commit diffs'. Another note says 'Automatically deploys from `master`'.

A message box at the bottom right says 'You can now change your main deploy branch from "master" to "main" for both manual and automatic deploys, please follow the [Instructions here](#)'. Below this, a note says 'Automatic deploys from `master` are enabled' with a checkmark icon. It includes a checkbox for 'Wait for CI to pass before deploy' (unchecked) and a note about CI services. A 'Disable Automatic Deploys' button is visible at the bottom.

Fazendo a página inicial como a listagem dos heróis

config\routes.rb

```
Rails.application.routes.draw do
  root 'heros#index'
  resources :heros
end
```

git status

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master
Your branch is ahead of 'origin/master' by 1 commit.
  (use "git push" to publish your local commits)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   config/routes.rb

no changes added to commit (use "git add" and/or "git commit -a")
```

git commit -am "Configura página inicial"

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git commit -am "Configura página inicial"
warning: LF will be replaced by CRLF in config/routes.rb.
The file will have its original line endings in your working directory
[master 442b0c0] Configura página inicial
 1 file changed, 1 insertion(+), 1 deletion(-)
```

git push

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git push
Warning: Permanently added the RSA host key for IP address '140.82.114.3' to the list of known hosts.
Enumerating objects: 14, done.
Counting objects: 100% (14/14), done.
Delta compression using up to 2 threads
Compressing objects: 100% (9/9), done.
Writing objects: 100% (9/9), 1.07 KiB | 47.00 KiB/s, done.
Total 9 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 4 local objects.
To github.com:betopinheiro1005/tour_of_heroes.git
  09513f6..442b0c0  master -> master
```



Heros

Name

[New Hero](#)



Heros

Name

Homem de Ferro [Show](#) [Edit](#) [Destroy](#)
Thor [Show](#) [Edit](#) [Destroy](#)

[New Hero](#)

Rodando em modo local

rails s

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ rails s
=> Booting Puma
=> Rails 6.1.3 application starting in development
=> Run `bin/rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR1 not implemented, signal based restart unavailable!
*** SIGHUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Puma version: 5.2.2 (ruby 2.7.2-p137) ("Fettislagsbulle")
* Min threads: 5
* Max threads: 5
* Environment: development
* PID: 11540
* Listening on http://[::1]:3000
* Listening on http://127.0.0.1:3000
Use Ctrl-C to stop
```

Bloqueando certas ações

Autenticação

https://guides.rubyonrails.org/getting_started.html#basic-authentication

10.1 Basic Authentication

If you were to publish your blog online, anyone would be able to add, edit and delete articles or delete comments.

Rails provides an HTTP authentication system that will work nicely in this situation.

In the `ArticlesController` we need to have a way to block access to the various actions if the person is not authenticated. Here we can use the Rails `http_basic_authenticate_with` method, which allows access to the requested action if that method allows it.

To use the authentication system, we specify it at the top of our `ArticlesController` in `app/controllers/articles_controller.rb`. In our case, we want the user to be authenticated on every action except `index` and `show`, so we write that:

```
class ArticlesController < ApplicationController

  http_basic_authenticate_with name: "dhh", password: "secret", except:
  [:index, :show]

  def index
    @articles = Article.all
  end

  # snippet for brevity
```

Copy

app\controllers\heros_controller.rb

```
class HerosController < ApplicationController
  http_basic_authenticate_with name: "paulo", password: "melo", except: [:index, :show]
  before_action :set_hero, only: [:show, :edit, :update, :destroy]

  # GET /heros or /heros.json
  def index
    @heros = Hero.all
  end

  # GET /heros/1 or /heros/1.json
  def show
  end

  # GET /heros/new
  def new
    @hero = Hero.new
  end

  # GET /heros/1/edit
  def edit
  end

  # POST /heros or /heros.json
  def create
    @hero = Hero.new(hero_params)

    respond_to do |format|
      if @hero.save
        format.html { redirect_to @hero, notice: "Hero was successfully created." }
        format.json { render :show, status: :created, location: @hero }
      else
        format.html { render :new, status: :unprocessable_entity }
        format.json { render json: @hero.errors, status: :unprocessable_entity }
      end
    end
  end

  # PATCH/PUT /heros/1 or /heros/1.json
  def update
    respond_to do |format|
      if @hero.update(hero_params)
        format.html { redirect_to @hero, notice: "Hero was successfully updated." }
        format.json { render :show, status: :ok, location: @hero }
      else
        format.html { render :edit, status: :unprocessable_entity }
        format.json { render json: @hero.errors, status: :unprocessable_entity }
      end
    end
  end

  # DELETE /heros/1 or /heros/1.json
  def destroy
    @hero.destroy
    respond_to do |format|
      format.html { redirect_to heros_url, notice: "Hero was successfully destroyed." }
      format.json { head :no_content }
    end
  end
end
```

```

end
end

private
# Use callbacks to share common setup or constraints between actions.
def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.
def hero_params
  params.require(:hero).permit(:name)
end
end

```

Descriptografando o arquivo de credenciais

EDITOR="code --wait" bin/rails credentials:edit

config\credentials.yml.enc

```

# aws:
# access_key_id: 123
# secret_access_key: 345

# Used as the base secret for all MessageVerifiers in Rails, including the one protecting cookies.
secret_key_base:
fc35f8f4a8cfb2a725b1a5da6e326badfe58dbe32ff51b9e4d7d568149e3b0837d4ebdf3bb1d7f62e124cb0e5b
dcb1e9681a05fb772a759e38cc7906c18f9a10

authenticate:
  name: peimelo
  password: *****

```

- Salve o arquivo

```

beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ EDITOR="code --wait" bin/rails credentials:edit
File encrypted and saved.

```

`http_basic_authenticate_with name: Rails.application.credentials.authenticate[:name],
 password: Rails.application.credentials.authenticate[:password],
 except: [:index, :show]`

app\controllers\heros_controller.rb

```
class HerosController < ApplicationController
  http_basic_authenticate_with name: Rails.application.credentials.authenticate[:name],
    password: Rails.application.credentials.authenticate[:password],
    except: [:index, :show]
  before_action :set_hero, only: [:index, :show, :edit, :update, :destroy]

  # GET /heros or /heros.json
  def index
    @heros = Hero.all
  end

  # GET /heros/1 or /heros/1.json
  def show
  end

  # GET /heros/new
  def new
    @hero = Hero.new
  end

  # GET /heros/1/edit
  def edit
  end

  # POST /heros or /heros.json
  def create
    @hero = Hero.new(hero_params)

    respond_to do |format|
      if @hero.save
        format.html { redirect_to @hero, notice: "Hero was successfully created." }
        format.json { render :show, status: :created, location: @hero }
      else
        format.html { render :new, status: :unprocessable_entity }
        format.json { render json: @hero.errors, status: :unprocessable_entity }
      end
    end
  end

  # PATCH/PUT /heros/1 or /heros/1.json
  def update
    respond_to do |format|
      if @hero.update(hero_params)
        format.html { redirect_to @hero, notice: "Hero was successfully updated." }
        format.json { render :show, status: :ok, location: @hero }
      else
        format.html { render :edit, status: :unprocessable_entity }
        format.json { render json: @hero.errors, status: :unprocessable_entity }
      end
    end
  end

  # DELETE /heros/1 or /heros/1.json
  def destroy
    @hero.destroy
    respond_to do |format|
    end
  end
end
```

```

format.html { redirect_to heros_url, notice: "Hero was successfully destroyed." }
format.json { head :no_content }
end
end

private
# Use callbacks to share common setup or constraints between actions.
def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.
def hero_params
  params.require(:hero).permit(:name)
end
end

```

① localhost:3000/heros/new

Entre para acessar este site
Autorização exigida por http://localhost:3000

Nome de usuário	<input type="text"/>
Senha	<input type="password"/>

Entrar **Cancelar**

① localhost:3000/heros/new

Entre para acessar este site
Autorização exigida por http://localhost:3000

Nome de usuário	<input type="text" value="peimelo"/>
Senha	<input type="password" value="....."/>

Entrar **Cancelar**

← → ⌂ ① localhost:3000/heros/new

2048.5 ms ×11

New Hero

Name

Create Hero

[Back](#)

← → ⌂ ① localhost:3000/heros/3
730.4 ms ×4

Hero was successfully created.

Name: Mulher Maravilha

[Edit](#) | [Back](#)

localhost:3000/heros

254.6 ms × 3

Heros

Name

Thor	Show	Edit	Destroy
Homem de Ferro	Show	Edit	Destroy
Mulher Maravilha	Show	Edit	Destroy

[New Hero](#)

Configurando a variável da chave no Heroku

config\environment.rb
9e203acaacf9157711c3e178ec83d96

Config Vars

Hide Config Vars

DATABASE_URL	postgres://eklh1wjpuiwrxe53d1c61a33d0be		
LANG	en_US.UTF-8		
RACK_ENV	production		
RAILS_ENV	production		
RAILS_LOG_TO_STDOUT	enabled		
RAILS_SERVE_STATIC_FILES	enabled		
SECRET_KEY_BASE	33a02190688517409ae52152294cae5c29ddd68c7		
RAILS_MASTER_KEY	9e203acaacf9157711c3e178ec83d96		

git status

```
beta1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
      modified:   app/controllers/heros_controller.rb
      modified:   config/credentials.yml.enc

no changes added to commit (use "git add" and/or "git commit -a")
```

git commit -am "Adiciona autenticação básica para manipular CRUD"

```
beta1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git commit -am "Adiciona autenticação básica para manipular CRUD"
warning: LF will be replaced by CRLF in app/controllers/heros_controller.rb.
The file will have its original line endings in your working directory
[master 4d68e68] Adiciona autenticação básica para manipular CRUD
 2 files changed, 4 insertions(+), 1 deletion(-)
 rewrite config/credentials.yml.enc (100%)
```

```
git push
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git push
Warning: Permanently added the RSA host key for IP address '140.82.112.4' to the list of known hosts.
Enumerating objects: 13, done.
Counting objects: 100% (13/13), done.
Delta compression using up to 2 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (7/7), 1.07 KiB | 219.00 KiB/s, done.
Total 7 (delta 5), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (5/5), completed with 5 local objects.
To github.com:betopinheiro1005/tour_of_heroes.git
  442b0c0..4d68e68  master -> master
```

← → ⌂ <https://tour-of-heroes-2.herokuapp.com/heros>

Heros

Name

Homem de Ferro [Show](#) [Edit](#) [Destroy](#)
Thor [Show](#) [Edit](#) [Destroy](#)

[New Hero](#)

← → ⌂ <https://tour-of-heroes-2.herokuapp.com/heros/new>

Heros

Name

Homem de Ferro [Show](#) [Edit](#) [Destroy](#)
Thor [Show](#) [Edit](#) [Destroy](#)

[New Hero](#)

Entre para acessar este site
Autorização exigida por https://tour-of-heroes-2.herokuapp.com

Nome de usuário

Senha

[Entrar](#) [Cancelar](#)

← → ⌂ <https://tour-of-heroes-2.herokuapp.com/heros/3>

Hero was successfully created.

Name: Mulher Maravilha

[Edit](#) | [Back](#)

← → ⌂ <https://tour-of-heroes-2.herokuapp.com/heros>

Heros

Name

Homem de Ferro [Show](#) [Edit](#) [Destroy](#)
Thor [Show](#) [Edit](#) [Destroy](#)
Mulher Maravilha [Show](#) [Edit](#) [Destroy](#)

[New Hero](#)

README.md

```
# Tour Of Heroes API
```

Ruby on Rails 6 course as an API creating a Heroes CRUD.

This repository is part of the [Curso de Ruby on Rails 6 como API](<https://www.youtube.com/watch?v=gTR6lx00Nac&list=PLqsayW8DhUmuvgOX08aXYk6Y-HGrdYg20>) on YouTube.

```
<table>
<tr>
<td>Ruby version</td>
<td>
  2.7.2
</td>
</tr>
<tr>
<td>Rails version</td>
<td>
  6.1.x
</td>
</tr>
<tr>
<td>Database</td>
<td>
  SQLite3 (dev) / PostgreSQL (prod)
</td>
</tr>
</table>
```

```
## Initial settings to run the project
```

```
```bash
clone the project
git clone https://github.com/peimelo/curso_tour_of_heroes_api.git

enter the cloned directory
cd curso_tour_of_heroes_api

install Ruby on Rails dependencies
bundle install

create the development and test databases
rails db:create

create the tables
rails db:migrate

run the project
rails s
```

```

The backend is available at `http://localhost:3000`.

```
## Tests
```

```
![Tests](https://github.com/peimelo/curso\_tour\_of\_heroes\_api/actions/workflows/ruby.yml/badge.svg)
```

To run the tests:

```
```bash
rspec
```

## Using the HEROES API
```

Include a Header Authorization

For all requests, use an ****Authorization header****, of size >= 10 characters, so that you can only manipulate your data, for example:

```
```bash
curl --request GET \
--url 'https://curso-tour-of-heroes-api.herokuapp.com/api/heroes' \
--header 'Authorization: anyTokenCanBeUsed'
```

```

API Endpoint

The following endpoints are available:

| Endpoints | Usage | Params |
|-----------------------------|---|--------------------|
| `GET /api/heroes` | Get all of the heroes. | |
| `GET /api/heroes?name=term` | Get all heroes with `name` like a `term`. | **term**: [String] |
| `GET /api/heroes/:id` | Get the details of a single hero. | |
| `POST /api/heroes` | Add a new hero. | **name**: [String] |
| `PUT /api/heroes/:id` | Edit the details of an existing hero. | **name**: [String] |
| `DELETE /api/heroes/:id` | Remove the hero. | |

git status

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
    (use "git restore <file>..." to discard changes in working directory)
      modified: README.md

no changes added to commit (use "git add" and/or "git commit -a")
```

git commit -am "Atualizado arquivo README.md"

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git commit -am "Atualizado arquivo README.md"
warning: LF will be replaced by CRLF in README.md.
The file will have its original line endings in your working directory
[master 21180b4] Atualizado arquivo README.md
 1 file changed, 85 insertions(+), 3 deletions(-)
 rewrite README.md (97%)
```

```
git push
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/tour-of-heroes (master)
$ git push
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 2 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 1.22 KiB | 415.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:betopinheiro1005/tour_of_heroes.git
  4d68e68..21180b4 master -> master
```

Aula 5 - Visual Studio Code

Nesse vídeo eu mostro como configurar a IDE Visual Studio Code com plugins e customizações.

Site do VSCode

<https://code.visualstudio.com/>

Link para teclas de atalho do VSCode

https://code.visualstudio.com/docs/getstarted/keybindings#_keyboard-shortcuts-reference

Repositório da font FiraCode

<https://github.com/tonsky/FiraCode>

Gist de como está configurado meu VSCode

<https://gist.github.com/peimelo/5e96751a0408dc7c705488c3d6895d60>

Site do Rubocop

<https://rubocop.org/>

Site da extention de Ruby para o VSCode

<https://github.com/rubyide/vscode-ruby>

Meu repositório Tour of Heroes no GitHub

https://github.com/peimelo/tour_of_heroes

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

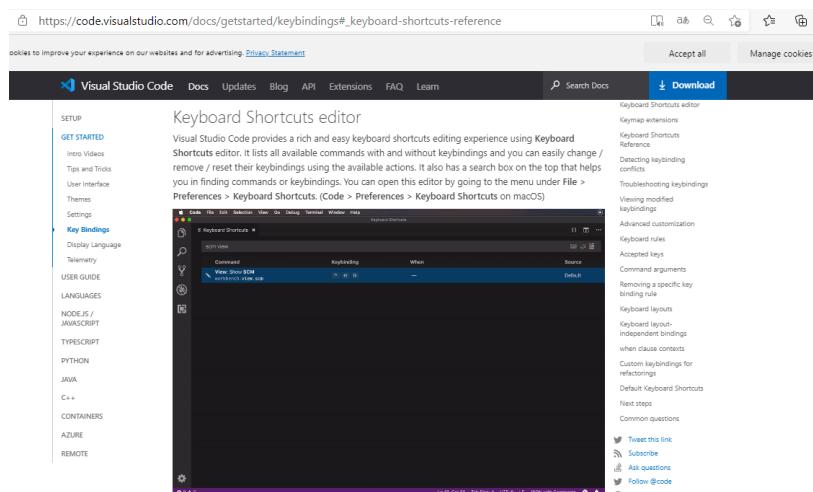
<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4goR2p>

Teclas de atalho

code.visualstudio.com/docs/getstarted/keybindings#_keyboard-shortcuts-reference



Plugins essenciais para Ruby on Rails

Bracket Pair Colorizer 1.0.61
Color Highlight 2.3.0
Debugger for Chrome 4.12.11
Debugger for Microsoft Edge 1.0.15
Docker 1.9.0
Docs View 0.0.8
DotENV 1.0.1
Dracula Official 2.22.3
EditorConfig for VS Code 0.16.4
ESLint 2.1.14
Excel Viewer 3.0.40
Git Blame 6.0.2
Git Graph 1.28.0
Git History 0.6.14
Git Lens - Git supercharged 11.1.2
Jest 3.2.0
Jest Runner 0.4.31
Jupyter
Material Icon Theme 4.4.0
npm 0.3.13
NxConsole 15.0.0
Path Intellisense 2.3.0
Peacock 3.9.1
Prettier - Code formatter 5.8.0
Python
Remote - Containers 0.15.4.1
Ruby 0.27.0
Ruby on Rails 1.0.8
Settings Sync 3.4.3
Template String Converter 0.4.5
TSLint 1.3.2
VSCode Ruby 0.27.0
vscode-styled-components 1.4.1
Winter is Coming Theme 1.4.3

Instalar gem RuboCop

```
gem install rubocop
```

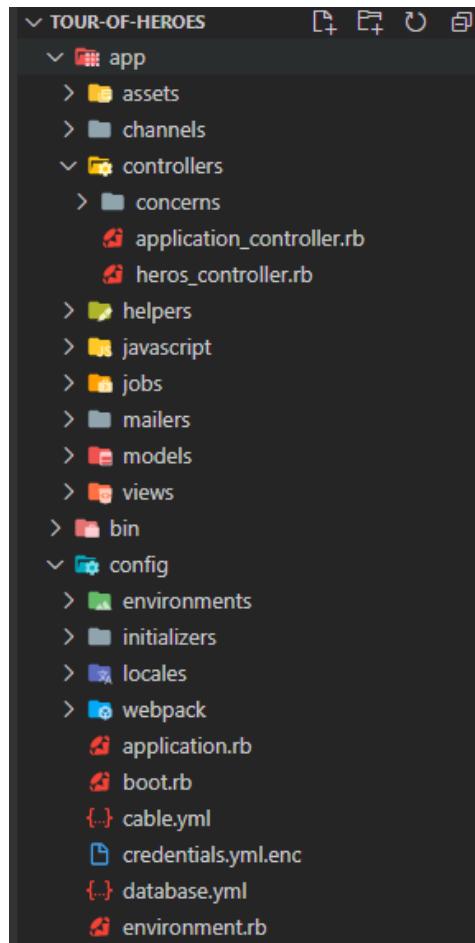
```
betol@DESKTOP-85HCHHQ MINGW64 /c/Sites/tour-of-heroes (master)
$ gem install rubocop
Fetching rainbow-3.0.0.gem
Fetching ruby-progressbar-1.11.0.gem
Fetching rubocop-1.11.0.gem
Fetching rubocop-ast-1.4.1.gem
Fetching ast-2.4.2.gem
Fetching parser-3.0.0.0.gem
Fetching parallel-1.20.1.gem
Fetching unicode-display_width-2.0.0.gem
Successfully installed parallel-1.20.1
Successfully installed ast-2.4.2
Successfully installed parser-3.0.0.0
Successfully installed rainbow-3.0.0
Successfully installed rubocop-ast-1.4.1
```

Instalando plugins

- Instale o plugin **Material Icon Theme 4.4.0** e o ative.

Ctrl-Shift-P

Material icons: Activate icon theme



- Instale o plugin **Ruby**

- Instale o plugin **Ruby on Rails**

Alterando o tamanho da fonte

Ctrl-Shift-P

Digite: **settings**

Selecione:

Preferences: Open Settings (UI)

Editor: **font-size**

Altere de 14 para 16 e salve.

Ctrl-Shift-P

Selecione:

Preferences: Open Settings (JSON)

settings.json

```
{  
  "terminal.integrated.shell.windows": "C:\\Program Files\\Git\\bin\\bash.exe",  
  "workbench.iconTheme": "material-icon-theme",  
  "editor.fontSize": 16  
}
```

Utilizando fonte FiraCode

<https://github.com/tonsky/FiraCode>

- Baixe o zip (Fira_Code_v5.2.zip) e instale as fontes que estão na pasta TTF, dando dois cliques em cada fonte e clicando no botão "Instalar"

<https://github.com/tonsky/FiraCode/wiki/VS-Code-Instructions>

Windows

- In the ttf folder, double-click each font file, click "Install font"; to install all at once, select all files, right-click, and choose "Install"
- On some systems (especially Windows 10), you may need to "Unblock" each font file before installing. To do so, right-click each font file, click Properties, then check Unblock next to Security at the bottom of the General tab. Click OK, and then install. Note: Skipping this step may cause the Fira Code fonts to intermittently stop working in VS Code, even though the fonts still appear in other programs.

or

On Windows 10 open the System Settings, go to Fonts and drag and drop the font files from the ttf folder into the drop area indicated at the top of the dialog.

Editando settings.json

Using the visual Settings Editor

To open the settings editor: from the `Code` menu, choose `Preferences > Settings`, or use keyboard shortcut `(Ctrl + ,)` (`Cmd + ,` on Mac).

To enable FiraCode in the settings editor: under "Commonly Used", expand the "Text Editor" settings and then click on "Font". In the "Font Family" input box type `Fira Code`, replacing any content. Tick the check box "Enables/Disables font ligatures" under "Font Ligatures" to enable the special ligatures.

Manually editing `settings.json`

Visual Studio Code allows you to also edit the underlying `settings.json` config file. First open the settings editor as described above, then click the "curly brackets" icon to open the `settings.json` file.

Then paste the following lines and save the file.

```
"editor.fontFamily": "Fira Code",  
"editor.fontLigatures": true,
```

If this doesn't work for you, you can try:

1. restarting VS Code;
2. wrapping the "Fira Code" section with additional apostrophes:

```
"editor.fontFamily": "'Fira Code'",  
"editor.fontLigatures": true,
```

- Reinicie o VS Code.

<https://github.com/rubyide/vscode-ruby>

Ctrl-Shift-P

Settings

```
{  
  "workbench.iconTheme": "material-icon-theme",  
  "terminal.integrated.shell.windows": "C:\\Program Files\\Git\\bin\\bash.exe",  
  "editor.fontSize": 18,  
  "terminal.integrated.fontSize": 18,  
  "editor.fontFamily": "Fira Code",  
  "editor.fontLigatures": true,  
  "window.zoomLevel": 1,  
  "editor.formatOnSave": true,  
  "ruby.useLanguageServer": true,  
  "ruby.lint": {  
    "rubocop": true  
  },  
  "ruby.format": "rubocop",  
  "[ruby)": {  
    "editor.defaultFormatter": "rebornix.ruby"  
  },  
}
```

- Instale o plugin **Settings Sync 3.4.3**

Ctrl-Shift-P

sync

[Sync: Download Settings](#)



- No GitHub entre em "Yours gists"

Gists permitem salvar trechos de código.

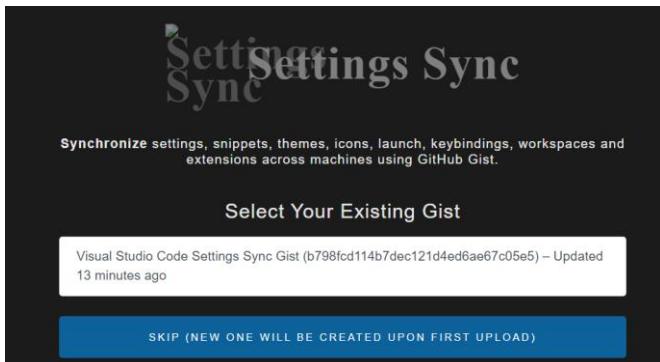
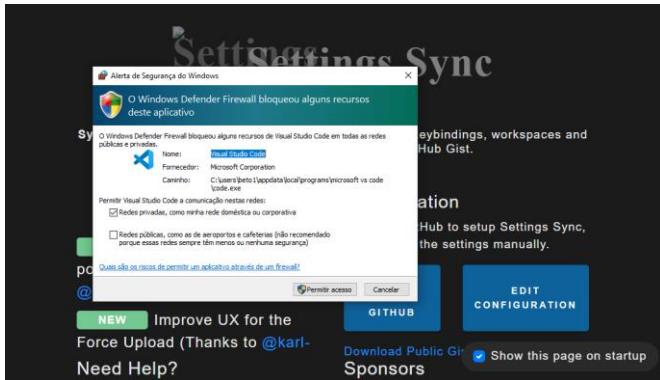
Click on Login with GitHub .

Login GitHub on Browser and close the browser tab once you get Success message.

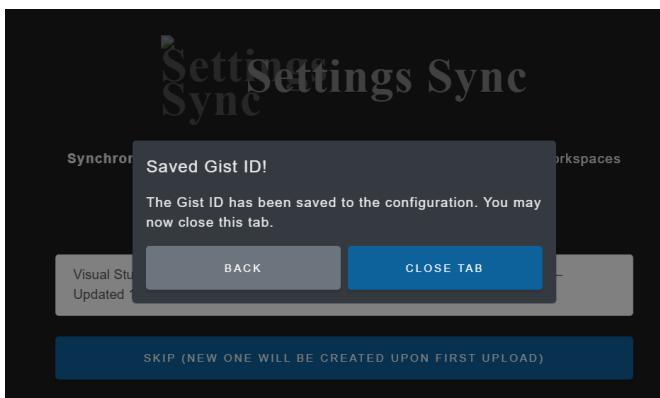
If you are using Settings Sync first time GIST will be created automatically when you upload your settings.

If you already have GitHub Gist, new window will be opened to allow you to select the GitHub Gist or Skip to create new Gist.

- Clique no botão "Login with GitHub"



- Selecione "Visual Studio Code Settings Sync Gist"



Para receber Gist do GitHub (download)

Ctrl-Shift-P
sync

Sync: Download Settings

Para enviar Gist para o GitHub (upload ou update)

Ctrl-Shift-P

sync

Sync: Update/Upload Settings

Preferences Open Settings (JSON)

```
{
  "sync.gist": "0ce70343940c1a66af61986ed16c8541",
  "sync.autoDownload": false,
  "sync.autoUpload": false,
  "peacock.favoriteColors": [
    {
      "name": "Angular Red",
      "value": "#b52e31"
    },
    {
      "name": "Auth0 Orange",
      "value": "#eb5424"
    },
    {
      "name": "Azure Blue",
      "value": "#007fff"
    },
    {
      "name": "C# Purple",
      "value": "#68217A"
    },
    {
      "name": "Gatsby Purple",
      "value": "#639"
    },
    {
      "name": "Go Cyan",
      "value": "#5dc9e2"
    },
    {
      "name": "Java Blue-Gray",
      "value": "#557c9b"
    },
    {
      "name": "JavaScript Yellow",
      "value": "#f9e64f"
    },
    {
      "name": "Mandalorian Blue",
      "value": "#1857a4"
    },
    {
      "name": "Node Green",
      "value": "#215732"
    },
    {
      "name": "React Blue",
      "value": "#00b3e6"
    }
  ]
}
```

```
{  
    "name": "Something Different",  
    "value": "#832561"  
},  
{  
    "name": "Vue Green",  
    "value": "#42b883"  
}  
,  
{"workbench.iconTheme": "material-icon-theme",  
"terminal.integrated.shell.windows": "C:\\Program Files\\Git\\bin\\bash.exe",  
"terminal.integrated.shell.osx": "/bin/zsh",  
"editor.fontSize": 16,  
"terminal.integrated.fontSize": 16,  
"editor.fontFamily": "Fira Code",  
"editor.fontLigatures": true,  
"window.zoomLevel": 1,  
"editor.formatOnSave": true,  
"editor.formatOnPaste": true,  
"prettier.singleQuote": true,  
"workbench.colorTheme": "Dracula",  
"ruby.useLanguageServer": true,  
"ruby.lint": {  
    "rubocop": true  
},  
"ruby.format": "rubocop",  
"[ruby)": {  
    "editor.defaultFormatter": "rebornix.ruby"  
},  
}  
}
```

Aula 7 – Criando a API

Nesse vídeo eu mostro como criar a API e o resource de Heroes.

Rails Guides

<https://guides.rubyonrails.org/>

https://guides.rubyonrails.org/api_app.html

https://guides.rubyonrails.org/active_record_migrations.html

https://guides.rubyonrails.org/v3.2/getting_started.html#getting-up-and-running-quickly-with-scaffolding

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

```
rails new curso_tour_of_heroes_api --api  
cd curso_tour_of_heroes_api  
code .
```

No terminal entre com os seguintes comandos:

```
git status  
git add .  
git commit -m "Estrutura inicial da API"
```

Criar o repositório no GitHub

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository](#).

Owner * Repository name *

betopinheiro1005 / curso_tour_of_heroes_api

Great repository names are short and memorable. Need inspiration? How about [super-happiness](#)?

Description (optional)

Curso de Ruby on Rails como API

 Public
Anyone on the internet can see this repository. You choose who can commit.

 Private
You choose who can see and commit to this repository.

Initialize this repository with:

Skip this step if you're importing an existing repository.

Add a README file
This is where you can write a long description for your project. [Learn more](#).

Add .gitignore
Choose which files not to track from a list of templates. [Learn more](#).

Choose a license
A license tells others what they can and can't do with your code. [Learn more](#).

The screenshot shows the GitHub repository setup page for the repository 'curso_tour_of_heroes_api'. It provides instructions for quick setup, creating a new repository on the command line, pushing an existing repository, and importing code from another repository. It also includes a link to 'Import code'.

```
git remote add origin git@github.com:betopinheiro1005/curso_tour_of_heroes_api.git
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git remote add origin git@github.com:betopinheiro1005/curso_tour_of_heroes_api.git
```

Primeiro push

```
git push -u origin master
```

The screenshot shows the GitHub repository page for 'curso_tour_of_heroes_api'. It displays the commit history for the 'master' branch, which contains 1 commit by 'betopinheiro1005' titled 'Estrutura inicial da API'. The commit was made 15 minutes ago. The repository page also includes sections for 'About', 'Releases', and 'Packages'.

| Commit | Message | Time Ago |
|-------------------------|--------------------------|----------------|
| fed49e2 | Estrutura inicial da API | 15 minutes ago |

config\initializers\inflections.rb

```
ActiveSupport::Inflector.inflections(:en) do |inflect|
  inflect.irregular 'hero', 'heroes'
end
```

No terminal, entre com os seguintes comandos:

```
git status
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   config/initializers/inflections.rb

no changes added to commit (use "git add" and/or "git commit -a")
```

```
git commit -am "Adiciona inflection para Hero"
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git commit -am "Adiciona inflection para Hero"
warning: LF will be replaced by CRLF in config/initializers/inflections.rb.
The file will have its original line endings in your working directory
[master 5e048e7] Adiciona inflection para Hero
 1 file changed, 5 insertions(+), 16 deletions(-)
 rewrite config/initializers/inflections.rb (99%)
```

```
git push
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 2 threads
Compressing objects: 100% (5/5), done.
Writing objects: 100% (5/5), 482 bytes | 40.00 KiB/s, done.
Total 5 (delta 3), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (3/3), completed with 3 local objects.
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
  fed49e2..5e048e7  master -> master
```

Criando a tabela

```
rails g scaffold Hero name:string
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ rails g scaffold Hero name:string
  invoke  active_record
  create    db/migrate/20210322030728_create_heroes.rb
  create    app/models/hero.rb
  invoke  test_unit
  create    test/models/hero_test.rb
  create    test/fixtures/heroes.yml
  invoke  resource_route
  route    resources :heroes
  invoke  scaffold_controller
  create    app/controllers/heroes_controller.rb
  invoke  resource_route
  invoke  test_unit
  create    test/controllers/heroes_controller_test.rb
```

- Em caso de erro ao digitar o comando, use o comando:

```
rails d scaffold Hero
```

Diferenças entre MVC e API

API não contém as seguintes pastas:

```
app/views  
app/assets  
app/helpers  
app/javascript  
node_modules  
vendor
```

E, no diretório raiz, os seguintes arquivos:

```
.browserslistrc  
babel.config.js  
package.json  
postcss.config.js  
yarn.lock
```

Arquivos com conteúdos diferentes:

```
config/application.rb
```

Tornando obrigatória o preenchimento da coluna name da tabela heroes

```
db\migrate\20210322030728_create_heroes.rb
```

```
class CreateHeroes < ActiveRecord::Migration[6.1]  
  def change  
    create_table :heroes do |t|  
      t.string :name, null: false  
  
      t.timestamps  
    end  
  end  
end
```

Criando o banco de dados

`rails db:create`

```
betol@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ rails db:create
Created database 'db/development.sqlite3'
Created database 'db/test.sqlite3'
```

Criando a tabela

`rails db:migrate`

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ rails db:migrate
== 20210322030728 CreateHeroes: migrating ==
-- create_table(:heroes)
   -> 0.0062s
== 20210322030728 CreateHeroes: migrated (0.0132s) ==
```

Comandos rails

rails -T

git status

```
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   config/routes.rb

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    app/controllers/heroes_controller.rb
    app/models/hero.rb
    db/migrate/
    db/schema.rb
    test/controllers/heroes_controller_test.rb
    test/fixtures/heroes.yml
    test/models/hero_test.rb

no changes added to commit (use "git add" and/or "git commit -a")
```

git add .

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git add .
warning: LF will be replaced by CRLF in config/routes.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in app/controllers/heroes_controller.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in app/models/hero.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in db/migrate/20210322030728_create_heroes.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in test/controllers/heroes_controller_test.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in test/fixtures/heroes.yml.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in test/models/hero_test.rb.
The file will have its original line endings in your working directory
```

git commit -m "Cria estrutura para API Hero"

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git commit -m "Cria estrutura para API Hero"
[master c8c1d64] Cria estrutura para API Hero
 8 files changed, 145 insertions(+)
 create mode 100644 app/controllers/heroes_controller.rb
 create mode 100644 app/models/hero.rb
 create mode 100644 db/migrate/20210322030728_create_heroes.rb
 create mode 100644 db/schema.rb
 create mode 100644 test/controllers/heroes_controller_test.rb
 create mode 100644 test/fixtures/heroes.yml
 create mode 100644 test/models/hero_test.rb
```

git push

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push
Enumerating objects: 31, done.
Counting objects: 100% (30/30), done.
Delta compression using up to 2 threads
Compressing objects: 100% (19/19), done.
Writing objects: 100% (20/20), 3.03 KiB | 129.00 KiB/s, done.
Total 20 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), completed with 4 local objects.
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
  5e048e7..c8c1d64  master -> master
```

Aula 8 - M de Model

Nesse vídeo eu mostro sobre model, database e seed.

Rails Guides

https://guides.rubyonrails.org/active_record_validations.html#presence

https://guides.rubyonrails.org/command_line.html#bin-rails-console

https://guides.rubyonrails.org/command_line.html#bin-rails-dbconsole

https://guitarails.com.br/active_record_migrations.html#migracoes-e-dados-de-seed

DBeaver

<https://dbeaver.io/>

Gem Faker

<https://github.com/faker-ruby/faker>

Extensão JSON Viewer

<https://chrome.google.com/webstore/detail/json-viewer/gbmdgpbipfallnflgajpalibnhgdobh?hl=pt-BR>

Versionamento Semântico

<https://semver.org/>

Imagen do Fluxo Rails

<https://hackernoon.com/images/4DzMEPIYOFTBuMvA8dSarR02rMx1-rl3f329u.jpg>

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbciae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

- Instale o DBeaver

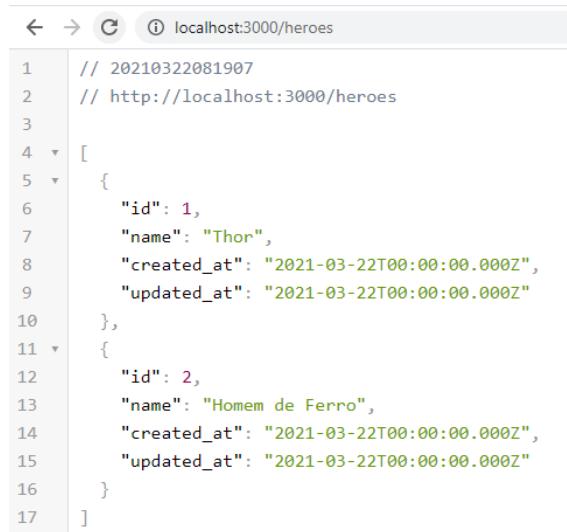
Levantando o servidor

rails s

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ rails s
=> Booting Puma
=> Rails 6.1.3 application starting in development
=> Run `bin/rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR1 not implemented, signal based restart unavailable!
*** SIGHUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Puma version: 5.2.2 (ruby 2.7.2-p137) ("Fettisdagsbulle")
* Min threads: 5
* Max threads: 5
* Environment: development
* PID: 12728
* Listening on http://[::1]:3000
* Listening on http://127.0.0.1:3000
Use Ctrl-C to stop
```

- No Google Chrome instale a extensão [JSON Viewer](#)

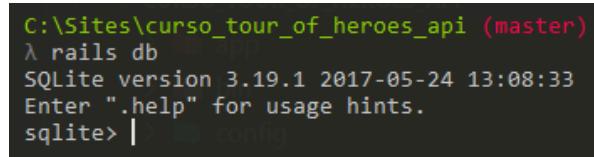
<http://localhost:3000/heroes>



```
1 // 20210322081907
2 // http://localhost:3000/heroes
3
4 [
5   {
6     "id": 1,
7     "name": "Thor",
8     "created_at": "2021-03-22T00:00:00.000Z",
9     "updated_at": "2021-03-22T00:00:00.000Z"
10    },
11   {
12     "id": 2,
13     "name": "Homem de Ferro",
14     "created_at": "2021-03-22T00:00:00.000Z",
15     "updated_at": "2021-03-22T00:00:00.000Z"
16   }
17 ]
```

Abra outro terminal e entre com o comando:

`rails db`



```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails db
SQLite version 3.19.1 2017-05-24 13:08:33
Enter ".help" for usage hints.
sqlite> | config
```

`.help`



```
Enter ".help" for usage hints.
sqlite> .help
sqlite> .help
sqlite> .auth ON|OFF Show authorizer callbacks
sqlite> .backup ?DB? FILE Backup DB (default "main") to FILE
sqlite> .ballon on|off Stop after hitting an error. Default OFF
sqlite> .binary on|off Turn binary output on or off. Default OFF
sqlite> .changes on|off Show number of rows changed by SQL
sqlite> .check GLOB Fail if output since . testcase does not match
sqlite> .clone NEWDB Clone data into NEWDB from the existing database
sqlite> .databases List names and files of attached databases
sqlite> .dbinfo ?DB? Show status information about the database
sqlite> .dump ?TABLE? ... Dump the database in an SQL text format
        If TABLE specified, only dump tables matching
        LIKE pattern TABLE.
sqlite> .echo on|off Turn command echo on or off
sqlite> .eqp on|off|full Enable or disable automatic EXPLAIN QUERY PLAN
sqlite> .exit Exit this program
sqlite> .explain ?on|off|auto? Turn EXPLAIN output mode on or off or to automatic
sqlite> .fullschema ?--indent? Show schema and the content of sqlite_stat tables
sqlite> .headers on|off Turn display of headers on or off
sqlite> .help Show this message
sqlite> .import FILE TABLE Import data from FILE into TABLE
sqlite> .impostor INDEX TABLE Create impostor table TABLE on index INDEX
sqlite> .indexes ?TABLE? Show names of all indexes
        If TABLE specified, only show indexes for tables
        matching LIKE pattern TABLE.
sqlite> .limit ?LIMIT? ?VAL? Display or change the value of an SQLITE_LIMIT
sqlite> .lint OPTIONS Report potential schema issues. Options:
        fkey-indexes Find missing foreign key indexes
sqlite> .load FILE ?ENTRY? Load an extension library
sqlite> .log FILE|off Turn logging on or off. FILE can be stderr/stdout
sqlite> .mode MODE ?TABLE? Set output mode where MODE is one of:
        ascii Columns/rows delimited by 0x1F and 0x1E
        csv Comma-separated values
        column Left-aligned columns. (See .width)
        html HTML <table> code
        insert SQL insert statements for TABLE
        line One value per line
        list Values delimited by "|"
        quote Escape answers as for SQL
        tabs Tab-separated values
```

.table

```
C:\Sites\curso_tour_of_heroes_api (master) | settings.json
\ rails db
SQLite version 3.19.1 2017-05-24 13:08:33
Enter ".help" for usage hints.
sqlite> .table
ar_internal_metadata  heroes  schema_migrations
sqlite> |
```

.schema

```
sqlite> .schema
CREATE TABLE IF NOT EXISTS "schema_migrations" ("version" varchar NOT NULL PRIMARY KEY);
CREATE TABLE IF NOT EXISTS "ar_internal_metadata" ("key" varchar NOT NULL PRIMARY KEY, "value" varchar,
"created_at" datetime(6) NOT NULL, "updated_at" datetime(6) NOT NULL);
CREATE TABLE IF NOT EXISTS "heroes" ("id" integer PRIMARY KEY AUTOINCREMENT NOT NULL, "name" varchar NO
T NULL, "created_at" datetime(6) NOT NULL, "updated_at" datetime(6) NOT NULL);
```

select * from heroes;

```
sqlite> select * from heroes;
1|Thor|2021-03-22|2021-03-22
2|Homem de Ferro|2021-03-22|2021-03-22
```

Para sair:

.exit

Console do Rails

rails console

ou

rails c

```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails c
Loading development environment (Rails 6.1.3)
irb(main):001:0> |
```

Métodos disponíveis no framework do Rails

Hero.methods.sort

```
hero = Hero.new
```

```
irb(main):002:0> hero = Hero.new
      (11.3ms)  SELECT sqlite_version(*)
=> #<Hero id: nil, name: nil, created_at: nil, updated_at: nil>
irb(main):003:0> |
```

```
hero.name = 'Hulk'
```

```
irb(main):003:0> hero.name =  
=> "Hulk"  
irb(main):004:0> |
```

hero save

```
irb(main):004:0> hero.save
 TRANSACTION (0.1ms)  begin transaction
 Hero Create (51.4ms)  INSERT INTO "heroes" ("name", "created_at", "updated_at") VALUES (?, ?, ?)  [[["name", "Hulk"], ["created_at", "2021-03-22 11:45:09.891565"], ["updated_at", "2021-03-22 11:45:09.891565"]]]
 TRANSACTION (144.8ms)  commit transaction
=> true
irb(main):005:0> |
```

- Para sair:

exit ou quit

Validação de name

app\models\hero.rb

```
class Hero < ApplicationRecord
  validates :name, presence: true
end
```

rails c

```
hero = Hero.new
hero.save
```

```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails c
Loading development environment (Rails 6.1.3)
irb(main):001:0> hero = Hero.new
(1.6ms)  SELECT sqlite_version(*)
=> #<Hero id: nil, name: nil, created_at: nil, updated_at: nil>
irb(main):002:0> hero.save
=> false
irb(main):003:0> |
```

hero.errors.messages

```
irb(main):004:0> hero.errors.messages
=> {:_name=>["can't be blank"]}
irb(main):005:0> |
```

quit

rails c --sandbox

Ao sair do console, tudo será descartado (não serão criados registros na tabela).

Hero.create name: 'Sandbox'

```
irb(main):001:0> Hero.create name: 'Sandbox'
(1.4ms)  SELECT sqlite_version(*)
TRANSACTION (0.1ms)  begin transaction
TRANSACTION (0.1ms)  SAVEPOINT active_record_1
Hero Create (31.9ms)  INSERT INTO "heroes" ("name", "created_at", "updated_at") VALUES (?, ?, ?)  [["name", "Sandbox"], ["created_at", "2021-03-22 12:05:58.347271"], ["updated_at", "2021-03-22 12:05:58.347271"]]
TRANSACTION (0.2ms)  RELEASE SAVEPOINT active_record_1
=> #<Hero id: 4, name: "Sandbox", created_at: "2021-03-22 12:05:58.347271000 +0000", updated_at: "2021-03-22 12:05:58.347271000 +0000">
irb(main):002:0> |
```

exit

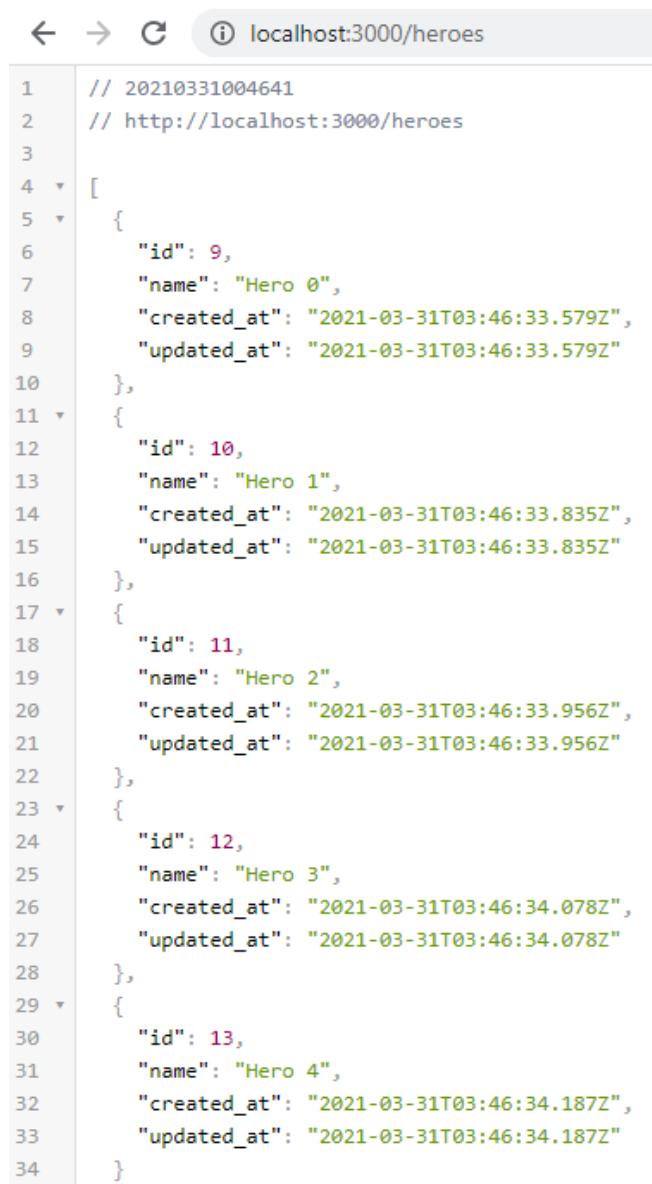
Seed

db\seeds.rb

```
Hero.delete_all  
  
5.times do |i|  
  Hero.create name: "Hero #{i}"  
end
```

No terminal:

rails db:seed



```
// 20210331004641
// http://localhost:3000/heroes
[{"id": 9, "name": "Hero 0", "created_at": "2021-03-31T03:46:33.579Z", "updated_at": "2021-03-31T03:46:33.579Z"}, {"id": 10, "name": "Hero 1", "created_at": "2021-03-31T03:46:33.835Z", "updated_at": "2021-03-31T03:46:33.835Z"}, {"id": 11, "name": "Hero 2", "created_at": "2021-03-31T03:46:33.956Z", "updated_at": "2021-03-31T03:46:33.956Z"}, {"id": 12, "name": "Hero 3", "created_at": "2021-03-31T03:46:34.078Z", "updated_at": "2021-03-31T03:46:34.078Z"}, {"id": 13, "name": "Hero 4", "created_at": "2021-03-31T03:46:34.187Z", "updated_at": "2021-03-31T03:46:34.187Z"}]
```

Usando fakers

<https://github.com/faker-ruby/faker>

Generators

NOTE: Some of the generators below aren't released yet. If you want to use them, change the line in your gemfile to:

```
gem 'faker', :git => 'https://github.com/faker-ruby/faker.git', :branch => 'master'
```

Default

- Faker::Address
- Faker::Alphanumeric
- Faker::Ancient
- Faker::App
- Faker::Appliance
- Faker::Artist
- Faker::Avatar
- Faker::Bank
- Faker::Barcode
- Faker::Beer
- Faker::Blood
- Faker::Boolean
- Faker::BossaNova
- Faker::Business
- Faker::Cannabis
- Faker::ChileRut
- Faker::ChuckNorris

bundle add faker --group 'development'

C:\Sites\tour-of-heroes (master) ↵ bundle add faker --group 'development' ↵ Fetching gem metadata from https://rubygems.org/..... ↵ Fetching gem metadata from https://rubygems.org/. ↵ Resolving dependencies... ↵ Fetching gem metadata from https://rubygems.org/..... ↵ Fetching gem metadata from https://rubygems.org/. ↵ Resolving dependencies... ↵ Using rake 13.0.3 ↵ Using concurrent-ruby 1.1.8 ↵ Using i18n 1.8.9 ↵ Using minitest 5.14.4 ↵ Using tzinfo 2.0.4 ↵ Using zeitwerk 2.4.2 ↵ Using activesupport 6.1.3 ↵ Using builder 3.2.4 ↵ Using erubi 1.10.0 ↵ Using racc 1.5.2 ↵ Using nokogiri 1.11.2 (x64-mingw32) ↵ Using rails-dom-testing 2.0.3 ↵ Using crass 1.0.6 ↵ Using loofah 2.9.0 ↵ Using rails-html-sanitizer 1.3.0 ↵ Using actionview 6.1.3 ↵ Using rack 2.2.3 ↵ Using rack-test 1.1.0 ↵ Using actionpack 6.1.3 ↵ Using nio4r 2.5.7 ↵ Using websocket-extensions 0.1.5 ↵ Using websocket-driver 0.7.3 ↵ Using actionable 6.1.3 ↵ Using globalid 0.4.2 ↵ Using activejob 6.1.3 ↵ Using activemodel 6.1.3 ↵ Using activerecord 6.1.3 ↵ Using mimemagic 0.3.5 ↵ Using marcel 0.3.3 ↵ Using activestorage 6.1.3 ↵ Using mini_mime 1.0.2

Gemfile

```
source 'https://rubygems.org'  
git_source(:github) { |repo| "https://github.com/#{repo}.git" }  
  
ruby '2.7.2'  
  
gem 'rails', '~> 6.1.3'  
gem 'sqlite3', '~> 1.4'  
gem 'puma', '~> 5.0'  
gem 'bootsnap', '>= 1.4.4', require: false  
  
group :development, :test do  
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]  
end  
  
group :development do  
end  
  
gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]  
  
gem "faker", "~> 2.17", :group => :development
```

Gemfile

```
source 'https://rubygems.org'  
git_source(:github) { |repo| "https://github.com/#{repo}.git" }  
  
ruby '2.7.2'  
  
gem 'rails', '~> 6.1.3'  
gem 'sqlite3', '~> 1.4'  
gem 'puma', '~> 5.0'  
gem 'bootsnap', '>= 1.4.4', require: false  
  
group :development, :test do  
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]  
end  
  
group :development do  
  gem "faker", "~> 2.17"  
end  
  
gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]
```

bundle update

master [Go to file](#) ...

stumpy Prep for 1.9.2 release X

Latest commit 396af90 on 11 Feb 2019 ⌂ History

1 contributor

20 lines (14 sloc) | 413 Bytes [Raw](#) [Blame](#) [Copy](#) [Edit](#) [Delete](#)

Faker::Superhero

Available since version 1.6.2.

```
# Random Superhero name
Faker::Superhero.name #=> "Magnificent Shatterstar"

# Random Superhero power
Faker::Superhero.power #=> "Photokinesis"

# Random Superhero prefix
Faker::Superhero.prefix #=> "Captain"

# Random Superhero suffix
Faker::Superhero.suffix #=> "the Fated"

# Random Superhero descriptor
Faker::Superhero.descriptor #=> "Bizarro"
```

Gerando heróis fakers

db\seeds.rb

```
Hero.delete_all
```

```
5.times do
  Hero.create name: Faker::Superhero.name
end
```

No terminal:

```
rails db:seed
```



```
// 20210331005436
// http://localhost:3000/heroes
[
  {
    "id": 14,
    "name": "Giant Flash Knight",
    "created_at": "2021-03-31T03:54:30.348Z",
    "updated_at": "2021-03-31T03:54:30.348Z"
  },
  {
    "id": 15,
    "name": "Bloodaxe Spirit",
    "created_at": "2021-03-31T03:54:30.508Z",
    "updated_at": "2021-03-31T03:54:30.508Z"
  },
  {
    "id": 16,
    "name": "Dark Rorschach",
    "created_at": "2021-03-31T03:54:30.718Z",
    "updated_at": "2021-03-31T03:54:30.718Z"
  },
  {
    "id": 17,
    "name": "General Darkside",
    "created_at": "2021-03-31T03:54:30.894Z",
    "updated_at": "2021-03-31T03:54:30.894Z"
  },
  {
    "id": 18,
    "name": "Vulcan",
    "created_at": "2021-03-31T03:54:31.058Z",
    "updated_at": "2021-03-31T03:54:31.058Z"
  }
]
```

Aula 9 - C de Controller

Nesse vídeo eu mostro sobre controller, Insomnia, namespace API e ordenação.

Rails Guides

<https://guides.rubyonrails.org/routing.html#crud-verbs-and-actions>

https://guides.rubyonrails.org/action_controller_overview.html#strong-parameters

https://guides.rubyonrails.org/action_controller_overview.html#filters

Insomnia

<https://insomnia.rest/>

<https://insomnia.rest/plugins/insomnia-plugin-dracula-theme>

The Ruby Toolbox

https://www.ruby-toolbox.com/categories/API_Builders

Gem active_model_serializers

https://github.com/rails-api/active_model_serializers

Imagen do Fluxo Rails

<https://hackernoon.com/understanding-your-rails-application-structure-r8w32xj>

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

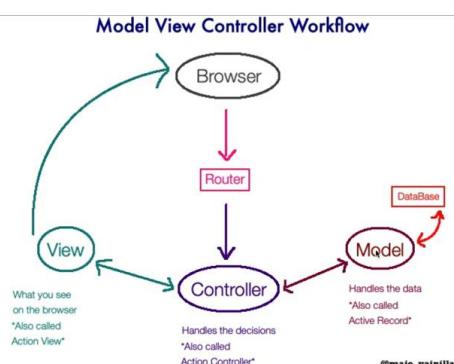
<https://t.me/joinchat/HPZD5GRFoE4goR2p>

imsonia

É um software que é um client para que possamos acessar e validar a API.

<https://insomnia.rest/>

- Baixe e instale.





Métodos HTTP para serviços RESTful

Obter os dados

GET /heroes
GET /heroes/1

Atualizar um recurso

PUT /heroes/1
PATCH /heroes/1

Criar um recurso

POST /heroes

Excluir um recurso

DELETE /heroes/1

Plugin Dracula

- Em **Preferences -> Plugin**, insira:

insomnia-plugin-theme-dracula

- Em **theme**, selecione:

Dracula

- Nome do workspace: Turn of Heroes API
- Crie a pasta: **Heroes**
- Crie New Request: **Read all** (do tipo GET)

- No terminal, suba o servidor:

rails s

app\controllers\heroes_controller.rb

```
class HeroesController < ApplicationController
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes
  def index
    @heroes = Hero.all

    render json: @heroes
  end

  # GET /heroes/1
  def show
    render json: @hero
  end

  # POST /heroes
  def create
    @hero = Hero.new(hero_params)

    if @hero.save
      render json: @hero, status: :created, location: @hero
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end
end
```

```

# PATCH/PUT /heroes/1
def update
  if @hero.update(hero_params)
    render json: @hero
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# DELETE /heroes/1
def destroy
  @hero.destroy
end

private
# Use callbacks to share common setup or constraints between actions.
def set_hero
  @hero = Hero.find(params[:id])
end

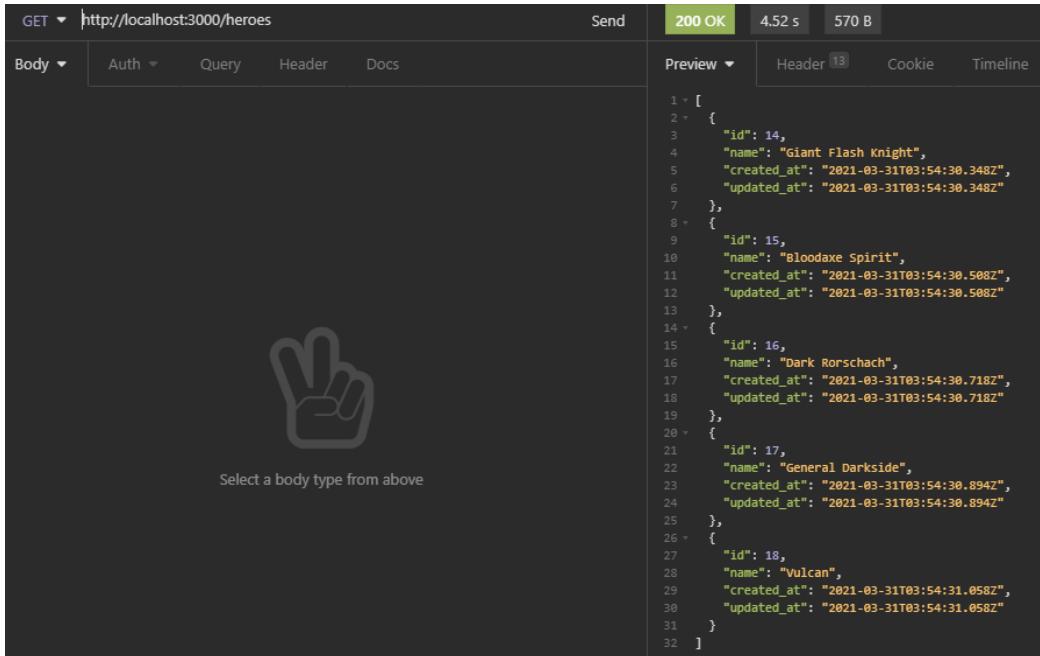
# Only allow a list of trusted parameters through.
def hero_params
  params.require(:hero).permit(:name)
end

```

- Na requisição, entre com:

<http://localhost:3000/heroes>

- Clique no botão "Send"



| GET ▾ | http://localhost:3000/heroes | Send | 200 OK | 4.52 s | 570 B |
|--|------------------------------|-------|--------|--------|---|
| Body ▾ | Auth ▾ | Query | Header | Docs | Preview ▾ Header 13 Cookie Timeline |
| <pre> 1: [2: { 3: "id": 14, 4: "name": "Giant Flash Knight", 5: "created_at": "2021-03-31T03:54:30.348Z", 6: "updated_at": "2021-03-31T03:54:30.348Z" 7: }, 8: { 9: "id": 15, 10: "name": "Bloodaxe Spirit", 11: "created_at": "2021-03-31T03:54:30.508Z", 12: "updated_at": "2021-03-31T03:54:30.508Z" 13: }, 14: { 15: "id": 16, 16: "name": "Dark Rorschach", 17: "created_at": "2021-03-31T03:54:30.718Z", 18: "updated_at": "2021-03-31T03:54:30.718Z" 19: }, 20: { 21: "id": 17, 22: "name": "General Darkside", 23: "created_at": "2021-03-31T03:54:30.894Z", 24: "updated_at": "2021-03-31T03:54:30.894Z" 25: }, 26: { 27: "id": 18, 28: "name": "Vulcan", 29: "created_at": "2021-03-31T03:54:31.058Z", 30: "updated_at": "2021-03-31T03:54:31.058Z" 31: } 32:] </pre> | | | | | |

- Crie uma nova requisição chamada: [Read one](#) (do tipo GET)

- Entre com:

<http://localhost:3000/heroes/15>

- Clique no botão "Send":

```
1 + {
2   "id": 15,
3   "name": "Bloodaxe spirit",
4   "created_at": "2021-03-31T03:54:30.508Z",
5   "updated_at": "2021-03-31T03:54:30.508Z"
6 }
```

- Crie uma nova requisição chamada: Create (do tipo POST)

- Entre com:

<http://localhost:3000/heroes>

- Na aba Body, selecione JSON e digite:

```
{
  "name": "Thor"
}
```

- Clique no botão "Send":

```
1 + {
2   "id": 19,
3   "name": "Thor",
4   "created_at": "2021-04-13T07:02:01.439Z",
5   "updated_at": "2021-04-13T07:02:01.439Z"
6 }
```

- Crie uma nova requisição chamada: Update (do tipo PUT)

- Entre com:

<http://localhost:3000/heroes/19>

- Na aba Body, selecione JSON e digite:

```
{
  "name": "Homem de Ferro"
}
```

- Clique no botão "Send":

```

PUT ▾ http://localhost:3000/heroes/19
Send 200 OK 804 ms 113 B
JSON ▾ Auth ▾ Query Header 1 Docs Preview ▾ Header 13 Cookie Timeline
1 + {
2   "name": "Homem de Ferro"
3 }
4
1 + {
2   "name": "Homem de Ferro",
3   "id": 19,
4   "created_at": "2021-04-13T07:02:01.439Z",
5   "updated_at": "2021-04-13T07:13:18.050Z"
6 }

```

Gerando um erro ao atualizar o registro

```

PUT ▾ http://localhost:3000/heroes/19
Send 422 Unprocessable Entity 5.32 s 27 B
JSON ▾ Auth ▾ Query Header 1 Docs Preview ▾ Header 12 Cookie Timeline
1 + {
2   "name": null
3 }
4
1 + {
2   "name": [
3     "can't be blank"
4   ]
5 }

```

- Crie uma nova requisição chamada: **Delete** (do tipo DELETE)

- Entre com:

<http://localhost:3000/heroes/19>

- Clique no botão "Send":

```

DELETE ▾ http://localhost:3000/heroes/19
Send 204 No Content 840 ms 0 B
JSON ▾ Auth ▾ Query Header 1 Docs Preview ▾ Header 9 Cookie Timeline
1 + ...
No body returned for response

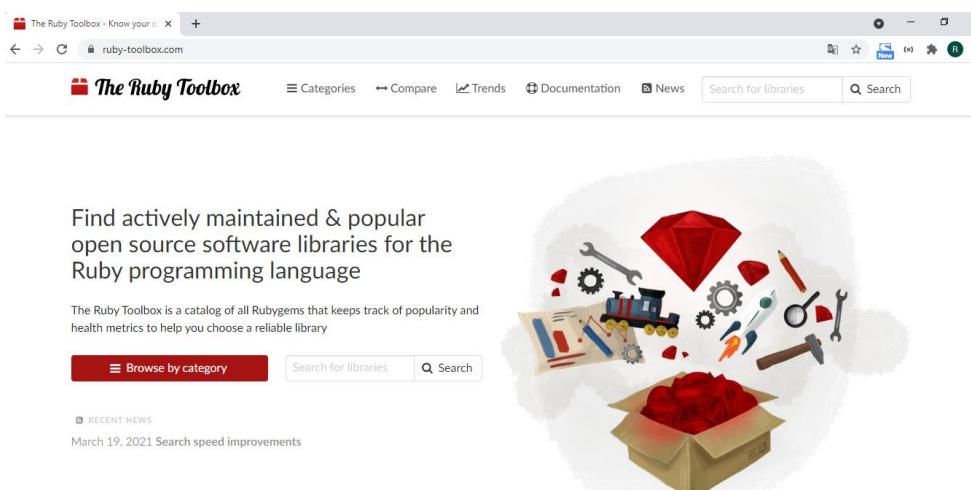
```

Não exibindo os campos "created_at" e "update_at" nas requisições

- Para isso é necessário instalar uma GEM específica: `ActiveModelSerializers`

<https://www.ruby-toolbox.com>

Ruby Toolbox



Em **Search**, entre com:

active_model_serializers

The screenshot shows the search results for 'active_model_serializers' on The Ruby Toolbox. The search bar at the top contains the query. Below it, there's a 'Categories' section with a message stating 'No matching categories were found'. The main area is titled 'Projects' and shows two results:

- active_model_serializers** (Version 7.7)
 - API Builders
 - Low commit activity in last 3 years
 - A long-lived project that still receives updates
- case_transform** (Version 3.73)
 - Repository is gone
 - No release in over 3 years
 - case_transform
 - Homepage

Below the projects, there are navigation links for 'Next page >' and a page number indicator showing 1, 2, 3, 4.

The screenshot shows the 'API Builders' category page on The Ruby Toolbox. The title is 'API Builders' and there's a note: 'This category does not have a description yet. You can [add one on github!](#)'

Below the title is a chart showing the count of gems in each category:

| CATEGORY | Count |
|--------------------------|-------|
| jbuilder | 12 |
| active_model_serializers | 8 |
| grape | 7 |
| representable | 7 |
| fast_jsonapi | 3 |
| rabl | 3 |

Instalando a GEM

No terminal, entre com:

```
bundle add active_model_serializers
```

```
C:\Sites\curso_tour_of_heroes_api (master)
\ bundle add active_model_serializers
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Using rake 13.0.3
Using concurrent-ruby 1.1.8
Using i18n 1.8.10
Using minitest 5.14.4
Using tzinfo 2.0.4
Using zeitwerk 2.4.2
Using activesupport 6.1.3.1
Using builder 3.2.4
Using erubi 1.10.0
Using rack 1.5.2
Using nokogiri 1.11.2 (x64-mingw32)
Using rails-dom-testing 2.0.3
Using crass 1.0.6
Using loofah 2.9.0
Using rails-html-sanitizer 1.3.0
Using actionview 6.1.3.1
Using rack 2.2.3
```

Gemfile

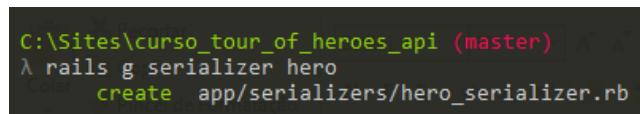
```
source 'https://rubygems.org'  
git_source(:github) { |repo| "https://github.com/#{repo}.git" }  
  
ruby '2.7.2'  
  
gem 'rails', '~> 6.1.3'  
gem 'sqlite3', '~> 1.4'  
gem 'puma', '~> 5.0'  
gem 'bootsnap', '>= 1.4.4', require: false  
  
group :development, :test do  
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]  
end  
  
group :development do  
  gem "faker", "~> 2.17"  
end  
  
gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]  
  
gem "active_model_serializers", "~> 0.10.12"
```

Gemfile

```
source 'https://rubygems.org'  
git_source(:github) { |repo| "https://github.com/#{repo}.git" }  
  
ruby '2.7.2'  
  
gem 'rails', '~> 6.1.3'  
gem 'sqlite3', '~> 1.4'  
gem 'puma', '~> 5.0'  
gem 'bootsnap', '>= 1.4.4', require: false  
gem "active_model_serializers", "~> 0.10.12"  
  
group :development, :test do  
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]  
end  
  
group :development do  
  gem "faker", "~> 2.17"  
end  
  
gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]
```

- No terminal, entre com o comando:

```
rails g serializer hero
```



```
C:\Sites\curso_tour_of_heroes_api (master) λ rails g serializer hero  
  Color   create  app/serializers/hero_serializer.rb
```

- Em "app" será criada uma pasta chamada "**serializers**", com o arquivo **hero_serializer.rb**

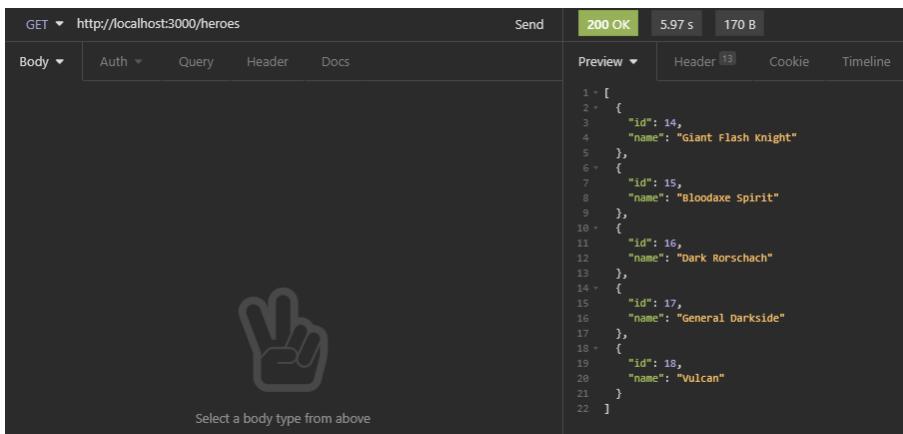
app\serializers\hero_serializer.rb

```
class HeroSerializer < ActiveModel::Serializer
  attributes :id, :name
end
```

- Pare e reinicie o servidor

- Voltando ao Insomnia:

- Na requisição "**Read all**", clique no botão "**Send**"



```
1: [
2:   {
3:     "id": 14,
4:     "name": "Giant Flash Knight"
5:   },
6:   {
7:     "id": 15,
8:     "name": "Bloodaxe Spirit"
9:   },
10:  {
11:    "id": 16,
12:    "name": "Dark Rorschach"
13:  },
14:  {
15:    "id": 17,
16:    "name": "General Darkside"
17:  },
18:  {
19:    "id": 18,
20:    "name": "Vulcan"
21:  }
22: ]
```

Frontend e Backend sites

- Desenvolvimento

localhost:4200/heroes => Angular exibe Heroes

localhost:3000/api/heroes => [{ id: 1, name: 'Thor' }]

- Produção (frontend e backend no mesmo servidor)

mysite.com/heroes => Angular exibe Heroes

mysite.com/api/heroes => [{ id: 1, name: 'Thor' }]

- Produção (frontend e backend em servidores separados)

mysite.com/heroes => Angular exibe Heroes

othersite.com/api/heroes => [{ id: 1, name: 'Thor' }]

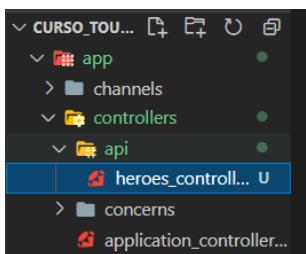
<Ctrl><p>

routes.rb

config/routes.rb

```
Rails.application.routes.draw do
  namespace :api, defaults: { format: :json } do
    resources :heroes
  end
end
```

- Em `app/controllers` criar uma nova pasta chamada `api`
- E arraste o arquivo `heroes_controller.rb` para dentro desta pasta



- Reinicie o servidor.

- Volte ao insomnia:

Na requisição "Read all" entre com:

<http://localhost:3000/api/heroes>

- Clique no botão "Send":

| GET ▾ | http://localhost:3000/api/heroes | Send | 200 OK | 6.88 s | 170 B |
|---|----------------------------------|-------|--------|--------|-------|
| Body ▾ | Auth ▾ | Query | Header | Docs | |
| <div style="text-align: center;"> 
Select a body type from above </div> <pre> 1 > [2 > [3 > { 4 > "id": 14, 5 > "name": "Giant Flash Knight" 6 > }, 7 > [8 > { 9 > "id": 15, 10 > "name": "Bloodaxe Spirit" 11 > }, 12 > [13 > { 14 > "id": 16, 15 > "name": "Dark Rorschach" 16 > }, 17 > [18 > { 19 > "id": 17, 20 > "name": "General Darkside" 21 > } 22 >] 23 >] 24 >] 25 >] 26 > 27 ></pre> | | | | | |
| <div style="display: flex; justify-content: space-between;"> Preview ▾ Header [12] Cookie Timeline </div> | | | | | |

Exibindo as rotas

No terminal, entre com o comando:

`rails routes`

```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails routes
 Prefix Verb   URI Pattern
 mat=>:json}           api_heroes GET    /api/heroes(.:format)
 rmat=>:json}           POST   /api/heroes(.:format)
 at=>:json}             api_heroe GET    /api/heroes/:id(.:format)
 rmat=>:json}           PATCH  /api/heroes/:id(.:format)
 rmat=>:json}           PUT    /api/heroes/:id(.:format)
 rmat=>:json}           DELETE /api/heroes/:id(.:format)
 ormat=>:json}
      rails_postmark_inbound_emails POST  /rails/action_mailbox/postmark/inbound_emails(.:format)
 es/postmark/inbound_emails#create
      rails_relay_inbound_emails POST  /rails/action_mailbox/relay/inbound_emails(.:format)
 es/relay/inbound_emails#create
      rails_sendgrid_inbound_emails POST  /rails/action_mailbox/sendgrid/inbound_emails(.:format)
 es/sendgrid/inbound_emails#create
      rails_mandrill_inbound_health_check GET   /rails/action_mailbox/mandrill/inbound_emails(.:format)
 es/mandrill/inbound_emails#health_check
      rails_mandrill_inbound_emails POST  /rails/action_mailbox/mandrill/inbound_emails(.:format)
 es/mandrill/inbound_emails#create
      rails_mailgun_inbound_emails POST  /rails/action_mailbox/mailgun/inbound_emails/mime(.:format)
 es/mailgun/inbound_emails#create
      rails_conductor_inbound_emails GET   /rails/conductor/action_mailbox/inbound_emails(.:format)
 _mailbox/inbound_emails#index
      POST   /rails/conductor/action_mailbox/inbound_emails(.:format)
 _mailbox/inbound_emails#create
      rails_conductor_inbound_email GET   /rails/conductor/action_mailbox/inbound_emails/:id(.:format)
 _mailbox/inbound_emails#show
      PATCH  /rails/conductor/action_mailbox/inbound_emails/:id(.:format)
 _mailbox/inbound_emails#update
      PUT    /rails/conductor/action_mailbox/inbound_emails/:id(.:format)
 _mailbox/inbound_emails#update
      DELETE /rails/conductor/action_mailbox/inbound_emails/:id(.:format)
 _mailbox/inbound_emails#destroy
```

Manage Environments

| Base Environment | dev | Color | Duplicate | ⋮ |
|------------------|---|-------|-----------|---|
| Sub Environments | 1 + {
2 "baseUrl": "http://localhost:3000/api"
3 } | | | |
| ● dev | | | | |

GET `_.baseUrl`/heroes

Send **200 OK** 660 ms 170 B

| Body | Auth | Query | Header | Docs |
|--|------|-------|--------|------|
| 
Select a body type from above | | | | |

Preview ▾ Header 12 Cookie Timeline

```
1 + [
2 + {
3   "id": 14,
4   "name": "Giant Flash Knight"
5 },
6 + {
7   "id": 15,
8   "name": "Bloodaxe Spirit"
9 },
10 + {
11   "id": 16,
12   "name": "Dark Rorschach"
13 },
14 + {
15   "id": 17,
16   "name": "General Darkside"
17 },
18 + {
19   "id": 18,
20   "name": "Vulcan"
21 }
22 ]
```

- Fazer essa troca nas demais requisições da variável "dev"

- Alterar o controller

app\controllers\api\heroes_controller.rb

```
class Api::HeroesController < ApplicationController
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes
  def index
    @heroes = Hero.all.sorted_by_name
    render json: @heroes
  end

  # GET /heroes/1
  def show
    render json: @hero
  end

  # POST /heroes
  def create
    @hero = Hero.new(hero_params)
    if @hero.save
      render json: @hero, status: :created, location: api_hero_url(@hero)
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end

  # PATCH/PUT /heroes/1
  def update
    if @hero.update(hero_params)
      render json: @hero
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end

  # DELETE /heroes/1
  def destroy
    @hero.destroy
  end

  private

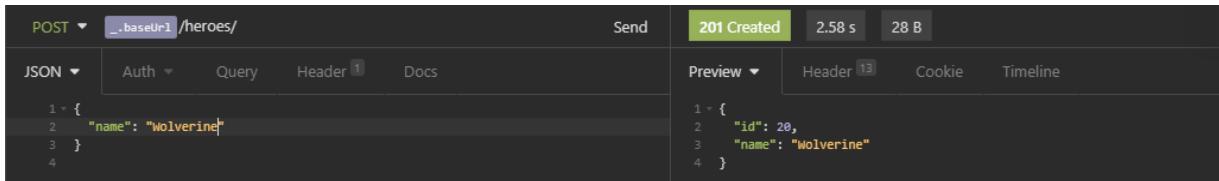
  # Use callbacks to share common setup or constraints between actions.

  def set_hero
    @hero = Hero.find(params[:id])
  end

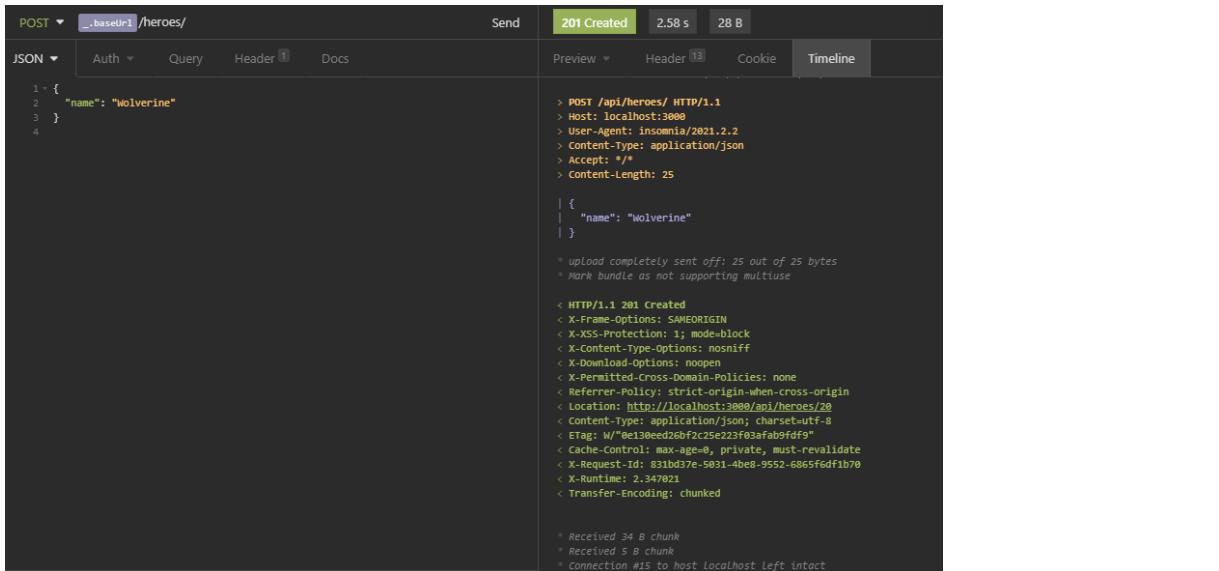
  # Only allow a list of trusted parameters through.

  def hero_params
    params.require(:hero).permit(:name)
  end
end
```

Criando um novo herói



The screenshot shows the Insomnia API client interface. A POST request is made to `_.baseUrl1/heroes/`. The JSON body contains `{ "name": "Wolverine" }`. The response is a **201 Created** status with a time of 2.58 s and a size of 28 B. The response body shows the created hero with `id: 20` and `name: "Wolverine"`.



The screenshot shows the Timeline tab for the same POST request. It displays the raw request and the raw response. The request header includes `Content-Type: application/json` and `Accept: */*`. The response header includes `X-Frame-Options: SAMEORIGIN`, `X-XSS-Protection: 1; mode=block`, `X-Content-Type-Options: nosniff`, `X-Download-Options: noopener`, `X-Permitted-Cross-Domain-Policies: none`, `Referrer-Policy: strict-origin-when-cross-origin`, `Location: http://localhost:3000/api/heroes/20`, `Content-Type: application/json; charset=utf-8`, `ETag: W/"0e13eed26bf2c25e223f03afab9fdf9"`, `Cache-Control: max-age=0, private, must-revalidate`, `X-Request-ID: 831bd37e-5031-4be8-9552-6865f6df1b70`, `X-Runtime: 2.347021`, and `Transfer-Encoding: chunked`. The response body shows the hero details.

Listando os heróis em ordem alfabética

`app\controllers\api\heroes_controller.rb`

```
class Api::HeroesController < ApplicationController
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes
  def index
    @heroes = Hero.all.order(:name)
    render json: @heroes
  end

  # GET /heroes/1
  def show
    render json: @hero
  end

  # POST /heroes
  def create
    @hero = Hero.new(hero_params)
    if @hero.save
      render json: @hero, status: :created, location: @hero
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end
end
```

```

# PATCH/PUT /heroes/1
def update
  if @hero.update(hero_params)
    render json: @hero
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# DELETE /heroes/1

def destroy
  @hero.destroy
end

private

# Use callbacks to share common setup or constraints between actions.
def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.
def hero_params
  params.require(:hero).permit(:name)
end

```

Screenshot of a REST API testing tool showing a successful GET request to '/heroes'.

| Method | Path | Send | Status | Time | Size |
|--------|---------|--------|-----------|----------|--------|
| GET | /heroes | | 200 OK | 2.34 s | 170 B |
| Body | | Auth ▾ | Preview ▾ | Header ▾ | Cookie |
| | | Query | | Timeline | |
| | | Header | | | |
| | | Docs | | | |

The preview pane shows the JSON response:

```

1: [
2:   {
3:     "id": 15,
4:     "name": "Bloodaxe Spirit"
5:   },
6:   {
7:     "id": 16,
8:     "name": "Dark Rorschach"
9:   },
10:  {
11:    "id": 17,
12:    "name": "General Darkside"
13:  },
14:  {
15:    "id": 14,
16:    "name": "Giant Flash Knight"
17:  },
18:  {
19:    "id": 18,
20:    "name": "Vulcan"
21:  }
22: ]

```

Below the preview pane, there is a large icon of a hand making a peace sign.

app\models\hero.rb

```

class Hero < ApplicationRecord
  validates :name, presence: true
  scope :sorted_by_name, -> { order(:name) }
end

```

Listando os heróis em ordem alfabética descendente

app\models\hero.rb

```
class Hero < ApplicationRecord
  validates :name, presence: true
  scope :sorted_by_name, -> { order(name: :desc) }
end
```

The screenshot shows a browser developer tools Network tab. A request to `$_baseUrl /heroes` is listed with a status of **200 OK**, a duration of **1.61 s**, and a size of **170 B**. The response body is displayed as JSON:

```
1 + [
2 +   {
3 +     "id": 18,
4 +     "name": "Vulcan"
5 +   },
6 +   {
7 +     "id": 14,
8 +     "name": "Giant Flash Knight"
9 +   },
10 +  {
11 +    "id": 17,
12 +    "name": "General Darkside"
13 +  },
14 +  {
15 +    "id": 16,
16 +    "name": "Dark Rorschach"
17 +  },
18 +  {
19 +    "id": 15,
20 +    "name": "Bloodaxe Spirit"
21 +  }
22 ]
```

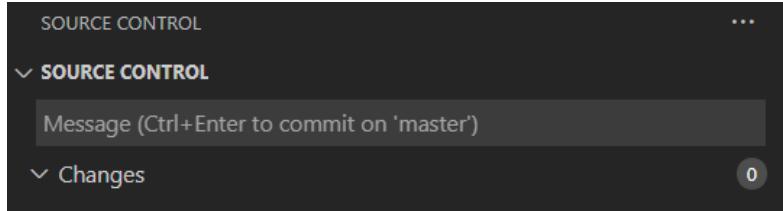
Fazendo o commit

The screenshot shows the Source Control interface in a code editor. The left sidebar shows a tree view with **SOURCE CONTROL** expanded. Under **Staged Changes**, there are four files: **Gemfile** (M), **Gemfile.lock** (M), **hero_serializer.rb** (app\serializers) (A), and **heroes_controller.rb** (app\controllers) (D). Under **Changes**, there are five files: **heroes_controller.rb** (app\controllers\api) (D), **hero.rb** (app\models) (M), and **routes.rb** (config) (M).

- Clique no botão "Commit"

The screenshot shows the Source Control interface after a commit. The commit message in the top bar is **Adiciona namespace API e ordena heroes**. The staged changes list shows four items: **heroes_controller.rb** (app\controllers) (D), **heroes_controller.rb** (app\controllers\api) (U), **hero.rb** (app\models) (M), and **routes.rb** (config) (M).

- Clique no botão "**Commit**"



- Finalmente envie para o Github, clicando no botão "**Push**" (Sinal de refresh na parte inferior da tela)

Aula 10 - Token (Parte 1)

Nesse vídeo eu mostro sobre como adicionar um token para manipular o recurso Heroes.

Rails Guides

https://guides.rubyonrails.org/layouts_and_rendering.html#the-layout-option

<https://guides.rubyonrails.org/security.html#sql-injection>

https://guides.rubyonrails.org/getting_started.html#using-concerns

Jogo da Memorização que usa a abordagem de token desse vídeo

<https://jogodamemorizacao.web.app/>

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

git branch

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/sites/curso_tour_of_heroes_api (master)
$ git branch
* master
```

Criando um novo branch e indo para ele

git checkout -b 10-token-parte-1

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/sites/curso_tour_of_heroes_api (master)
$ git checkout -b 10-token-parte-1
Switched to a new branch '10-token-parte-1'
```

git branch

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/sites/curso_tour_of_heroes_api (10-token-parte-1)
$ git branch
* 10-token-parte-1
  master
```

```
git commit -am "Fixa erro de location ao criar Hero"
```

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (10-token-parte-1)
$ git commit -am "Fixa erro de location ao criar Hero"
warning: LF will be replaced by CRLF in app/controllers/api/heroes_controller.rb.
The file will have its original line endings in your working directory
[10-token-parte-1 35beccf] Fixa erro de location ao criar Hero
 1 file changed, 1 insertion(+), 1 deletion(-)
```

Fazendo pesquisas

GET `./baseUrl/heroes` Send **200 OK** 637 ms 199 B

Body Auth Query 1 Header Docs

URL PREVIEW
`http://localhost:3000/api/heroes?term=dArk`

term `dArk` New name New value

Preview Header Cookie Timeline

```
1: [
2:   {
3:     "id": 15,
4:     "name": "Bloodaxe Spirit"
5:   },
6:   {
7:     "id": 16,
8:     "name": "Dark Rorschach"
9:   },
10:  {
11:    "id": 17,
12:    "name": "General Darkside"
13:  },
14:  {
15:    "id": 14,
16:    "name": "Giant Flash Knight"
17:  },
18:  {
19:    "id": 18,
20:    "name": "Vulcan"
21:  },
22:  {
23:    "id": 20,
24:    "name": "Wolverine"
25:  }
26: ]
```

```
Started GET "/api/heroes?term=dArk" for ::1 at 2021-04-13 07:26:39 -0300
Processing by Api::HeroesController#index as JSON
  Parameters: {"term"=>"dArk"}
  (0.1ms)  SELECT sqlite_version(*)
  ↳ app/models/hero.rb:3:in `block in <class:Hero>'
  Hero Load (1.6ms)  SELECT "heroes".* FROM "heroes" ORDER BY "heroes"."name" ASC
  ↳ app/controllers/api/heroes_controller.rb:9:in `index'
[active_model_serializers] Rendered ActiveModel::Serializer::CollectionSerializer with ActiveModelSerializers::Adapter::Attributes (0.97ms)
Completed 200 OK in 25ms (Views: 10.5ms | ActiveRecord: 3.3ms | Allocations: 1804)
```

app\controllers\api\heroes_controller.rb

```
class Api::HeroesController < ApplicationController
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes
  def index
    @heroes = Hero.search(params[:term]).sorted_by_name
    render json: @heroes
  end

  # GET /heroes/1
  def show
    render json: @hero
  end
end
```

```

# POST /heroes

def create
  @hero = Hero.new(hero_params)
  if @hero.save
    render json: @hero, status: :created, location: api_hero_url(@hero)
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# PATCH/PUT /heroes/1

def update
  if @hero.update(hero_params)
    render json: @hero
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# DELETE /heroes/1

def destroy
  @hero.destroy
end

private

# Use callbacks to share common setup or constraints between actions.

def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.

def hero_params
  params.require(:hero).permit(:name)
end

```

app\models\hero.rb

```

class Hero < ApplicationRecord
  validates :name, presence: true
  scope :search, -> (term) { where('LOWER(name) LIKE ?', "%#{term.downcase}%") if term.present? }
  scope :sorted_by_name, -> { order(:name) }
end

```

- No insomnia, em Read all, clique no botão "Send"

GET `_.baseUrl1 /heroes`

Query 1

Body ▾ Auth ▾

Header Docs

URL PREVIEW
`http://localhost:3000/api/heroes?term=dArK`

term: dArK

New name: New value

Send

200 OK | 2.26 s | 71 B

Preview ▾

```

1 [
2   [
3     {
4       "id": 16,
5       "name": "Dark Rorschach"
6     },
7     {
8       "id": 17,
9       "name": "General Darkside"
10    }
11 ]

```

```

Started GET "/api/heroes?term=dArK" for ::1 at 2021-04-13 07:54:56 -0300
Processing by Api::HeroesController#index as JSON
Parameters: {"term"=>"dArK"}
(0.2ms)  SELECT sqlite_version()
[...]
Hero Load (1.5ms)  SELECT "heroes".* FROM "heroes" WHERE (LOWER(name) LIKE '%dark%') ORDER BY "heroes"."name" ASC
[...]
[active_model_serializers] Rendered ActiveModel::Serializer::CollectionSerializer with ActiveModelSerializers::Adapter::Attributes (0.46ms)
Completed 200 OK in 17ms (Views: 5.9ms | ActiveRecord: 3.4ms | Allocations: 1466)

```

GET `_.baseUrl1 /heroes`

Query

Body ▾ Auth ▾

Header Docs

URL PREVIEW
`http://localhost:3000/api/heroes`

term: dArK

New name: New value

Send

200 OK | 659 ms | 199 B

Preview ▾

```

1 [
2   [
3     {
4       "id": 15,
5       "name": "Bloodaxe Spirit"
6     },
7     {
8       "id": 16,
9       "name": "Dark Rorschach"
10    },
11    {
12      "id": 17,
13      "name": "General Darkside"
14    },
15    {
16      "id": 14,
17      "name": "Giant Flash Knight"
18    },
19    {
20      "id": 18,
21      "name": "Vulcan"
22    },
23    {
24      "id": 20,
25      "name": "Wolverine"
26    }
27 ]

```

Fazendo o commit

SOURCE CONTROL

...

▼ SOURCE CONTROL

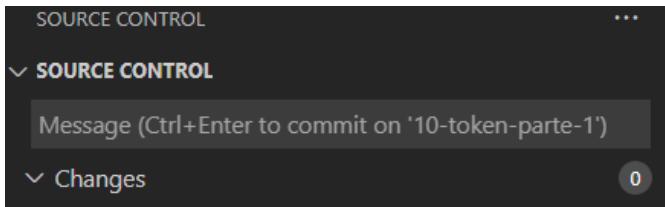
Adiciona busca na lista de heróis

▼ Changes

- hero_controller.rb app\controllers\api M
- hero.rb app\models M

+ M

- Clique no botão "commit"



Token

- Crie o arquivo authenticable.rb dentro da pasta app/controllers/concerns:

app\controllers\concerns\autenticable.rb

```
module Autenticable
  private

  def authenticate_with_token
    @token ||= request.headers['Authorization']

    unless valid_token?
      render json: { errors: 'Por favor, forneça qualquer token no header Authorization' },
      status: :unauthorized
    end
  end

  def valid_token?
    @token.present?
  end
end
```

app\controllers\api\heroes_controller.rb

```
class Api::HeroesController < ApplicationController
  include Autenticable

  before_action :authenticate_with_token
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes
  def index
    @heroes = Hero.search(params[:term]).sorted_by_name
    render json: @heroes
  end

  # GET /heroes/1
  def show
    render json: @hero
  end
```

```

# POST /heroes
def create
  @hero = Hero.new(hero_params)
  if @hero.save
    render json: @hero, status: :created, location: api_hero_url(@hero)
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# PATCH/PUT /heroes/1
def update
  if @hero.update(hero_params)
    render json: @hero
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# DELETE /heroes/1
def destroy
  @hero.destroy
end

private

# Use callbacks to share common setup or constraints between actions.
def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.
def hero_params
  params.require(:hero).permit(:name)
end

```

- No insomnia, no request **Read all**, clique no **botão Send**

The screenshot shows a REST client interface with the following details:

- Method:** GET
- URL:** `baseUrl /heroes`
- Status:** 401 Unauthorized
- Time:** 3.19 s
- Size:** 71 B
- Last Updated:** 6 Minutes Ago
- Body:** Auth, Query, Header, Docs
- Preview:** Header (11), Cookie, Timeline
- Response Preview:**

```

1 < {
2   "errors": "Por favor, forneça qualquer token no header Authorization"
3 }
```
- Icon:** A hand icon pointing upwards.
- Text at bottom:** Select a body type from above

Manage Environments

| | |
|----------------------|---|
| Base Environment ? | dev |
| Sub Environments + ▾ | <pre> 1 = { 2 "baseUrl": "http://localhost:3000/api", 3 "token": "token123" 4 }</pre> |
| dev | |

GET ▾ `_.baseUrl/heroes` Send

| | | | | |
|---|------|-------|----------|------|
| Body | Auth | Query | Header 1 | Docs |
| Authorization <code>_.token</code> <input checked="" type="checkbox"/> <input type="button" value="Delete"/>
<input type="button" value="New header"/> New value | | | | |

- Fazer isso em todas as requisições

Criando um novo herói para testar

POST ▾ `_.baseUrl/heroes/` Send **201 Created** 3.09 s 34 B

| | | | | |
|---|------|-------|----------|------|
| JSON | Auth | Query | Header 2 | Docs |
| <pre> 1 = { 2 "name": "Wolverine Token" 3 } 4 }</pre> | | | | |
| Preview Header 13 Cookie Timeline <pre> 1 = { 2 "id": 21, 3 "name": "Wolverine Token" 4 }</pre> | | | | |

Testando atualização de um herói

PUT ▾ `_.baseUrl/heroes/15` Send **200 OK** 1.18 s 28 B

| | | | | |
|---|------|-------|----------|------|
| JSON | Auth | Query | Header 2 | Docs |
| <pre> 1 = { 2 "name": "Hulk Dois" 3 } 4 }</pre> | | | | |
| Preview Header 12 Cookie Timeline <pre> 1 = { 2 "id": 15, 3 "name": "Hulk Dois" 4 }</pre> | | | | |

Testando a exclusão de um herói

DELETE ▾ `_.baseUrl/heroes/21` Send **204 No Content** 834 ms 0 B

| | | | | |
|--|------|-------|----------|------|
| JSON | Auth | Query | Header 2 | Docs |
| Content-Type application/json <input checked="" type="checkbox"/> <input type="button" value="Delete"/> | | | | |
| Authorization <code>_.token</code> <input checked="" type="checkbox"/> <input type="button" value="Delete"/> | | | | |
| <input type="button" value="New header"/> New value | | | | |

No body returned for response

Não necessitar de token para exibir um ou todos os heróis

app\controllers\api\heroes_controller.rb

```
class Api::HeroesController < ApplicationController
  include Autenticable

  before_action :authenticate_with_token, except: %i[index show]
  before_action :set_hero, only: %i[show update destroy]

  # GET /heroes

  def index
    @heroes = Hero.search(params[:term]).sorted_by_name
    render json: @heroes
  end

  # GET /heroes/1

  def show
    render json: @hero
  end

  # POST /heroes

  def create
    @hero = Hero.new(hero_params)

    if @hero.save
      render json: @hero, status: :created, location: api_hero_url(@hero)
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end

  # PATCH/PUT /heroes/1

  def update
    if @hero.update(hero_params)
      render json: @hero
    else
      render json: @hero.errors, status: :unprocessable_entity
    end
  end

  # DELETE /heroes/1

  def destroy
    @hero.destroy
  end

  private

  # Use callbacks to share common setup or constraints between actions.
```

```

def set_hero
  @hero = Hero.find(params[:id])
end

# Only allow a list of trusted parameters through.

```

```

def hero_params
  params.require(:hero).permit(:name)
end
end

```

GET `$_baseUrl/heroes`

Send **200 OK** 3.94 s 193 B

| Body | Auth | Query | Header | Docs |
|---|------|-------|---------------------|------|
| | | | <code>_token</code> | |
| Authorization: <code>_token</code>
New header: New value | | | | |

Preview Header 12 Cookie Timeline

```

1 [
2   {
3     "id": 16,
4     "name": "Dark Rorschach"
5   },
6   {
7     "id": 17,
8     "name": "General Darkside"
9   },
10  {
11    "id": 14,
12    "name": "Giant Flash Knight"
13  },
14  {
15    "id": 15,
16    "name": "Hulk Dois"
17  },
18  {
19    "id": 18,
20    "name": "Vulcan"
21  },
22  {
23    "id": 20,
24    "name": "Wolverine"
25 }
26 ]

```

GET `$_baseUrl/heroes/15`

Send **200 OK** 611 ms 28 B

| Body | Auth | Query | Header | Docs |
|---|------|-------|---------------------|------|
| | | | <code>_token</code> | |
| Authorization: <code>_token</code>
New header: New value | | | | |

Preview Header 12 Cookie Timeline

```

1 {
2   "id": 15,
3   "name": "Hulk Dois"
4 }

```

Gerando uma chave no Rails

[rails secret](#)

```
C:\Sites\curso_tour_of_heroes_api (10-token-parte-1) AaBbCcDd AaBbCcDk AaBbCc AaBbCc AaB
λ rails secret
2658270fad3bc6a813601aa1c651d7e9ddb162e3ed58a230366ccf238b3798fbfa3549dc91c4cbc8548478d8e44c7a1576f9b3360c0e8544172899a3e24d93b
```

Editando as credenciais

[EDITOR="code --wait" bin/rails credentials:edit](#)

Será aberto o arquivo de credenciais. Complemente com a linha abaixo e salve o arquivo:

10812.credentials.yml

```
# aws:  
# access_key_id: 123  
# secret_access_key: 345  
  
# Used as the base secret for all MessageVerifiers in Rails, including the one protecting cookies.  
secret_key_base:  
6f1c70c07ac9b3232b7361dcc7156cf104ec11af00dcacb94aa82c473574103aaacd20dd5d6abc082d17a19bce922c6242  
dc4b455f87e188a1b766e6d524984d  
  
token:  
2658270fad3bc6a813601aa1c651d7e9ddb162e3ed58a230366ccf238b3798fbfa3549dc91c4cbc8548478d8e44c7a157  
6f9b3360c0e8544172899a3e24d93b
```

Fechando essa aba:

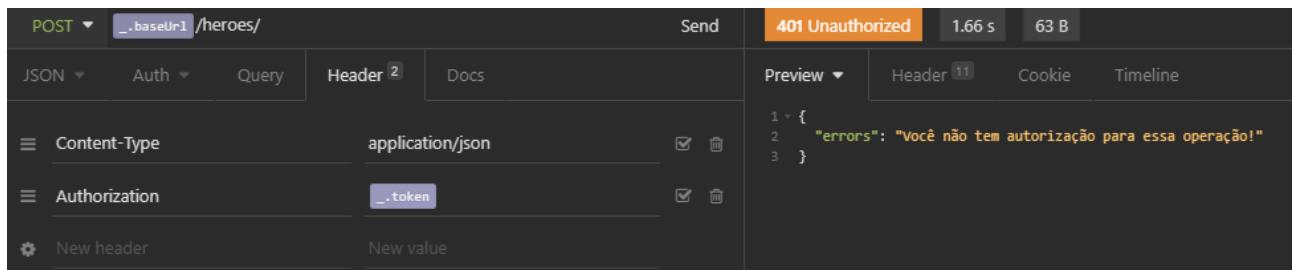
```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (10-token-parte-1)  
$ EDITOR="code --wait" bin/rails credentials:edit  
File encrypted and saved.
```

app\controllers\concerns\autenticable.rb

```
module Autenticable  
  private  
  
  def authenticate_with_token  
    @token ||= request.headers['Authorization']  
  
    unless valid_token?  
      render json: { errors: 'Você não tem autorização para essa operação!' },  
              status: :unauthorized  
    end  
  end  
  
  def valid_token?  
    @token.present? && @token == Rails.application.credentials.token  
  end  
end
```

- Voltando para o insomnia

Tentando criar um herói:



The screenshot shows the insomnia REST client interface. A POST request is being made to `./baseUrl/1/heroes/`. The request has two headers: `Content-Type: application/json` and `Authorization: .token`. The response is a **401 Unauthorized** status with a response time of **1.66 s** and a size of **63 B**. The response body is a JSON object with an `errors` key containing the value `"Você não tem autorização para essa operação!"`.

| Header | Value | Preview | Header | Cookie | Timeline |
|---------------|------------------|---|--------|--------|----------|
| Content-Type | application/json | 1: {
2: "errors": "Você não tem autorização para essa operação!"
3: } | 11 | | |
| Authorization | .token | | | | |

- Altere a variável de ambiente para:

```
1: {
2:   "baseUrl": "http://localhost:3000/api",
3:   "token": "2658270fad3bc6a813e01aa1c651d7e9ddb162e3ed58a230366ccf238b3798fbfa3549dc91c4cbc8548478d8e44c7a1576f9b3360c0e8544172899a3e24d938"
4: }
```

- Agora crie um novo herói:

```
1: {
2:   "id": 22,
3:   "name": "Wolverine Token Secret"
4: }
```

- Atualize o nome do herói de id 15

```
1: {
2:   "id": 15,
3:   "name": "Hulk Dois Secreto"
4: }
```

- Apague o herói de id 22

```
1: ...
```

Fazendo o commit e envio das alterações feitas para o Github

```
Adiciona token secreto para manipular Heros
```

- Changes (3)
 - heroes_controller.rb app\controllers\api M
 - autenticable.rb app\controllers\concerns U
 - credentials.yml.enc config M

- Clique no botão "Commit"

```
Message (Ctrl+Enter to commit on '10-token-part...' ...)
```

- Changes (0)

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (10-token-parte-1)
$ git status
On branch 10-token-parte-1
nothing to commit, working tree clean
```

Voltando para o branch master:

```
git checkout master
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (10-token-parte-1)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
```

```
git branch
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git branch
  10-token-parte-1
* master
```

Fazendo o merge:

```
git merge --no-ff 10-token-parte-1
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/sites/curso_tour_of_heroes_api (master)
$ git merge --no-ff 10-token-parte-1
Merge made by the 'recursive' strategy.
 app/controllers/api/heroes_controller.rb | 22 ++++++-----+
 app/controllers/concerns/autenticable.rb | 16 ++++++-----
 app/models/hero.rb                   |  4 +-+
 config/credentials.yml.enc          |  2 ++
 4 files changed, 33 insertions(+), 11 deletions(-)
 create mode 100644 app/controllers/concerns/autenticable.rb
```

Fazendo o push para enviar para o GitHub

```
git push
```

```
betol@DESKTOP-85HCHH0 MINGW64 /c/sites/curso_tour_of_heroes_api (master)
$ git push
Enumerating objects: 35, done.
Counting objects: 100% (35/35), done.
Delta compression using up to 2 threads
Compressing objects: 100% (22/22), done.
Writing objects: 100% (25/25), 3.01 KiB | 81.00 KiB/s, done.
Total 25 (delta 14), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (14/14), completed with 6 local objects.
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 9f77b64..b3a11f6  master -> master
```

Para também enviar o branch **10-token-parte-1**

```
git push origin 10-token-parte-1
```

```

betol1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push origin 10-token-parte-1
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for '10-token-parte-1' on GitHub by visiting:
remote:     https://github.com/betopinheiro1005/curso_tour_of_heroes_api/pull/new/10
remote:
remote:
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 * [new branch]      10-token-parte-1 -> 10-token-parte-1

```

A screenshot of a GitHub repository page for 'curso_tour_of_heroes_api'. The page shows the master branch with 2 branches and 0 tags. The commit history for the master branch shows 12 commits from betopinheiro1005, all merged from '10-token-parte-1'. The commits are dated from 9 minutes ago to 23 days ago. The repository has 1 star, 0 forks, and 0 issues. It includes sections for About, Releases, Packages, and Languages.

A screenshot of a GitHub repository page for 'curso_tour_of_heroes_api'. The page shows the master branch with 2 branches and 0 tags. The commit history for the master branch shows 12 commits from betopinheiro1005, all merged from '10-token-parte-1'. The commits are dated from 9 minutes ago to 23 days ago. The repository has 1 star, 0 forks, and 0 issues. It includes sections for About, Releases, Packages, and Languages.

A screenshot of a GitHub repository page for 'curso_tour_of_heroes_api'. The page shows the master branch with 2 branches and 0 tags. The commit history for the master branch shows 12 commits from betopinheiro1005, all merged from '10-token-parte-1'. The commits are dated from 9 minutes ago to 23 days ago. The repository has 1 star, 0 forks, and 0 issues. It includes sections for Overview, Yours, Active, Stale, All branches, and a search bar for branches.

A screenshot of a GitHub repository page for 'curso_tour_of_heroes_api'. The page shows the master branch with 2 branches and 0 tags. The commit history for the master branch shows 12 commits from betopinheiro1005, all merged from '10-token-parte-1'. The commits are dated from 9 minutes ago to 23 days ago. The repository has 1 star, 0 forks, and 0 issues. It includes sections for Overview, Yours, Active, Stale, All branches, and a search bar for branches.

A screenshot of a GitHub repository page for 'curso_tour_of_heroes_api'. The page shows the master branch with 2 branches and 0 tags. A modal window titled 'Switch branches/tags' is open, showing a search bar with placeholder text 'Find or create a branch...'. Below the search bar are tabs for 'Branches' (selected) and 'Tags'. Under the 'Branches' tab, there is a checked checkbox next to 'master' and a radio button labeled 'default' next to it. Below these are two other branches: '10-token-parte-1' and a link to 'View all branches'.

Aula 11 - Token (Parte 2)

Nesse vídeo eu faço a implementação final de token com uma coluna na tabela.

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

Adicionando um campo chamado token na tabela heroes

rails g migration AddTokenToHeroes token:string:index

```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails g migration AddTokenToHeroes token:string:index
  invoke  active_record
    create    db/migrate/20210414082035_add_token_to_heroes.rb
```

db\migrate\20210414082035_add_token_to_heroes.rb

```
class AddTokenToHeroes < ActiveRecord::Migration[6.1]
  def change
    add_column :heroes, :token, :string, null: false
    add_index :heroes, :token
  end
end
```

Apagando todos os registros da tabela heroes

```
rails c
Hero.delete_all
```

Rodando a migration

```
rails db:migrate
```

```
C:\Sites\curso_tour_of_heroes_api (master)
λ rails db:migrate
== 20210322030728 CreateHeroes: migrating =====
-- create_table(:heroes)
-> 0.0722s
== 20210322030728 CreateHeroes: migrated (0.0731s) =====
== 20210414082035 AddTokenToHeroes: migrating =====
-- add_column(:heroes, :token, :string, {null=>false})
-> 0.0655s
-- add_index(:heroes, :token)
-> 0.0021s
== 20210414082035 AddTokenToHeroes: migrated (0.0693s) =====
```

Criando um novo branch

```
git checkout -b 11-token-parte-2
```

```
beto1@DESKTOP-85HCHHO MINGW64 /c/sites/curso_tour_of_heroes_api (master)
$ git checkout -b 11-token-parte-2
Switched to a new branch '11-token-parte-2'
```

```
git add .
```

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ git add .
warning: LF will be replaced by CRLF in db/migrate/20210322030728_create_heroes.rb.
The file will have its original line endings in your working directory
warning: LF will be replaced by CRLF in db/migrate/20210414082035_add_token_to_heroes.rb.
The file will have its original line endings in your working directory
```

```
git commit -m "Adiciona coluna token em Heroes"
```

```
beto1@DESKTOP-85HCHHO MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ git commit -m "Adiciona coluna token em Heroes"
[11-token-parte-2 85259b4] Adiciona coluna token em Heroes
 4 files changed, 10 insertions(+), 7 deletions(-)
  create mode 100644 db/migrate/20210414082035_add_token_to_heroes.rb
```

app\controllers\api\heroes_controller.rb

```
class Api::HeroesController < ApplicationController
  include Autenticable

  before_action :authenticate_with_token
  before_action :set_hero, only: [:show, :update, :destroy]

  # GET /heroes

  def index
    @heroes = Hero.by_token(@token).search(params[:term]).sorted_by_name
    render json: @heroes
  end

  # GET /heroes/1

  def show
    render json: @hero
  end

  # POST /heroes

  def create
    @hero = Hero.new(hero_params.to_h.merge!({ token: @token }))
  end
```

```

if @hero.save
  render json: @hero, status: :created, location: api_hero_url(@hero)
else
  render json: @hero.errors, status: :unprocessable_entity
end
end

# PATCH/PUT /heroes/1

def update
  if @hero.update(hero_params)
    render json: @hero
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end

# DELETE /heroes/1

def destroy
  @hero.destroy
end

private

# Use callbacks to share common setup or constraints between actions.

def set_hero
  @hero = Hero.by_token(@token).find(params[:id])
end

# Only allow a list of trusted parameters through.

def hero_params
  params.require(:hero).permit(:name)
end

```

- Entre no console do rails com os seguintes comandos:

`rails c`

```

irb(main):004:0> hero_params = { name: 'Thor' }
=> {:name=>"Thor"}
irb(main):005:0> hero_params.to_h
=> {:name=>"Thor"}
irb(main):006:0> hero_params.size
=> 1
irb(main):007:0> hero_params
=> {:name=>"Thor"}
irb(main):008:0> hero_params.to_h.merge!( { token: 123 } )
=> {:name=>"Thor", :token=>123}
irb(main):009:0> hero_params
=> {:name=>"Thor", :token=>123}
irb(main):010:0> |

```

app\controllers\concerns\autenticable.rb

```
module Autenticable
  private
  def authenticate_with_token
    @token ||= request.headers['Authorization']
    unless valid_token?
      render json: { errors: 'Forneça um header Authorization para se identificar (qualquer um com pelo menos 10 caracteres).'},
      status: :unauthorized
    end
  end
  def valid_token?
    @token.present? && @token.size >= 10
  end
end
```

app\models\hero.rb

```
class Hero < ApplicationRecord
  validates :name, :token, presence: true
  scope :by_token, ->(token) { where(token: token) }
  scope :search, ->(term) { where('LOWER(name) LIKE ?', "%#{term.downcase}%") if term.present? }
  scope :sorted_by_name, -> { order(:name) }
end
```

- No terminal, suba o servidor:

```
rails s
```

```
C:\Sites\curso_tour_of_heroes_api (11-token-parte-2)
λ rails s
=> Booting Puma
=> Rails 6.1.3.1 application starting in development
=> Run `bin/rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR1 not implemented, signal based restart unavailable!
*** SIGHUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Puma version: 5.2.2 (ruby 2.7.2-p137) ("Fettisdagsbulle")
* Min threads: 5
* Max threads: 5
* Environment: development
* PID: 24420
* Listening on http://[::1]:3000
* Listening on http://127.0.0.1:3000
Use Ctrl-C to stop
|
```

- No insomnia, na requisição **Read all**, clique no botão **Send**

GET `_.baseUrl` /heroes

Send

401 Unauthorized 5.18 s 109 B Just Now

Preview ▾ Header [1] Cookie Timeline

```
1 + {
2   "errors": "Forneça um header Authorization para se identificar (qualquer um com
pelo menos 10 caracteres)."
3 }
```

- No terminal, entre com o seguinte comando:

rails secret

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ rails secret
b2ed35d4f70761923d30ea61970090dcf079497787be4b08d96ade633b6b7b95ccbd4e8ed0f6f49abebcf5
dd021616c609a581b7359bb16b83ac7ad12db8b51b
```

- Copie os 10 primeiros caracteres da chave gerada.

- No insomnia, em **Manage Environments** entre com esses caracteres em **token**:

```
{
  "baseUrl": "http://localhost:3000/api",
  "token": "b2ed35d4f7"
}
```

- No insomnia, na requisição **Create**, crie um herói

POST `_.baseUrl` /heroes/

Send

201 Created 1.4 s 27 B

Preview ▾ Header [13] Cookie Timeline

```
1 + {
2   "id": 1,
3   "name": "Wolverine"
4 }
```

- No insomnia, na requisição **Read all**, clique no botão **Send**:

GET `_.baseUrl` /heroes

Send

200 OK 1.27 s 29 B

Preview ▾ Header [12] Cookie Timeline

```
1 + [
2   {
3     "id": 1,
4     "name": "Wolverine"
5   }
6 ]
```

Usando um token diferente

GET `_.baseUrl` /heroes

Send

200 OK 854 ms 2 B

Preview ▾ Header [12] Cookie Timeline

```
1 + []
```

- Crie um herói chamado Hulk usando esse token

POST `_baseUrl/heroes/` Send **201 Created** 1.15 s 22 B

Header 2

Content-Type: application/json

Authorization: wwwwwwwwww

New header: New value

Preview:

```
1: {
2:   "id": 2,
3:   "name": "Hulk"
4: }
```

- Liste os registros com esse token

GET `_baseUrl/heroes` Send **200 OK** 669 ms 24 B

Header 1

Authorization: wwwwwwwwww

New header: New value

Preview:

```
1: [
2:   {
3:     "id": 2,
4:     "name": "Hulk"
5:   }
6: ]
```

- Liste os registros com o token definido nas variáveis de ambiente

GET `_baseUrl/heroes` Send **200 OK** 852 ms 29 B

Header 1

Authorization: _token

New header: New value

Preview:

```
1: [
2:   {
3:     "id": 1,
4:     "name": "Wolverine"
5:   }
6: ]
```

= Crie um novo herói chamado Thor com o token definido nas variáveis de ambiente

= Liste os registros com esse token

GET `_baseUrl/heroes` Send **200 OK** 701 ms 52 B

Header 1

Authorization: _token

New header: New value

Preview:

```
1: [
2:   {
3:     "id": 3,
4:     "name": "Thor"
5:   },
6:   {
7:     "id": 1,
8:     "name": "Wolverine"
9:   }
10: ]
```

Exibindo os registros com o DBeaver

The screenshot shows the DBeaver interface with the 'heroes' table selected. The table has columns: id, abc_name, abc_created_at, abc_updated_at, and abc_token. The data is as follows:

| id | abc_name | abc_created_at | abc_updated_at | abc_token |
|----|-----------|----------------------------|----------------------------|------------|
| 1 | Wolverine | 2021-04-15 02:06:21.807259 | 2021-04-15 02:06:21.807259 | b2ed35d4f7 |
| 2 | Hulk | 2021-04-15 06:46:30.214642 | 2021-04-15 06:46:30.214642 | wwwwwwwwww |
| 3 | Thor | 2021-04-15 06:52:10.822368 | 2021-04-15 06:52:10.822368 | b2ed35d4f7 |

Fazendo o commit no branch 11-token-parte-2

```
git status
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ git status
On branch 11-token-parte-2
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified: app/controllers/api/heroes_controller.rb
    modified: app/controllers/concerns/autenticable.rb
    modified: app/models/hero.rb

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    .vscode/

no changes added to commit (use "git add" and/or "git commit -a")
```

```
git commit -am "Altera CRUD para token no banco de dados"
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ git commit -am "Altera CRUD para token no banco de dados"
[11-token-parte-2 16093a7] Altera CRUD para token no banco de dados
 3 files changed, 48 insertions(+), 34 deletions(-)
 rewrite app/controllers/concerns/autenticable.rb (93%)
```

- Voltando para o branch master:

```
git checkout master
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (11-token-parte-2)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
```

- Exibindo os branches existentes:

```
git branch
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git branch
  10-token-parte-1
  11-token-parte-2
* master
```

- Fazendo o merge

```
git merge --no-ff 11-token-parte-2
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git merge --no-ff 11-token-parte-2
Merge made by the 'recursive' strategy.
 app/controllers/api/heroes_controller.rb      | 25 ++++++-----
 app/controllers/concerns/autenticable.rb     | 39 ++++++-----
 app/models/hero.rb                          | 12 +++++-
 db/migrate/20210322030728_create_heroes.rb |  5 ---
 db/migrate/20210414082035_add_token_to_heroes.rb |  6 +++
 db/schema.rb                                |  4 ++
 6 files changed, 54 insertions(+), 37 deletions(-)
 create mode 100644 db/migrate/20210414082035_add_token_to_heroes.rb
```

- Enviando o branch para o GitHub

```
git push origin 11-token-parte-2
```

- Enviando o master para o GitHub

```
git push
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 231 bytes | 77.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 b3a11f6..6e2ac21  master -> master
```

The screenshot shows a GitHub repository page for 'curso_tour_of_heroes_api'. At the top, there are navigation links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Below that, there are buttons for Go to file, Add file, and Code. The repository has 3 branches and 0 tags. A recent commit by betopinheiro1005 is shown: 'Merge branch '11-token-parte-2'' (gezac21, 8 minutes ago). The repository has 15 commits in total. The code structure includes folders for app, bin, config, db, lib/tasks, log, public, storage, test, tmp, and vendor. Each folder has a brief description and a timestamp. To the right, there are sections for About (Curso de Ruby on Rails como API), Releases (No releases published, Create a new release), Packages (No packages published, Publish your first package), and Languages (Ruby 99.0%, HTML 1.0%).

[betopinheiro1005 / curso_tour_of_heroes_api](#)

Unwatch 1 Star 0 Fork 0

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Overview Yours Active Stale All branches Search branches...

Default branch

| | | | |
|--------|---|---------|--|
| master | Updated 9 minutes ago by betopinheiro1005 | Default | |
|--------|---|---------|--|

Your branches

| | | | | | |
|------------------|--|-----|------------------|--|--|
| 11-token-parte-2 | Updated 15 minutes ago by betopinheiro1005 | 1 0 | New pull request | | |
| 10-token-parte-1 | Updated yesterday by betopinheiro1005 | 4 0 | New pull request | | |

Active branches

| | | | | | |
|------------------|--|-----|------------------|--|--|
| 11-token-parte-2 | Updated 15 minutes ago by betopinheiro1005 | 1 0 | New pull request | | |
| 10-token-parte-1 | Updated yesterday by betopinheiro1005 | 4 0 | New pull request | | |

Aula 12 - Deploy da API

Nesse vídeo eu mostro como fazer o deploy da API e tratar o CORS.

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Repositório do Frontend em Angular

<https://github.com/peimelo/heroes-crud>

Site sobre CORS

<https://developer.mozilla.org/pt-BR/docs/Web/HTTP/CORS>

Gem rack-cors

<https://github.com/cyu/rack-cors>

Configuração do Procfile no RoR

<https://devcenter.heroku.com/articles/getting-started-with-rails6#create-a-procfile>

Rails Guides

https://guides.rubyonrails.org/active_record_validations.html#uniqueness

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

Impedindo a criação de um herói com nome já existente no BD

app\models\hero.rb

```
class Hero < ApplicationRecord
  validates :name, :token, presence: true
  validates :name, uniqueness: { scope: :token, case_sensitive: false }

  scope :by_token, ->(token) { where(token: token) }
  scope :search, ->(term) { where('LOWER(name) LIKE ?', "%#{term.downcase}%") if term.present? }
  scope :sorted_by_name, -> { order(:name) }
  # scope :sorted_by_name, -> { order(name: :desc) }
end
```

The screenshot shows a Postman request to `/heroes/`. The method is POST, and the URL is `http://localhost:3001/heroes/`. The request body is JSON with the following content:

```
1: {
2:   "name": "Thor"
3: }
```

The response status is **422 Unprocessable Entity**, with a response time of **1.07 s** and a response size of **35 B**. The response body is:

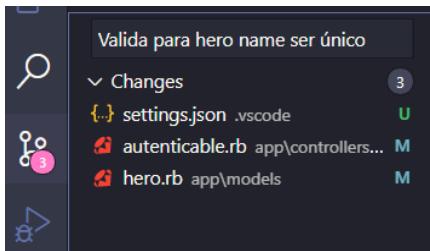
```
1: {
2:   "name": [
3:     "has already been taken"
4:   ]
5: }
```

Criando o branch desta aula

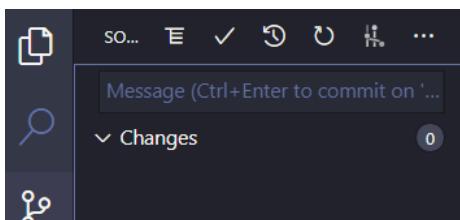
```
git checkout -b 12-deploy-api
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git checkout -b 12-deploy-api
Switched to a new branch '12-deploy-api'
```

Salvando as alterações feitas



- Faça o commit



Deploy

- Crie o arquivo **Procfile** no diretório raiz

Procfile

```
release: rails db:migrate
web: bundle exec puma -t 5:5 -p ${PORT:-3000} -e ${RACK_ENV:-development}
```

Adicionando a GEM do PostGreSQL

- No terminal entre com o seguinte comando:

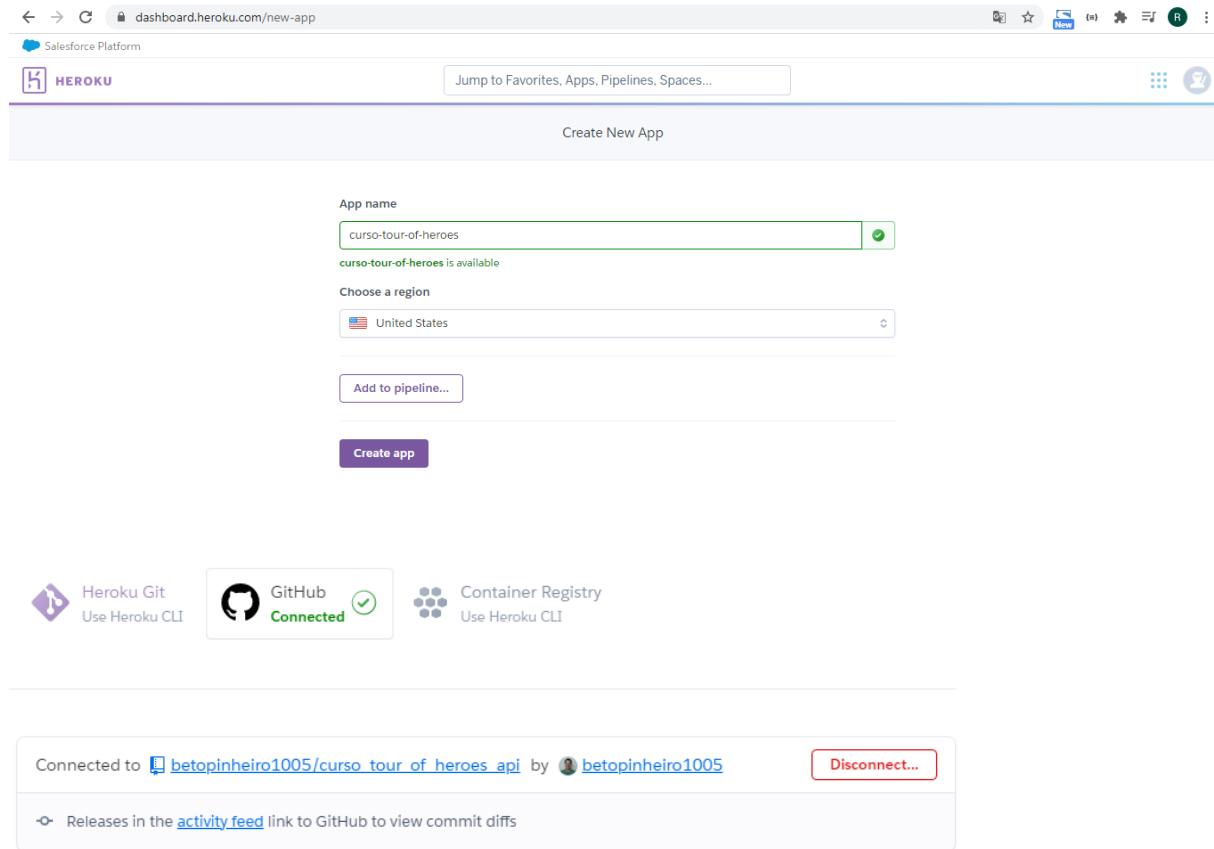
```
bundle add pg
```

```
C:\Sites\curso_tour_of_heroes_api (12-deploy-api)
λ bundle add pg
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/..
Resolving dependencies...
Using rake 13.0.3
Using concurrent-ruby 1.1.8
Using i18n 1.8.10
Using minitest 5.14.4
Using tzinfo 2.0.4
Using zeitwerk 2.4.2
Using activesupport 6.1.3.1
Using builder 3.2.4
Using erubi 1.10.0
Using racc 1.5.2
Using nokogiri 1.11.2 (x64-mingw32)
Using rails-dom-testing 2.0.3
Using crass 1.0.6
Using loofah 2.9.0
Using rails-html-sanitizer 1.3.0
Using actionview 6.1.3.1
Using rack 2.2.3
Using rack-test 1.1.0
Using actionpack 6.1.3.1
Using nio4r 2.5.7
Using websocket-extensions 0.1.5
Using websocket-driver 0.7.3
Using actioncable 6.1.3.1
Using globalid 0.4.2
Using activejob 6.1.3.1
Using activemodel 6.1.3.1
Using activerecord 6.1.3.1
Using marcel 1.0.0
Using mini_mime 1.0.3
Using activestorage 6.1.3.1
Using mail 2.7.1
```

Gemfile

```
source 'https://rubygems.org'  
git_source(:github) { |repo| "https://github.com/#{repo}.git" }  
  
ruby '2.7.2'  
  
gem 'rails', '~> 6.1.3'  
gem 'puma', '~> 5.0'  
gem 'bootsnap', '>= 1.4.4', require: false  
gem "active_model_serializers", "~> 0.10.12"  
  
group :development, :test do  
  gem 'sqlite3', '~> 1.4'  
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]  
end  
  
group :development do  
  gem "faker", "~> 2.17"  
end  
  
gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]  
  
group :production do  
  gem "pg", "~> 1.2"  
end
```

Criando um novo projeto no Heroku



The screenshot shows the Heroku dashboard at dashboard.heroku.com/new-app. The page has a header with the Heroku logo and a search bar. Below the header, there's a button labeled "Create New App". The main form for creating a new app is filled out with:

- App name:** curso-tour-of-heroes
- Choose a region:** United States
- Add to pipeline...** (button)
- Create app** (button)

At the bottom of the page, there are three integration cards:

- Heroku Git**: Use Heroku CLI
- GitHub Connected**: GitHub Connected
- Container Registry**: Use Heroku CLI

A footer bar at the bottom indicates the user is connected to the GitHub repository [betopinheiro1005/curso_tour_of_heroes_api](#) by user [betopinheiro1005](#), with a "Disconnect..." button and a note about releases in the activity feed.

Enable automatic deploys from GitHub

Every push to the branch you specify here will deploy a new version of this app. Deployes happen automatically: be sure that this branch is always in a deployable state and any tests have passed before you push. [Learn more](#).

Choose a branch to deploy

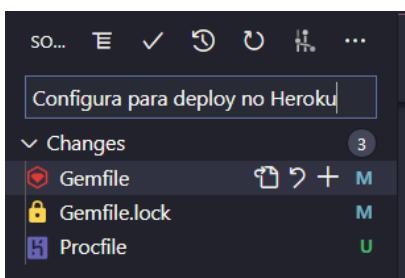
master

Wait for CI to pass before deploy
Only enable this option if you have a Continuous Integration service configured on your repo.

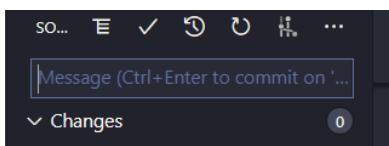
Enable Automatic Deploys

- Clique no botão "Enable Automatic Deployes"

Salvando as alterações feitas



- Faça o commit



- Volte para o branch master

git checkout master

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (12-deploy-api)
$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
```

- Faça o merge

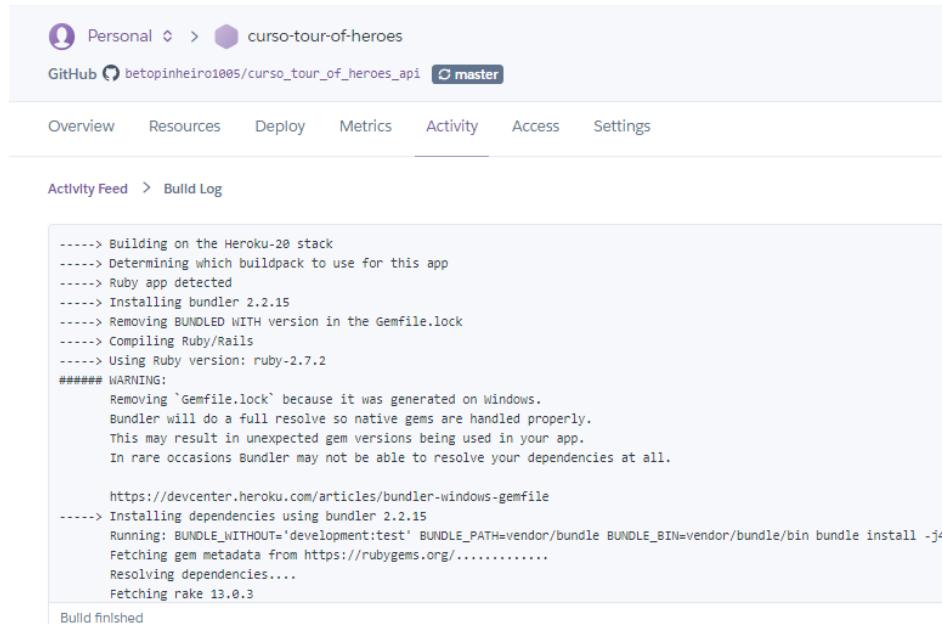
git merge --no-ff 12-deploy-api

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git merge --no-ff 12-deploy-api
Merge made by the 'recursive' strategy.
.vscode/settings.json      |  3 +++
Gemfile                     |  5 +////
Gemfile.lock                |  2 ++
Procfile                    |  2 ++
app/controllers/concerns/autenticable.rb | 14 +-----
app/models/hero.rb          | 10 ++++++++
6 files changed, 22 insertions(+), 14 deletions(-)
create mode 100644 .vscode/settings.json
create mode 100644 Procfile
```

- Envie para o GitHub

git push

O deploy será feito automaticamente no Heroku

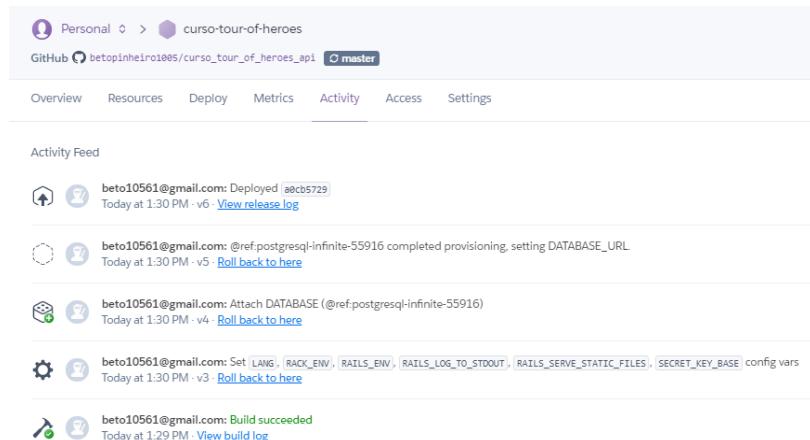


The screenshot shows a GitHub repository page for 'curso-tour-of-heroes'. The 'Activity Feed' section is selected, showing a log of a recent deployment to Heroku. The log details the build process, including installing the Heroku-20 stack, determining the buildpack (Ruby), installing Bundler 2.2.15, removing bundled native gems, and installing dependencies using bundler 2.2.15. It also mentions removing 'Gemfile.lock' because it was generated on Windows. The deployment was successful, reaching version v6.

```
-----> Building on the Heroku-20 stack
-----> Determining which buildpack to use for this app
-----> Ruby app detected
-----> Installing bundler 2.2.15
-----> Removing BUNDLED WITH version in the Gemfile.lock
-----> Compiling Ruby/Rails
-----> Using Ruby version: ruby-2.7.2
##### WARNING:
  Removing 'Gemfile.lock' because it was generated on Windows.
  Bundler will do a full resolve so native gems are handled properly.
  This may result in unexpected gem versions being used in your app.
  In rare occasions Bundler may not be able to resolve your dependencies at all.

  https://devcenter.heroku.com/articles/bundler-windows-gemfile
-----> Installing dependencies using bundler 2.2.15
  Running: BUNDLE_WITHOUT=development:test BUNDLE_PATH=vendor/bundle BUNDLE_BIN=vendor/bin bundle install -j4
  Fetching gem metadata from https://rubygems.org/.....
  Resolving dependencies...
  Fetching rake 13.0.3

Build finished
```



The screenshot shows a GitHub repository page for 'curso-tour-of-heroes'. The 'Activity Feed' section is selected, showing deployment logs. A user named beto10561@gmail.com deployed the application to version v6. Subsequent logs show the database being provisioned (DATABASE_URL), attached (DATABASE), and configuration variables being set (config vars). The final log entry indicates the build succeeded.

```
beto10561@gmail.com: Deployed aecb5729
Today at 1:30 PM · v6 · View release log

beto10561@gmail.com: @ref:postgresql-infinite-55916 completed provisioning, setting DATABASE_URL
Today at 1:30 PM · v5 · Roll back to here

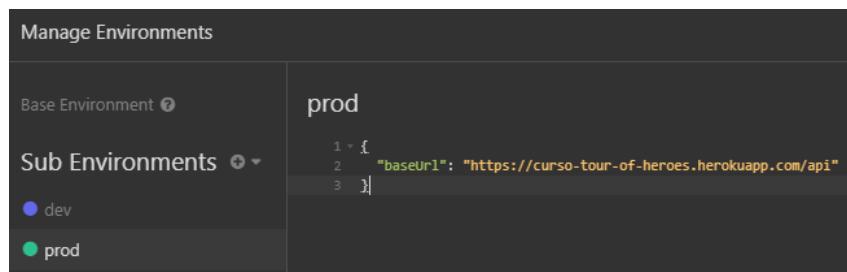
beto10561@gmail.com: Attach DATABASE (@ref:postgresql-infinite-55916)
Today at 1:30 PM · v4 · Roll back to here

beto10561@gmail.com: Set LANG, RACK_ENV, RAILS_ENV, RAILS_LOG_TO_STDOUT, RAILS_SERVE_STATIC_FILES, SECRET_KEY_BASE config vars
Today at 1:30 PM · v3 · Roll back to here

beto10561@gmail.com: Build succeeded
Today at 1:29 PM · View build log
```

Testando no insomnia

- Crie uma nova variável de ambiente chamada **prod**



The screenshot shows the 'Manage Environments' interface on Heroku. On the left, there are sections for 'Base Environment' and 'Sub Environments'. Under 'Sub Environments', 'dev' is selected, and 'prod' is listed. On the right, the 'prod' environment is shown with its configuration. One key, 'baseurl', is defined with the value 'https://curso-tour-of-heroes.herokuapp.com/api'.

| Key | Value |
|---------|--|
| baseurl | https://curso-tour-of-heroes.herokuapp.com/api |

- No terminal, entre com o comando:

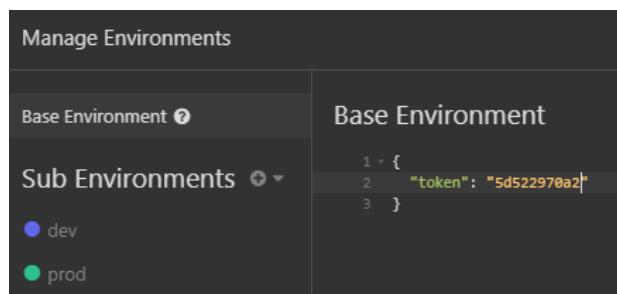
```
rails secret
```

```
beto10DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ rails secret
5d522970a22d4315b4ceb9b16ee1164a2796982881763c34f7973235740c602022175c5eb83e987b33f701
6388778289d5c6b9e7fa54ea12817dfba232e05c41
```

- Copie, pelo menos, 10 caracteres.

5d522970a2

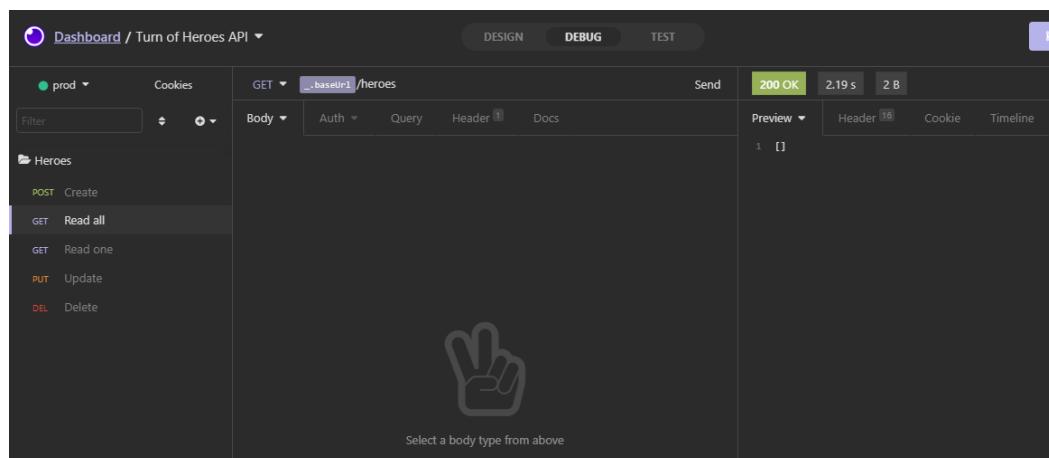
- No insomnia, em **Base Environment**:



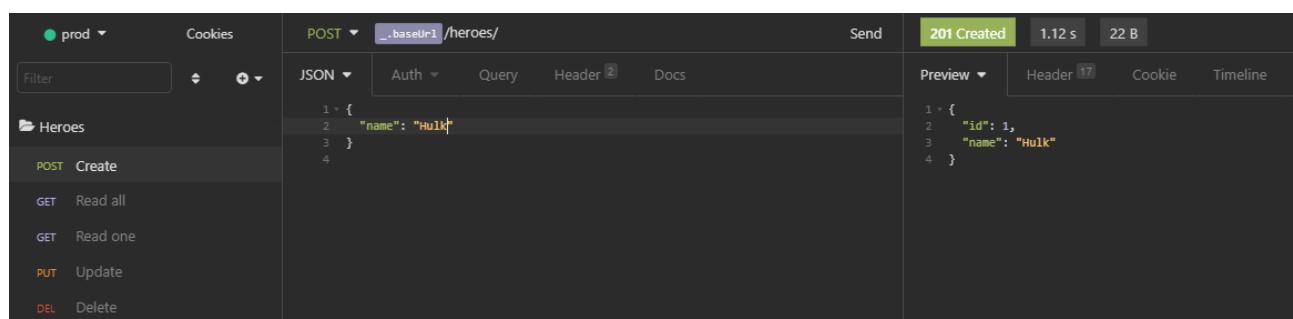
```
1 v {
2   "token": "5d522970a2"
3 }
```

- Feche a janela e em seguida selecione **Use prod**

- Em Read all, clique no botão **Send**



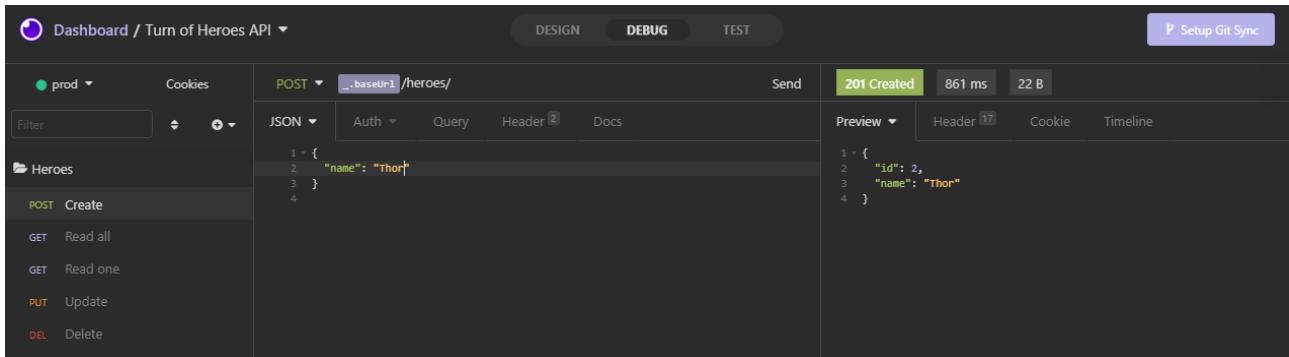
- Crie um herói chamado **Hulk**:



```
1 v {
2   "name": "Hulk"
3 }
```

```
1 v {
2   "id": 1,
3   "name": "Hulk"
4 }
```

- Crie outro herói, com o nome **Thor**



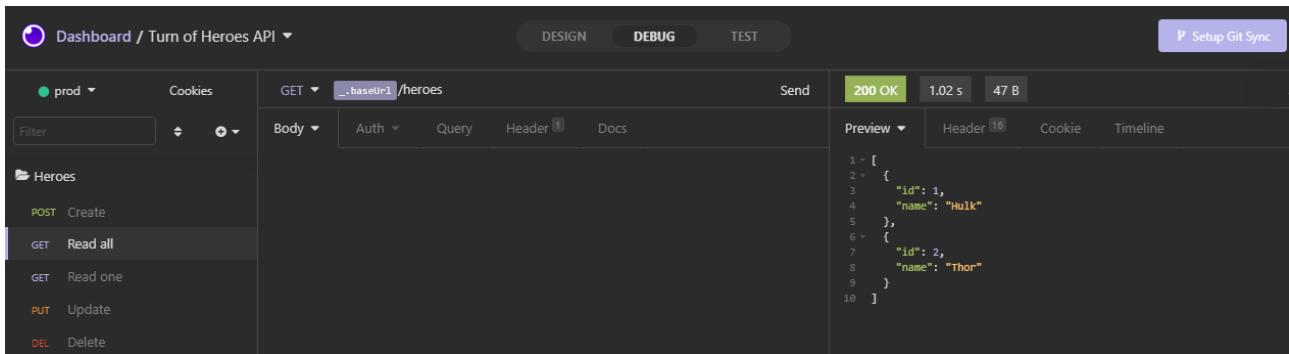
The screenshot shows the Turn of Heroes API interface. On the left, there's a sidebar with a 'Heroes' section containing 'Create', 'Read all', 'Read one', 'Update', and 'Delete' buttons. The main area shows a POST request to `...baseUrl1/heroes/`. The 'Body' tab is selected, showing a JSON payload:

```
1 + {  
2 +   "name": "Thor"  
3 + }  
4
```

On the right, the response is shown with a status of **201 Created**, a time of **861 ms**, and a size of **22 B**. The preview shows the JSON response:

```
1 + {  
2 +   "id": 2,  
3 +   "name": "Thor"  
4 }
```

- Liste, em **Read all**



The screenshot shows the Turn of Heroes API interface. On the left, there's a sidebar with a 'Heroes' section containing 'Create', 'Read all', 'Read one', 'Update', and 'Delete' buttons. The 'Read all' button is highlighted. The main area shows a GET request to `...baseUrl1/heroes`. The 'Body' tab is selected. On the right, the response is shown with a status of **200 OK**, a time of **1.02 s**, and a size of **47 B**. The preview shows the JSON response:

```
1 + [  
2 +   {  
3 +     "id": 1,  
4 +     "name": "Hulk"  
5 +   },  
6 +   {  
7 +     "id": 2,  
8 +     "name": "Thor"  
9 +   }  
10 ]
```

- Faça os demais testes (com Read one, Update e Delete).

Frontend e Backend em mesmos servidores ou diferentes servidores



- **Desenvolvimento**

localhost:4200/heroes => Angular exibe Heroes

localhost:3000/api/heroes => [{ id: 1, name: 'Thor' }]

- **Produção (frontend e backend no mesmo servidor)**

mysite.com/heroes => Angular exibe Heroes

mysite.com/api/heroes => [{ id: 1, name: 'Thor' }]

- **Produção (frontend e backend em servidores separados)**

mysite.com/heroes => Angular exibe Heroes

othersite.com/api/heroes => [{ id: 1, name: 'Thor' }]

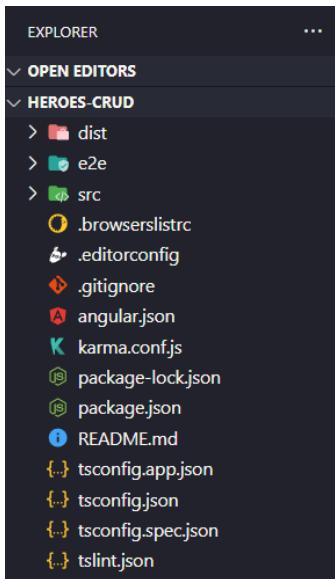
1. Desenvolvimento

- Acesse o [github peimelo](#), e faça o clone (via [HTTPS](#)) de [heroes-crud](#) (trata-se de um frontend simples (feito em Angular) para o app que estamos desenvolvendo).

Configuração

```
git clone https://github.com/peimelo/heroes-crud.git  
cd heroes-crud
```

- Abra o projeto no Visual Studio Code

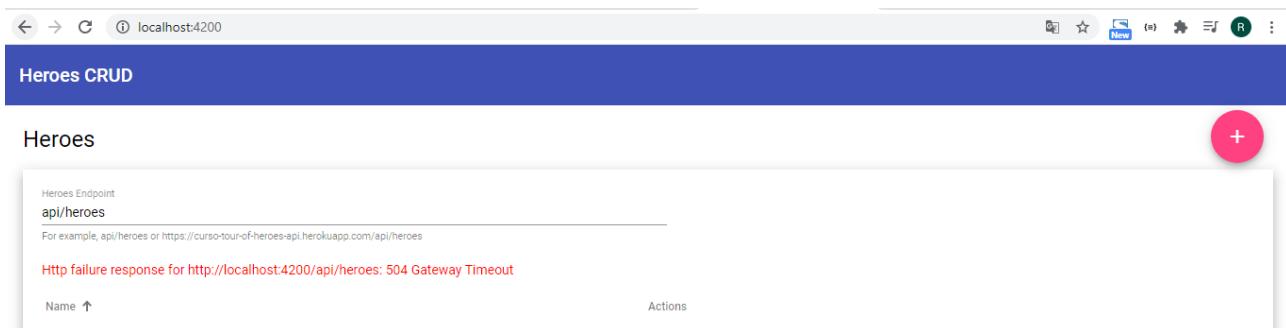


- Instale o Angular CLI:

```
npm install -g @angular/cli
```

```
# installation of dependencies  
npm install
```

```
# run the project  
ng serve
```



Backend

Espera-se que o backend suba em `http://localhost:3000`. Caso queira em outra porta, altere o arquivo `src/proxy.conf.json` e reinicie o frontend.

`src\proxy.conf.json`

```
{  
  "/api": {  
    "target": "http://localhost:3000",  
    "secure": false  
  }  
}
```

The screenshot shows a browser window with the URL `localhost:4200`. The page title is "Heroes CRUD". On the left, there's a sidebar with a "Heroes" section and a "Heroes Endpoint" field containing `api/heroes`. Below it, a message says "Http failure response for http://localhost:4200/api/heroes: 504 Gateway Timeout". On the right, there's a "Heroes" table with columns "Name" and "Actions". A pink circle highlights the "+" button at the top right of the table. To the right of the browser window is the Chrome DevTools Application panel. The "LocalStorage" section shows two items: "endpoint" with value "api/heroes" and "token" with value "poao7blnjo". The "Network" tab shows a single request to "api/heroes".

- O token exibido foi criado de forma aleatória.

Alterando o token

- Vamos substitui-lo pelo token criado no insomnia na sessão de desenvolvimento (dev).

The screenshot shows the "Manage Environments" section of the Heroku Settings. It has a "Base Environment" dropdown set to "dev" and a "Sub Environments" dropdown also set to "dev". Under "Sub Environments", there are two entries: "dev" (selected) and "prod". On the right, there's a code editor showing a JSON object:

```
1  {  
2    "baseUrl": "http://localhost:3000/api",  
3    "token": "b2ed35d4f7"  
4  }
```

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes

For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

Http failure response for http://localhost:4200/api/heroes: 504 Gateway Timeout

| Name ↑ | Actions |
|--------|---------|
| | |

Application

- Manifest
- Service Workers
- Storage
- Storage
 - Local Storage
 - http://localhost:4200
 - Session Storage
 - IndexedDB
 - Web SQL
 - Cookies
- Cache
 - Cache Storage
 - Application Cache

Key Value

endpoint api/heroes

token b2ed35d4f7

- Atualize a página

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes

For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|----------------|---------|
| Homem de Ferro | |
| Thor | |
| Wolverine | |

Application

- Manifest
- Service Workers
- Storage
- Storage
 - Local Storage
 - http://localhost:4200
 - Session Storage
 - IndexedDB
 - Web SQL
 - Cookies
- Cache
 - Cache Storage
 - Application Cache
- Background Services
 - Background Fetch
 - Background Sync
 - Notifications
 - Payment Handler
 - Periodic Background Sync
 - Push Messaging
- Frames
 - top

Key Value

endpoint api/heroes

token b2ed35d4f7

1 poao7b1njo

- Clique no botão + (vermelho) e insira um novo herói:

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes

For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | |
|----------------|--|
| Homem de Ferro | |
| Thor | |
| Wolverine | |

Create hero

Name *

Cancel Create

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes
For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|------------------|---------|
| Homem de Ferro | |
| Mulher Maravilha | |
| Thor | |
| Wolverine | |

- Altere de "Mulher Maravilha" para "Pantera Negra"

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes
For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|------------------|---------|
| Homem de Ferro | |
| Mulher Maravilha | |
| Thor | |
| Wolverine | |

Update hero

Name *
Pantera Negra

[Cancel](#) [Update](#)

localhost:4200

Heroes CRUD

Heroes

Heroes Endpoint
api/heroes
For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|----------------|---------|
| Homem de Ferro | |
| Pantera Negra | |
| Thor | |
| Wolverine | |

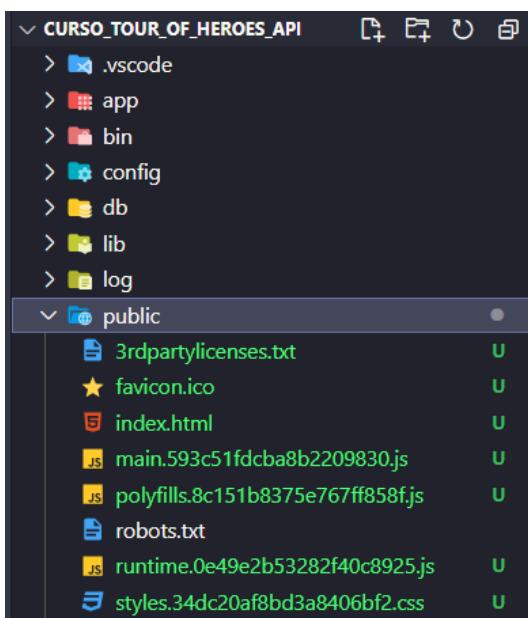
- É via JSON que o backend e o frontend se comunicam.

2. Produção (frontend e backend no mesmo servidor)

dist\heroes-crud



- Copie todos os arquivos desta pasta para o projeto da API na pasta **public** de `curso_tour_of_heroes_api`



- A pasta **public** é a pasta quando acessamos o nosso site.

- Abra o terminal e rode o comando:

git status

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git status
On branch master
Your branch is up to date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    public/3rdpartylicenses.txt
    public/favicon.ico
    public/index.html
    public/main.593c51fdcba8b2209830.js
    public/polyfills.8c151b8375e767ff858f.js
    public/runtime.0e49e2b53282f40c8925.js
    public/styles.34dc20af8bd3a8406bf2.css

nothing added to commit but untracked files present (use "git add" to track)
```

```
git add .
```

```
git commit -m "Adiciona frontend no projeto"
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git commit -m "Adiciona frontend no projeto"
[master 1d1320e] Adiciona frontend no projeto
 7 files changed, 337 insertions(+)
 create mode 100644 public/3rdpartylicenses.txt
 create mode 100644 public/favicon.ico
 create mode 100644 public/index.html
 create mode 100644 public/main.593c51fdcba8b2209830.js
 create mode 100644 public/polyfills.8c151b8375e767ff858f.js
 create mode 100644 public/runtime.0e49e2b53282f40c8925.js
 create mode 100644 public/styles.34dc20af8bd3a8406bf2.css
```

```
git push
```

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push
Enumerating objects: 12, done.
Counting objects: 100% (12/12), done.
Delta compression using up to 2 threads
Compressing objects: 100% (10/10), done.
Writing objects: 100% (10/10), 156.93 KiB | 1.63 MiB/s, done.
Total 10 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 a0cb572..1d1320e master -> master
```

- O deploy será feito automaticamente no Heroku (ver na aba **Activity**)

- No Heroku, clique no botão "**Open app**"

- Foi criado um token aleatório

The screenshot shows a browser window with the URL `curso-tour-of-heroes.herokuapp.com`. The page title is "Heroes CRUD". Below the title, it says "Heroes Endpoint" and "api/heroes". A note below states "For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes". On the left, there is a table header with columns "Name ↑" and "Actions". On the right, the Chrome DevTools Application tab is open, showing storage details. The "LocalStorage" section lists an item with key "endpoint" and value "api/heroes", and another item with key "token" and value "j749owjelb". Other sections like "Session Storage", "IndexedDB", "Web SQL", and "Cookies" are also visible.

- Altere o token para o que foi criado no insomnia

```
1 var {  
2   "token": "5d522970a2"  
3 };
```

| Key | Value |
|----------|------------|
| endpoint | api/heroes |
| token | 5d522970a2 |

- Atualize a página

| Name | Actions |
|------|---------|
| Hulk | |
| Thor | |

- OBS.: Estamos usando o token do insomnia apenas para dar continuidade nos heroes criados por lá, mas você pode usar o que é criado aleatoriamente nesse site.

- Crie um novo herói chamado "Homem de Ferro"

Create hero

Name *

Homem de Ferro

Cancel Create

Heroes CRUD

Heroes



Heroes Endpoint
api/heroes
For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|----------------|---------|
| Homen de Ferro | |
| Hulk | |
| Thor | |

- Faça os demais testes (Read One, Update e Delete)

3. Produção (frontend e backend em servidores separados)

The screenshot shows the GitHub repository page for 'peimelo/heroes-crud'. The repository has 1 branch, 1 tag, and 18 commits. The commits list includes:

- peimelo Status do erro (Info do endpoint, 3 months ago)
- e2e initial commit (3 months ago)
- src Status do erro (3 months ago)
- .browserslistrc initial commit (3 months ago)
- .editorconfig initial commit (3 months ago)
- .gitignore Adiciona dist (3 months ago)
- README.md Atualiza doc (3 months ago)
- angular.json Adiciona Material (3 months ago)
- karma.conf.js initial commit (3 months ago)
- package-lock.json Adiciona Material (3 months ago)
- package.json Adiciona Material (3 months ago)

The repository has 1 star, 1 fork, and 1 watch. It also includes sections for About, Releases, Packages, and Environments.

- frontend em <https://heroes-crud.vercel.app/>

The screenshot shows the 'Heroes' page of the 'Heroes CRUD' application running on Vercel. The page displays the same list of heroes as the Heroku version, with edit and delete actions available for each entry.

- Substitua o endpoint pelo que você criou no Heroku:

Troque <https://curso-tour-of-heroes-api.herokuapp.com/api/heroes> por:
<https://curso-tour-of-heroes.herokuapp.com/api/heroes>

- Altere o token pelo que está no insomnia.

- Atualize a página. Será apresentado o seguinte erro:

The screenshot shows a browser window with the URL `heroes-crud.vercel.app`. The page title is "Heroes CRUD" and the sub-section is "Heroes". A red circular button with a plus sign is visible in the top right corner. The browser's developer tools are open, specifically the "Console" tab. The console output shows several error messages related to CORS (Cross-Origin Resource Sharing) issues:

```
main.012373a...js:1
> Nh {headers: Ch, status: 200, statusText: "OK", url: "https://heroes-crud.vercel.app/"}
✖ Access to XMLHttpRequest at 'https://cu heroes-crud.vercel.app/:1' from origin 'https://curso-tour-of-heroes.herokuapp.com' has been blocked by CORS policy: Response to preflight request doesn't pass access control check: No 'Access-Control-Allow-Origin' header is present on the requested resource.
main.012373a...js:1
▶ Nh {headers: Ch, status: 0, statusText: "Unknown Error", url: "https://curso-tour-of-heroes.herokuapp.com/api/heroes", ok: false, ...}
✖ GET https://curso-tour-of-heroes.herokuapp.com/api/heroes net::ERR_FAILED
> |
```

- Para resolver, é necessário utilizar CORS que permitirá compartilhar um recurso em servidores diferentes, pois o browser faz uma proteção para que isso não ocorra.

The screenshot shows the MDN Web Docs page titled "Cross-Origin Resource Sharing (CORS)". The page content includes a navigation bar with links to "Technologies", "References & Guides", and "Feedback". A search bar and a "Sign in" button are also present. The main content area discusses CORS (Cross-Origin Resource Sharing), explaining it as a mechanism for allowing different domains to share resources. It covers topics like "Jump to section", "Quem deve ler este artigo?", "Visão Geral", "Exemplos de cenários com controle de acesso", "Os cabeçalhos de resposta HTTP", "Os cabeçalhos de solicitação HTTP", "Especificações", "Compatibilidade entre Navegadores", and "Veja também". The page also includes a note about security concerns regarding cross-origin requests initiated via scripts.

- Se você está em um site e vai acessar a informação de outro site vai ocorrer um problema de CORS (porque como não estão no mesmo servidor, é uma proteção que ocorre).

- Para que isso seja resolvido, é necessário ir no site que será acessado (que no caso é o backend) e habilitar o CORS, para que isso funcione.

- O Ruby on Rails tem uma gem chamada `rack-cors` que permitirá essa habilitação. Vamos instala-lá:

- No terminal, entre com o seguinte comando:

`bundle add rack-cors`

```
C:\Sites\curso_tour_of_heroes_api (master)
\ bundle add rack-cors
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/.
Resolving dependencies...
Fetching gem metadata from https://rubygems.org/.....
Fetching gem metadata from https://rubygems.org/.
Resolving dependencies...
Using rake 13.0.3
Using concurrent-ruby 1.1.8
Using i18n 1.8.10
Using minitest 5.14.4
Using tzinfo 2.0.4
Using zeitwerk 2.4.2
Using activesupport 6.1.3.1
Using builder 3.2.4
Using erubi 1.10.0
Using racc 1.5.2
Using nokogiri 1.11.2 (x64-mingw32)
Using rails-dom-testing 2.0.3
Using crass 1.0.6
Using loofah 2.9.0
Using rails-html-sanitizer 1.3.0
```

Gemfile

```
source 'https://rubygems.org'
git_source(:github) { |repo| "https://github.com/#{repo}.git" }

ruby '2.7.2'

gem 'rails', '~> 6.1.3'
gem 'puma', '~> 5.0'
gem 'bootsnap', '>= 1.4.4', require: false
gem "active_model_serializers", "~> 0.10.12"
gem "rack-cors", "~> 1.1"

group :development, :test do
  gem 'sqlite3', '~> 1.4'
  gem 'byebug', platforms: [:mri, :mingw, :x64_mingw]
end

group :development do
  gem "faker", "~> 2.17"
end

gem 'tzinfo-data', platforms: [:mingw, :mswin, :x64_mingw, :jruby]

group :production do
  gem "pg", "~> 1.2"
end
```

- Outra alteração é necessária:

config\initializers\cors.rb

```
# Be sure to restart your server when you modify this file.

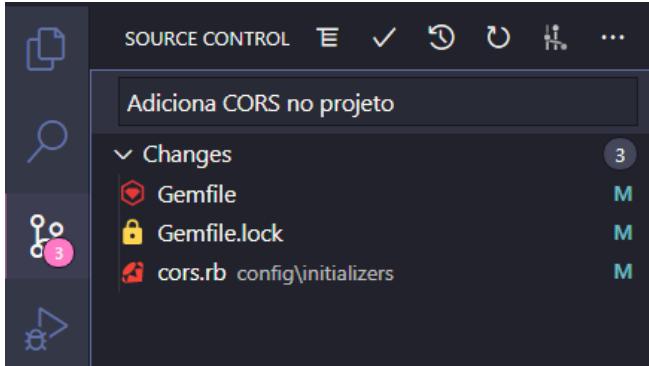
# Avoid CORS issues when API is called from the frontend app.
# Handle Cross-Origin Resource Sharing (CORS) in order to accept cross-origin AJAX requests.

# Read more: https://github.com/cyu/rack-cors

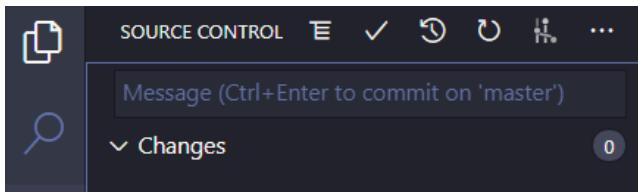
Rails.application.config.middleware.insert_before 0, Rack::Cors do
  allow do
    origins 'https://heroes-crud.vercel.app'

    resource '*',
      headers: :any,
      methods: [:get, :post, :put, :patch, :delete, :options, :head]
  end
end
```

- Salve as alterações no Github:



- Faça o commit



- Faça o push

- Altere o token para o do insomnia.
- Atualize a página

A screenshot of a web application titled "Heroes". The URL in the address bar is "heroes-crud.vercel.app". The page displays a table of heroes with columns for "Name" and "Actions". The heroes listed are "Homem de Ferro", "Hulk", and "Thor". Each hero has edit and delete icons in the "Actions" column. A red "+" button is located in the top right corner of the table area.

- Insira um novo herói chamado "**Mulher Maravilha**"

A screenshot of the same web application. A modal dialog box is open in the center, titled "Create hero". It has a single input field labeled "Name*" containing the text "Mulher Maravilha". At the bottom of the dialog are two buttons: "Cancel" and "Create". The background of the main page shows the same list of heroes: Homem de Ferro, Hulk, and Thor. A red "+" button is also visible in the top right corner of the main content area.

Heroes Endpoint
https://curso-tour-of-heroes.herokuapp.com/api/heroes

For example, api/heroes or https://curso-tour-of-heroes-api.herokuapp.com/api/heroes

| Name ↑ | Actions |
|------------------|---------|
| Homem de Ferro | |
| Hulk | |
| Mulher Maravilha | |
| Thor | |

Turn of Heroes API (prod) – Read all

Application Edit View Window Tools Help

Dashboard / Turn of Heroes API ▾

DESIGN DEBUG TEST

prod Cookies GET .baseUrl /heroes Send 200 OK 1.11 s 115 B Just Now

Filter Body Auth Query Header Docs

Heroes

POST Create

GET Read all

GET Read one

PUT Update

DEL Delete

Select a body type from above

```

1 [
2   {
3     "id": 3,
4     "name": "Homem de Ferro"
5   },
6   {
7     "id": 1,
8     "name": "Hulk"
9   },
10  {
11    "id": 4,
12    "name": "Mulher Maravilha"
13  },
14  {
15    "id": 2,
16    "name": "Thor"
17  }
18 ]

```

Criando uma tag

Quando se cria uma tag é como se colocasse uma versão do nosso projeto em produção.

- No terminal, entre com o seguinte comando:

git tag v1.0.0

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git tag v1.0.0
```

Subindo para o Heroku

git push --tags

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push --tags
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 * [new tag]      v1.0.0 -> v1.0.0
```

No GitHub:

The screenshot shows a GitHub repository page for 'curso_tour_of_heroes_api'. The 'Code' tab is selected. The master branch has 3 branches and 1 tag. The commit history shows 23 commits from 'betopinheiro1005' over the past 25 days. The commits are listed in descending order of age, with the most recent being 'Adiciona CORS no projeto' (23 minutes ago). The sidebar includes sections for About, Releases, Packages, and Environments.

This screenshot shows the same GitHub repository page, but with a search bar for 'Switch branches/tags' and a dropdown menu for 'Find a tag'. The commit history and sidebar are identical to the first screenshot.

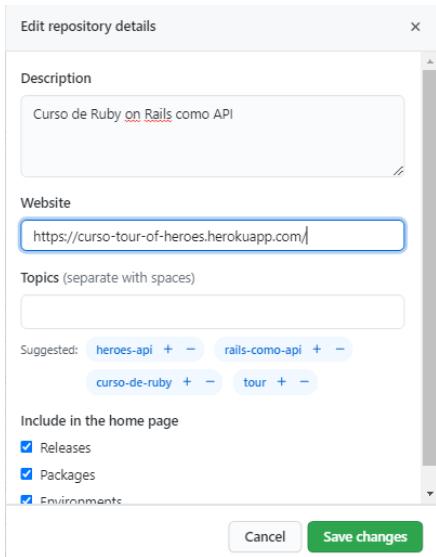
Subindo o branch que foi criado

git push origin 12-deploy-api

```
beto1@DESKTOP-85HCHH0 MINGW64 /c/Sites/curso_tour_of_heroes_api (master)
$ git push origin 12-deploy-api
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for '12-deploy-api' on GitHub by visiting:
remote:     https://github.com/betopinheiro1005/curso_tour_of_heroes_api/pull/
new/12-deploy-api
remote:
To github.com:betopinheiro1005/curso_tour_of_heroes_api.git
 * [new branch]    12-deploy-api -> 12-deploy-api
```

master 4 branches 1 tag

- No Github, clique em **About** e coloque o link do Heroku



About

Curso de Ruby on Rails como API

curso-tour-of-heroes.herokuapp.com/

[Readme](#)

Aula 13 - Como debugar

Nesse vídeo eu mostro algumas formas de debugar o código.

Rails Guides

https://guides.rubyonrails.org/debugging_rails_applications.html

Repositório do Curso

https://github.com/peimelo/curso_tour_of_heroes_api

Resumo dos comandos Ruby on Rails

<https://www.notion.so/Ruby-on-Rails-074b8daed32446af9bbe84da61c0db7f>

Resumo dos comandos Git

<https://www.notion.so/GIT-dbcae7162b69445391b70fe0b99ceac1>

Grupo "Curso Ruby on Rails 6 como API" no Telegram

<https://t.me/joinchat/HPZD5GRFoE4qoR2p>

Uso do comando puts (p)

O comando puts é similar ao console.log.

- Inicialmente levante o servidor:

rails s



```
PS C:\Sites\curso_tour_of_heroes_api> rails s
=> Booting Puma
=> Rails 6.1.3.1 application starting in development
=> Run `bin/rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR1 not implemented, signal based restart unavailable!
*** SIGHUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Puma version: 5.2.2 (ruby 2.7.2-p137) ("Fettisdagsbulle")
* Min threads: 5
* Max threads: 5
* Environment: development
* PID: 8868
* Listening on http://[::1]:3000
* Listening on http://127.0.0.1:3000
Use Ctrl-C to stop
```

- Abra o arquivo `app\controllers\api\heroes_controller.rb` e no método `index` insira o seguinte comando:

```
def index
  @heroes = Hero.by_token(@token).search(params[:term]).sorted_by_name
  p "PARAMETROS #{params}"
  render json: @heroes
end
```

- No insomnia, na variável **dev**, em **Read all**, clique no botão **Send**

```
Started GET "/api/heroes" for ::1 at 2021-04-17 01:45:50 -0300
Processing by Api::HeroesController#index as JSON
  (0.2ms)  SELECT sqlite_version(*)
  ↳ app/models/hero.rb:5:in `block in <class:Hero>'
"PARAMETROS {"format": "json", "controller": "api/heroes", "action": "index}"
  Hero Load (15.6ms)  SELECT "heroes".* FROM "heroes" WHERE "heroes"."token" = ? ORDER BY "heroes"
  ."name" ASC  [["token", "b2ed35d4f7"]]
  ↳ app/controllers/api/heroes_controller.rb:14:in `index'
[active_model_serializers] Rendered ActiveModel::Serializer::CollectionSerializer with ActiveMode
lSerializers::Adapter::Attributes (1.19ms)
Completed 200 OK in 487ms (Views: 351.6ms | ActiveRecord: 30.8ms | Allocations: 4932)
```

```
def index
  @heroes = Hero.by_token(@token).search(params[:term]).sorted_by_name

  p "TOKEN: #{@token}"

  render json: @heroes
end
```

- No insomnia, na variável **dev**, em **Read all**, clique no botão **Send**

```
Started GET "/api/heroes" for ::1 at 2021-04-17 01:50:02 -0300
Processing by Api::HeroesController#index as JSON
  (0.2ms)  SELECT sqlite_version(*)
  ↳ app/models/hero.rb:5:in `block in <class:Hero>'
"TOKEN: b2ed35d4f7"
  Hero Load (1.7ms)  SELECT "heroes".* FROM "heroes" WHERE "heroes"."token" = ? ORDER BY "heroes"
  ."name" ASC  [["token", "b2ed35d4f7"]]
  ↳ app/controllers/api/heroes_controller.rb:14:in `index'
[active_model_serializers] Rendered ActiveModel::Serializer::CollectionSerializer with ActiveMode
lSerializers::Adapter::Attributes (0.99ms)
Completed 200 OK in 115ms (Views: 60.7ms | ActiveRecord: 20.5ms | Allocations: 4922)
```

- A informação aparece apenas no terminal. Caso deseje que a informação apareça também no registro de logs, ao invés de **puts**, use o comando **logger.debug** (mostra somente em Development)

Uso do comando logger.debug

```
def index
  @heroes = Hero.by_token(@token).search(params[:term]).sorted_by_name
  logger.debug "TOKEN: #{@token}"
  render json: @heroes
end
```

- No insomnia, na variável **dev**, em **Create**, clique no botão **Send**

- No terminal, teremos:

```
Started POST "/api/heroes/" for ::1 at 2021-04-17 02:19:02 -0300
  (0.2ms)  SELECT sqlite_version(*)
Processing by Api::HeroesController#create as JSON
Parameters: {"name"=>"Homem de Ferro", "hero"=>{"name"=>"Homem de Ferro"}}

[48, 57] in C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  48:
  49:   byebug
  50:
  51:
  52:
=> 53:   if @hero.save
  54:
  55:     render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:   else
(byebug) █
```

log\development.log

```
log > development.log
1 Started GET "/api/heroes" for ::1 at 2021-04-17 02:02:56 -0300
2 Processing by Api::HeroesController#index as JSON
3 TOKEN: b2ed35d4f7
4   ↳ [1m[36mHero Load (1.4ms)[0m ↳ [1m[34mSELECT "heroes".* FROM "heroes"
5     ↳ app/controllers/api/heroes_controller.rb:14:in `index'
6   [active_model_serializers] Rendered ActiveModel::Serializer::CollectionSerializer
7   Completed 200 OK in 20ms (Views: 15.3ms | ActiveRecord: 1.4ms | Allocations:
```

Para mostrar a informação em produção:

```
def index
  @heroes = Hero.by_token(@token).search(params[:term]).sorted_by_name
  logger.info "TOKEN: #{@token}"
  render json: @heroes
end
```

Usando a gem byebug

- Interrompe o processamento no trecho de código que o comando se encontra.
- Esta gem se encontra no grupo de desenvolvimento e testes.
- Abra o arquivo `app\controllers\api\heroes_controller.rb` e no método `create` insira a seguinte linha:

```
def create
  @hero = Hero.new(hero_params.to_h.merge!({ token: @token }))
  byebug
  if @hero.save
    render json: @hero, status: :created, location: api_hero_url(@hero)
  else
    render json: @hero.errors, status: :unprocessable_entity
  end
end
```

```
Started POST "/api/heroes/" for ::1 at 2021-04-17 02:19:02 -0300
  (0.2ms)  SELECT sqlite_version(*)
Processing by Api::HeroesController#create as JSON
Parameters: {"name"=>"Homem de Ferro", "hero"=>{"name"=>"Homem de Ferro"}}

[48, 57] in C:/sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  48:
  49:     byebug
  50:
  51:
  52:
=> 53:     if @hero.save
  54:
  55:       render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:     else
(byebug) █
```

- Perceba que o processamento foi interrompido logo após a linha do debug e que é aberto um prompt do byebug que permitirá que entremos com um comando.
- Por exemplo, para verificarmos o conteúdo da variável `@hero`, nesse momento, entramos com `@hero`

```
Processing by Api::HeroesController#create as JSON
Parameters: {"name"=>"Homem de Ferro", "hero"=>{"name"=>"Homem de Ferro"}}

[48, 57] in C:/sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  49:     byebug
  50:
  51:
  52:
=> 53:     if @hero.save
  54:
  55:       render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:     else
(byebug) @hero
#<Hero id: nil, name: "Homem de Ferro", created_at: nil, updated_at: nil, token: [FILTERED]>
(byebug) █
```

- Para verificarmos o conteúdo do token, entramos com
@token

```
(byebug) @hero
#<Hero id: nil, name: "Homem de Ferro", created_at: nil, updated_at: nil, token: [FILTERED]>
(byebug) @token
"b2ed35d4f7"
(byebug) █
```

- Para verificarmos se o dado foi persistido (foi gravado no banco de dados), entramos com
@hero.persisted?

```
(byebug) @hero
#<Hero id: nil, name: "Homem de Ferro", created_at: nil, updated_at: nil, token: [FILTERED]>
(byebug) @token
"b2ed35d4f7"
(byebug) @hero.persisted?
false
(byebug) █
```

- Para executar todas as linhas seguintes do método, entre com:
continue

- Para executar a linha seguinte, entre com:
next

```
(byebug) next
 TRANSACTION (3.4ms)  begin transaction
↳ app/controllers/api/heroes_controller.rb:53:in `create'
Hero Exists? (15.5ms)  SELECT 1 AS one FROM "heroes" WHERE LOWER("heroes"."name") = LOWER(?) AND
D "heroes"."token" = ? LIMIT ?
 [["name", "Homem de Ferro"], ["token", "b2ed35d4f7"], ["LIMIT", 1]]
↳ app/controllers/api/heroes_controller.rb:53:in `create'
 TRANSACTION (0.8ms)  rollback transaction
↳ app/controllers/api/heroes_controller.rb:53:in `create'

[54, 63] in C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
 54:
 55:   render json: @hero, status: :created, location: api_hero_url(@hero)
 56:
 57: else
 58:
=> 59:   render json: @hero.errors, status: :unprocessable_entity
 60:
 61: end
 62:
 63: end
(byebug) █
```

- Não foi criado o herói, porque já existe herói com esse nome no BD.

- Para exibir os erros, entre com:
@hero.errors.messages

```
(byebug) @hero.errors.messages
{:name=>["has already been taken"]}
(byebug) █
```

- Para exibir em que linha do método o debug parou, entre com:
list=

```
(byebug) list=
```

```
[54, 63] in C:/sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  54:
  55:     render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:   else
  58:
=> 59:     render json: @hero.errors, status: :unprocessable_entity
  60:
  61:   end
  62:
  63: end
(byebug)
```

- Para concluir, entre com:
continue

Criando um herói com sucesso (nome não repetido no BD)

- No insomnia, crie um herói chamado "Mulher Maravilha"

```
[48, 57] in C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  48:
  49:     byebug
  50:
  51:
  52:
=> 53:     if @hero.save
  54:
  55:       render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:     else
```

Entre com o comando next:

```
[50, 59] in C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb
  50:
  51:
  52:
  53:     if @hero.save
  54:
=> 55:       render json: @hero, status: :created, location: api_hero_url(@hero)
  56:
  57:     else
  58:
  59:       render json: @hero.errors, status: :unprocessable_entity
(byebug)
```

- Verifique se o dado foi persistido. Entre com:
@hero.persisted?

```
(byebug) @hero.persisted?
true
```

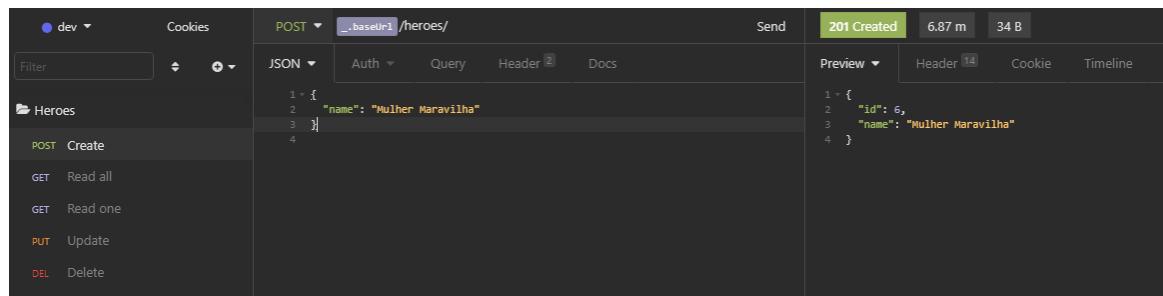
- Confira os dados do herói criado. Entre com:
@hero

```
(byebug) @hero
#<Hero id: 6, name: "Mulher Maravilha", created_at: "2021-04-17 05:48:23.451687000 +0000", updated_at: "2021-04-17 05:48:23.451687000 +0000", token: [FILTERED]>
```

- Para concluir, entre com:

continue

```
(byebug) continue
[active_model_serializers] Rendered HeroSerializer with ActiveModelSerializers::Adapter::Attributes (0.39ms)
Completed 201 Created in 411135ms (Views: 135.8ms | ActiveRecord: 145.3ms | Allocations: 524569)
```



The screenshot shows the Postman interface. On the left, there's a sidebar with a 'Heroes' collection containing 'Create', 'Read all', 'Read one', 'Update', and 'Delete' methods. The main area shows a POST request to `./baseUrl/1/heroes/`. The JSON body is set to `{ "name": "Mulher Maravilha" }`. The response is a **201 Created** status with a response body of `{ "id": 6, "name": "Mulher Maravilha" }`.

- Depois de resolvido o problema, exclua a informação byebug do controller.

Fazendo o debug dentro do Visual Studio Code

- Para isso é necessário instalar duas gems:

```
gem install ruby-debug-ide
```

```
PS C:\Sites\curso_tour_of_heroes_api> gem install ruby-debug-ide
Fetching ruby-debug-ide-0.7.2.gem
Temporarily enhancing PATH for MSYS/MINGW...
Building native extensions. This could take a while...
Successfully installed ruby-debug-ide-0.7.2
Parsing documentation for ruby-debug-ide-0.7.2
Installing ri documentation for ruby-debug-ide-0.7.2
Done installing documentation for ruby-debug-ide after 5 seconds
1 gem installed
```

- Perceba que é instalado também a documentação da gem. Isso poderia ser evitado com o comando:

```
gem install ruby-debug-ide --no-document
```

- Para que não seja necessário sempre digitar esse complemento, crie um arquivo chamado `.gemrc` na pasta raiz do usuário, com o seguinte conteúdo:

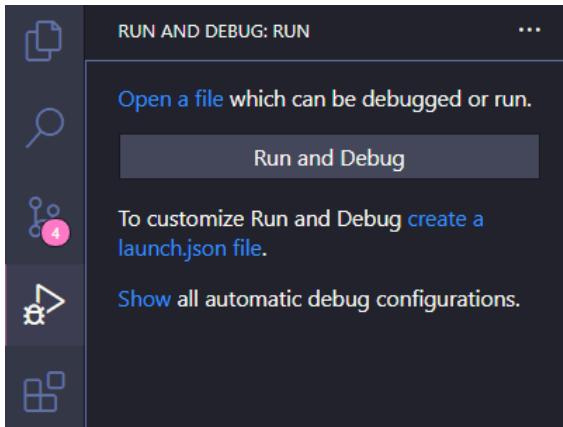
```
C:\Users\beto1\.gemrc
```

```
gem: --no-document
```

```
gem install debase
```

```
PS C:\Sites\curso_tour_of_heroes_api> gem install debase
Temporarily enhancing PATH for MSYS/MINGW...
Building native extensions. This could take a while...
Successfully installed debase-0.2.4.1
1 gem installed
```

- No Visual Studio Code, clique no ícone de debug:



- Crie no link "[create a launch.json file](#)"

- Selecione "[Ruby](#)" e no próximo menu selecione "[Rails server](#)"

- Será criado um arquivo chamado [.vscode\launch.json](#)

[.vscode\launch.json](#)

```
{
  // Use IntelliSense to learn about possible attributes.
  // Hover to view descriptions of existing attributes.
  // For more information, visit: https://go.microsoft.com/fwlink/?linkid=830387
  "version": "0.2.0",
  "configurations": [
    {
      "name": "Rails server",
      "type": "Ruby",
      "request": "launch",
      "program": "${workspaceRoot}/bin/rails",
      "args": [
        "server"
      ]
    }
  ]
}
```

- Interrompa o servidor do Rails.

- Volte para a tela do debug e clique no botão "[Play](#)" (RUN)

- Em heroes_controller.rb, clique no botão do lado direito da seguinte linha:

```

19 |   render json: @hero
20 | end
21 |
22 | # POST /heroes
23 |
24 | def create
25 |   @hero = Hero.new(hero_params.to_h.merge!({ token: @token }))
26 |
27 |   if @hero.save
28 |
29 |     render json: @hero, status: :created, location: api_hero_url(@hero)
30 |
31 |   else
32 |

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL Filter (e.g. text, exclude)

PROBLEMS: 3 DEBUG CONSOLE: ... Filter (e.g. text, exclude)

Call Stack: RUNNING

BREAKPOINTS: heroes_controller.rb app/controllers/api/... (27) >

- No insomnia, com a variável dev, em CREATE, clique no botão Send. Tente criar um herói que já existe:
- No Visual Studio Code, teremos a seguinte tela:

```

19 |   render json: @hero
20 | end
21 |
22 | # POST /heroes
23 |
24 | def create
25 |   @hero = Hero.new(hero_params.to_h.merge!({ token: @token }))
26 |
27 |   if @hero.save
28 |
29 |     render json: @hero, status: :created, location: api_hero_url(@hero)
30 |
31 |   else
32 |

```

PROBLEMS DEBUG CONSOLE ... Filter (e.g. text, exclude)

DEBUG CONSOLE: ...

Started POST "/api/heroes/" for ::1 at 2021-04-17 03:51:30 -0300
(5.1ms) SELECT sqlite_version()
(2.0ms) SELECT "schema_migrations"."version" FROM "schema_migrations" ORDER BY "schema_migrations"."version" ASC
Processing by Api::HeroesController#create as JSON
Parameters: {"name"=>"Mulher Maravilha", "hero"=>{"name"=>"Mulher Maravilha"}
C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.rb:27:
warning: \$SAFE will become a normal global variable in Ruby 3.0

- Clicando em um dos botões do menu exibido na parte superior da tela, é possível executar as ações de debug.
- Abrindo as opções, são exibidas as informações de cada bloco.
- Em "WATCH" adicione as variáveis que deseja monitorar.
- Execute a próxima linha, e para exibir o erro, em WATCH adicione `@hero.errors.messages`:

The screenshot shows the Visual Studio Code interface during a debugging session of a Rails application.

File Bar: File, Edit, Selection, View, Go, Run, Terminal, Help

Run and Debug Bar: RUN AND DEBUG, Rails server

VARIABLES Panel:

- Local:**
 - `self: Api::HeroesController`
 - `@_action_name: 'create'`
 - `@_lookup_context: ActionView::LookupContext`
 - `@_params: {"name": "Mulher Maravilha", "format": "json", ...}`
 - `@parameters: ActiveSupport::HashWithIndifferentAccess`
 - `'name': 'Mulher Maravilha'`
 - `'format': json`
 - `'controller': 'api/heroes'`
 - `'action': 'create'`
 - `> 'hero': {"name": "Mulher Maravilha"}`
 - `@permitted: false`
 - `@@action_on_unpermitted_parameters: log`
- WATCH:**
 - `@hero: #<Hero id: nil, name: "Mulher Maravilha", created...>`
 - `@token: "b2ed35d4f7"`
 - `@hero.persisted?: false`
 - `@hero.errors.messages: {name: ["has already been taken"]}`
- CALL STACK:**
- BREAKPOINTS:**
- Breakpoints:** heroes_controller.rb

Code Editor: heroes_controller.rb - curso_tour_of_heroes_api - Visual Studio Code

```
app/controllers/api/heroes_controller.rb:27:in `create'
  Hero Exists? (54.0ms)  SELECT 1 AS one FROM "heroes" WHERE LOWER("heroes"."name") = LOWER(?) AND "heroes"."token" = ? LIMIT ?  [["name", "Mulher Maravilha"], ["token", "b2ed35d4f7"], ["LIMIT", 1]]
    ↳ app/controllers/api/heroes_controller.rb:27:in `create'
TRANSACTION (0.5ms)  rollback transaction
    ↳ app/controllers/api/heroes_controller.rb:27:in `create'
C:/Sites/curso_tour_of_heroes_api/app/controllers/api/heroes_controller.r
b:33: warning: $SAFE will become a normal global variable in Ruby 3.0
```

DEBUG CONSOLE:

Filter (e.g. text, exclude)

Ln 33, Col 1 | Spaces: 2 | UTF-8 | CRLF | Ruby | ⚙️