MY FIRST RAILS APP

SET UP A DEVELOPMENT ENVIRONMENT

Card 1 of 10
I'm Learning: **The Ruby on Rails Framework**

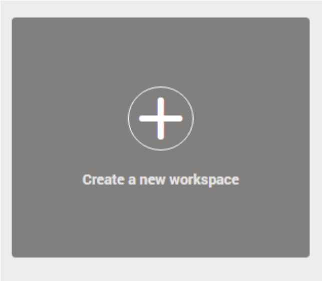
We're going to create a web application! These instructions are based on Michael Hartl's excellent book:
RUBY ON RAILS TUTORIAL https://www.railstutorial.org/book/

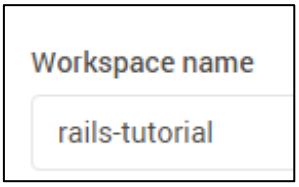
1 Logon to your account at c9.io. We are going to set up a development environment.

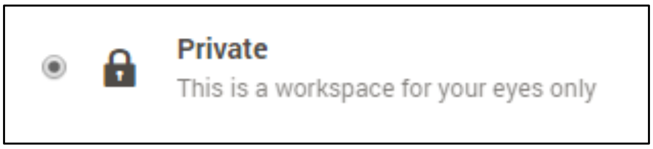
?

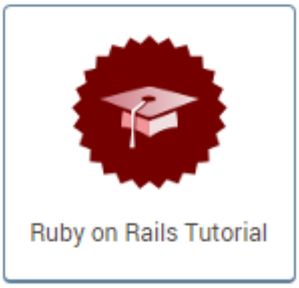
Before moving on, ask one of the mentors what this is and why it is needed.

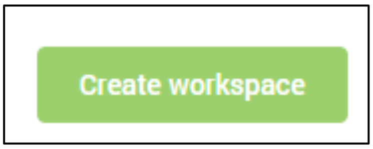
2




Workspace name
rails-tutorial

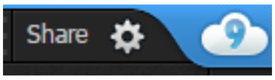

● Private
This is a workspace for your eyes only

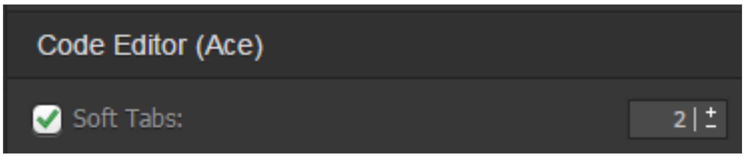

Ruby on Rails Tutorial

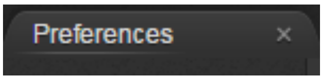


Follow these steps to create our online workspace.

3




Code Editor (Ace)
☑ Soft Tabs: 2



Change the settings for the text editor to use 2 spaces, by clicking the gears icon, changing the Soft Tabs and then closing the preferences tab.

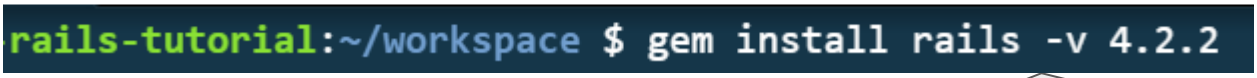
MY FIRST RAILS APP

INSTALL RAILS

Card 2 of 10
I'm Learning: **The Ruby on Rails Framework**

The online environment offers us a linux set up. We will be making use of the linux command line. This is labelled 'bash' in our setup. Accurate typing is a must!

1



```
rails-tutorial:~/workspace $ gem install rails -v 4.2.2
```

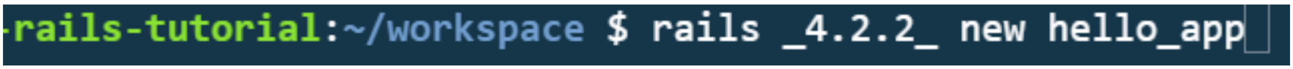
Type the following commands to install rails

Watch what happens on the command line and make sure that the messages say 'Successfully installed'.

If you get stuck or something unexpected happens, ask a mentor. Your mentor will probably try the command again.

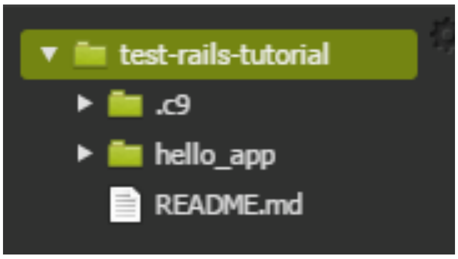
2

Once rails is installed, we can create our first app! This app will display "hello, world!" on a live web page.



```
rails-tutorial:~/workspace $ rails _4.2.2_ new hello_app
```

Type the command after $ to create a new rails apps called hello_app. Wait a few moments and you will see a new folder with lots of files created in your workspace.



3

Use ***ls*** to list all the files and folders in a directory.
Use ***cd*** ***name_of_directory*** to change to a different folder. Ask your mentor to show you how to do this.

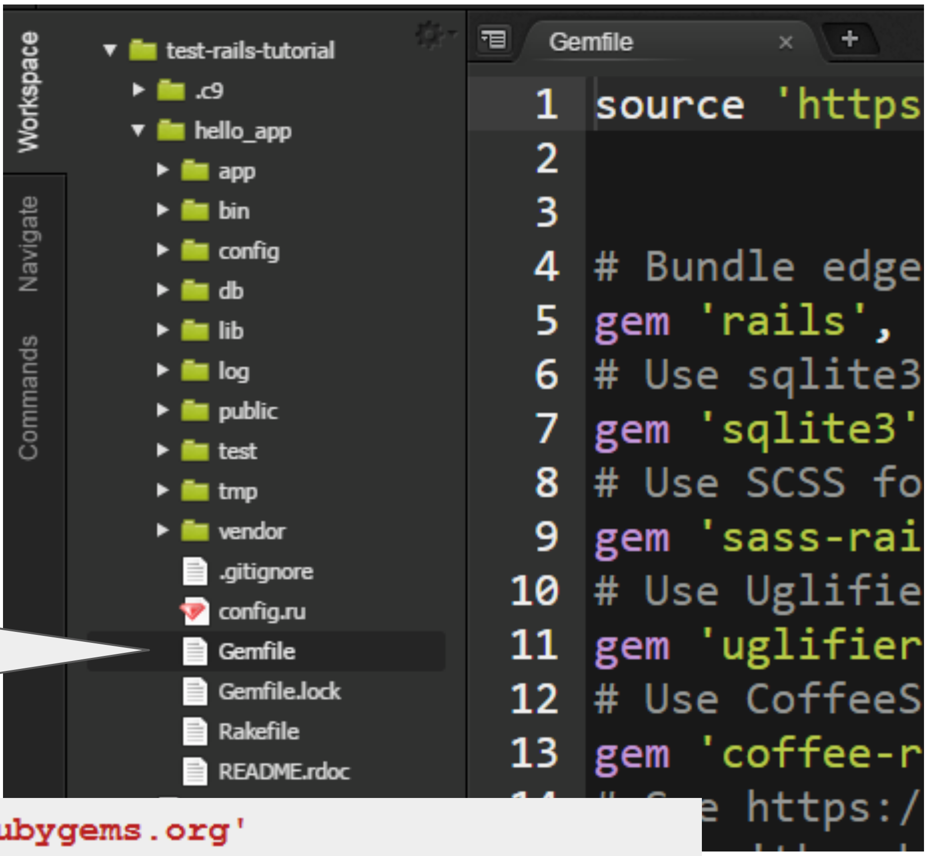
MY FIRST RAILS APP

UPDATE GEMFILE

Card 3 of 10
I'm Learning: **The Ruby on Rails Framework**

We are going to edit text using the text-editor in our online development environment. The editor starts automatically when you double-click a file in the tree-structure.

1



```
source 'https


# Bundle edge
gem 'rails',
# Use sqlite3
gem 'sqlite3'
# Use SCSS fo
gem 'sass-rai
# Use Uglifie
gem 'uglifier
# Use CoffeeS
gem 'coffee-r
# See https:/
```

Open the Gemfile by finding it in the tree-structure and double-clicking it.

2

```
source 'https://rubygems.org'

gem 'rails',                '4.2.2'
gem 'sass-rails',           '5.0.2'
gem 'uglifier',             '2.5.3'
gem 'coffee-rails',         '4.1.0'
gem 'jquery-rails',         '4.0.3'
gem 'turbolinks',           '2.3.0'
gem 'jbuilder',             '2.2.3'
gem 'sdoc',                 '0.4.0', group: :doc

group :development, :test do
  gem 'sqlite3',     '1.3.9'
  gem 'byebug',      '3.4.0'
  gem 'web-console', '2.0.0.beta3'
  gem 'spring',      '1.1.3'
end
```

Update Gemfile so it lists the following gems for our web-app.
Save the file.

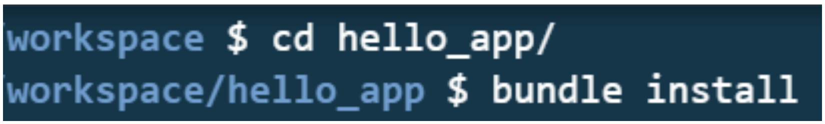
MY FIRST RAILS APP

INSTALL GEMS & START RAILS SERVER

Card 4 of 10
I’m Learning: **The Ruby on Rails Framework**

Once we have updated our Gemfile, we can install the gems (libraries of code) and run a rails server to see what our app will look like.

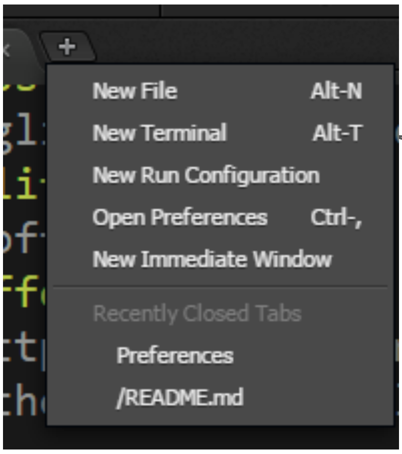
1



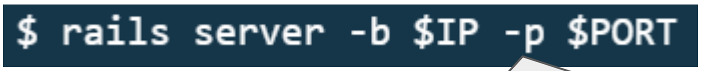
```
workspace $ cd hello_app/
workspace/hello_app $ bundle install
```

Navigate to your app folder using the cd command.
Install the gems we listed in Gemfile by using bundle install.

2



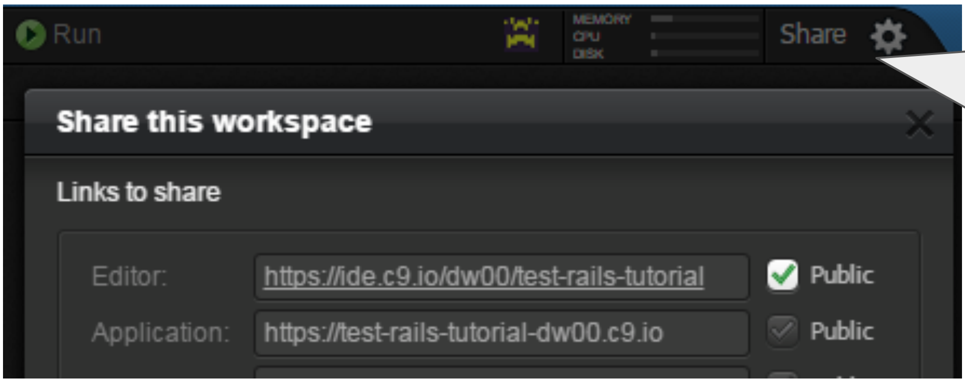
Click the + for a new tab.
Start a new terminal in which we can start, stop, restart a rails server to test our application.



```
$ rails server -b $IP -p $PORT
```

Issue this command to run the server so we can see what our app looks like on a local web server.

3



Share this workspace

Links to share

Editor: https://ide.c9.io/dw00/test-rails-tutorial ☑ Public

Application: https://test-rails-tutorial-dw00.c9.io ☑ Public

Click Share and then the application address to see your running app.

4

Ask a mentor about using the tab key to autocomplete and cycle through file/folder names. How to use the arrow keys to cycle through previously used commands.

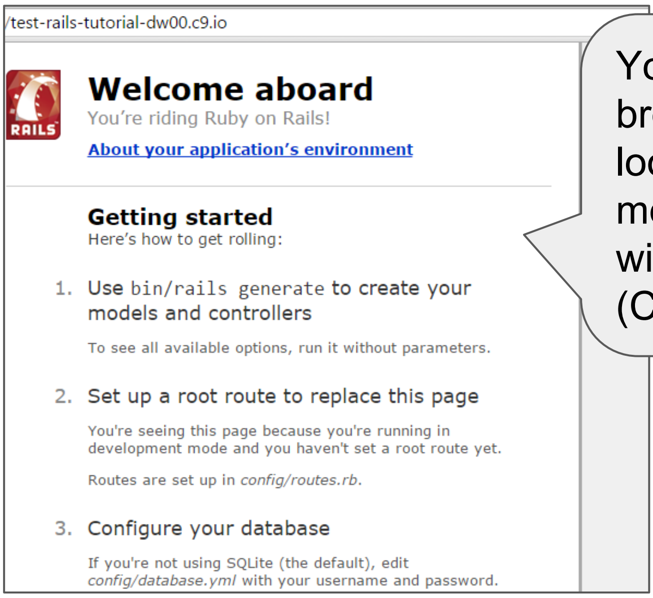
MY FIRST RAILS APP

THE LOCAL RAILS SERVER

Card 5 of 10
I'm Learning: **The Ruby on Rails Framework**

Your application is now running because you have started a web server that is serving/sending pages to anyone on the internet with the link.

1



/test-rails-tutorial-dw00.c9.io

Welcome aboard
You're riding Ruby on Rails!
About your application's environment

Getting started
Here's how to get rolling:

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

   To see all available options, run it without parameters.

2. Set up a root route to replace this page

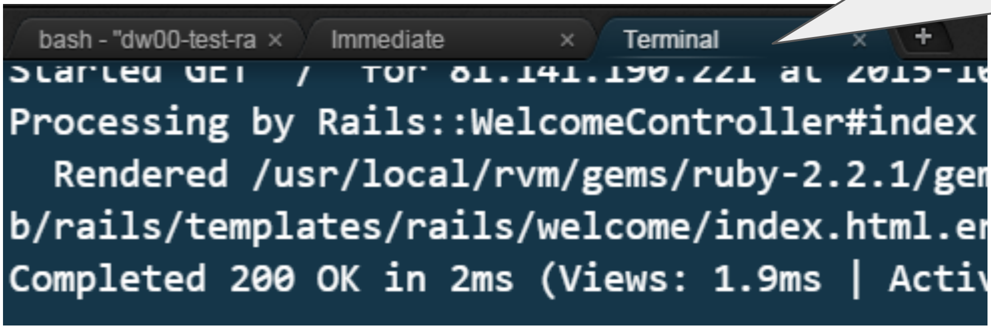
   You're seeing this page because you're running in development mode and you haven't set a root route yet.

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

3. Configure your database

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

Your application is running in a new browser tab.If you refresh the page, and look at the terminal, you will see messages from the server about dealing with requests. If you stop the web server (Ctrl-C), it will stop displaying the page.



```
Started GET "/" for 81.141.190.221 at 2015-1
Processing by Rails::WelcomeController#index
  Rendered /usr/local/rvm/gems/ruby-2.2.1/ger
b/rails/templates/rails/welcome/index.html.er
Completed 200 OK in 2ms (Views: 1.9ms | Activ
```

The terminal where you started the web server, will give you information about the pages it has served.

2

Ask your mentor to explain:

1. What is a web server?
2. What are the messages that appear in the terminal?
3. What happens if you stop the server? Why?
4. How has the RAILS framework helped you to get something online so quickly?
5. Why use RAILS?

MY FIRST RAILS APP

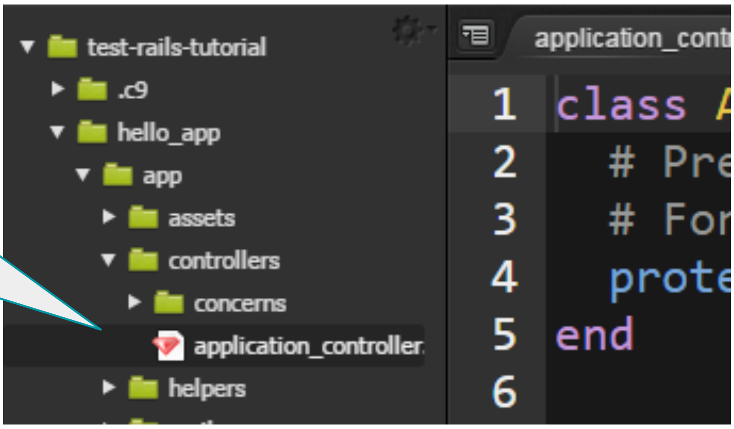
CREATE “hello, world!” APP

Card **6** of **10**
I’m Learning: **The Ruby on Rails Framework**

We can change our default app to display “hello, world!”. To do this we have to change two files in app tree-structure.

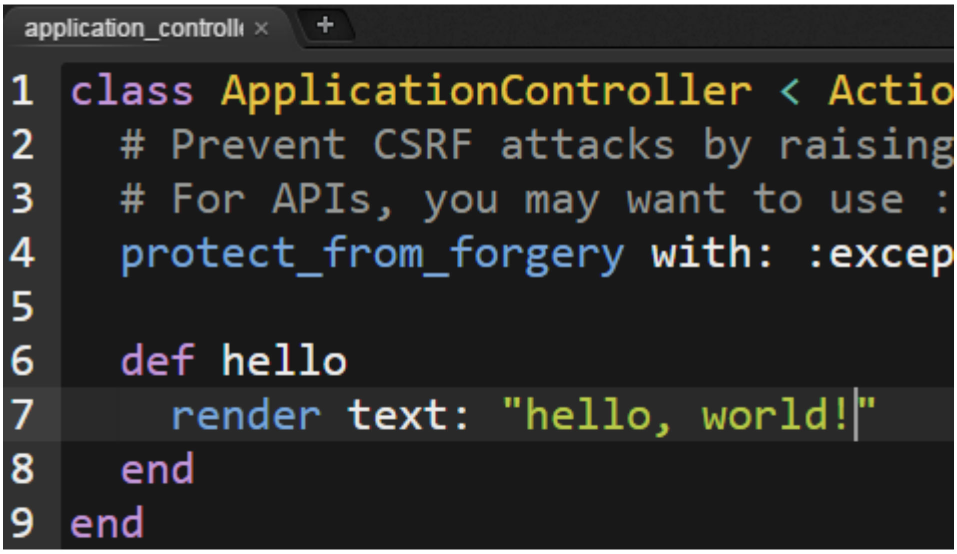
1

Open the *application_controller.rb* file.



```
class A
  # Pre
  # For
  prote
end
```

2



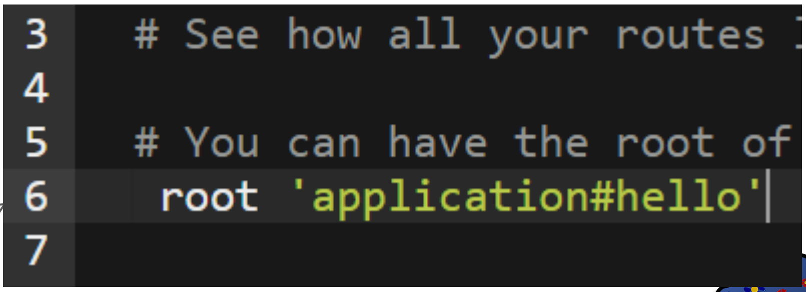
```
class ApplicationController < Actio
  # Prevent CSRF attacks by raising
  # For APIs, you may want to use :
  protect_from_forgery with: :excep

  def hello
    render text: "hello, world!"
  end
end
```

Add the following function to the file and save it.

3

Find the file *config/routes.rb* and change it as follows:



```
  # See how all your routes l

  # You can have the root of
  root 'application#hello'

```

4

View your app running on the local rails server. Ask how the controller, the hello function and the root route work together to change your app’s main page.

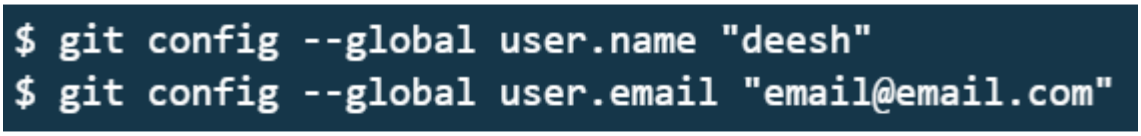
MY FIRST RAILS APP

SET UP Git

Card 7 of 10
I'm Learning: **The Ruby on Rails Framework**

We need to be able to deploy our application. To make this easy, we need to have our app under version-control. For this, we will use Git.

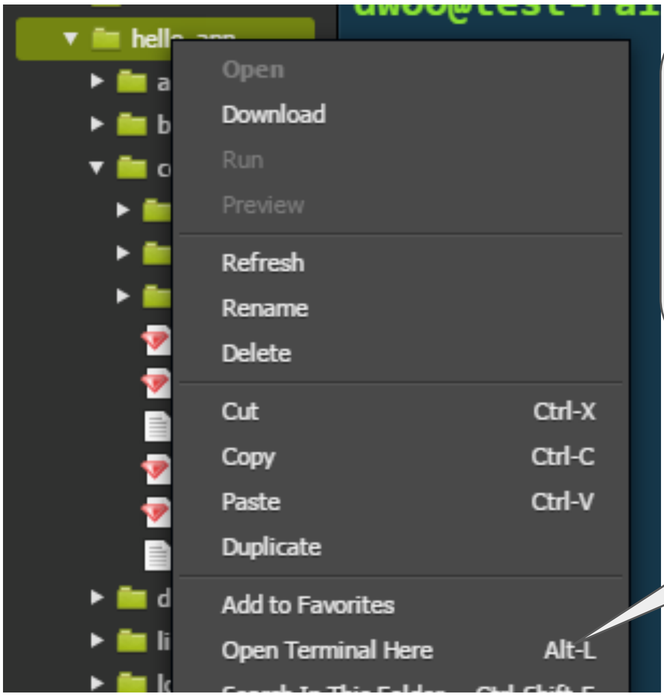
1



```
$ git config --global user.name "deesh"
$ git config --global user.email "email@email.com"
```

Once-only setup of Git in terminal.

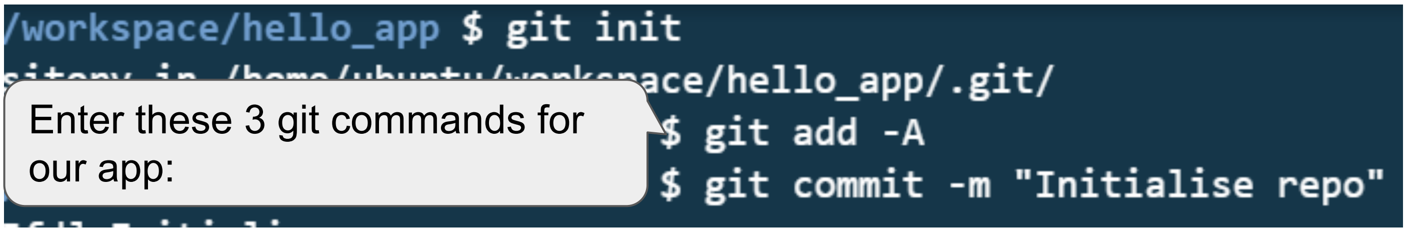
2



The next few commands are carried out for a project, such as our 'hello' app so have to be issued in the correct folder. Either use cd to naviagte to the 'hello_app' folder or use this GUI trick:

Right-click on the 'hello-app' folder and choose 'Open Terminal' here.

3



```
/workspace/hello_app $ git init
sitory in /home/ubuntu/workspace/hello_app/.git/
$ git add -A
$ git commit -m "Initialise repo"
```

Enter these 3 git commands for our app:

4

Ask a mentor, what Git is and what the commands we just typed mean.

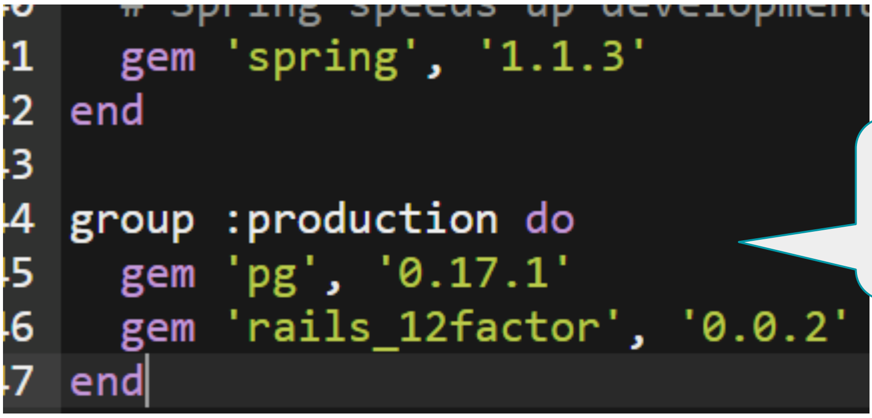
MY FIRST RAILS APP

GET READY TO DEPLOY

Card **8** of **10**
I'm Learning: **The Ruby on Rails Framework**

We want to share our app with everyone online! For this we will make use of Heroku to 'host' our app.

1

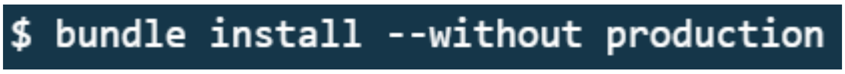


```
  # spring speeds up development
  gem 'spring', '1.1.3'
end

group :production do
  gem 'pg', '0.17.1'
  gem 'rails_12factor', '0.0.2'
end
```

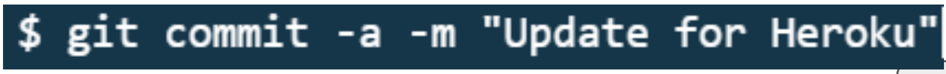
Add the following gems to our Gemfile

2



```
$ bundle install --without production
```

install the gems.



```
$ git commit -a -m "Update for Heroku"
```

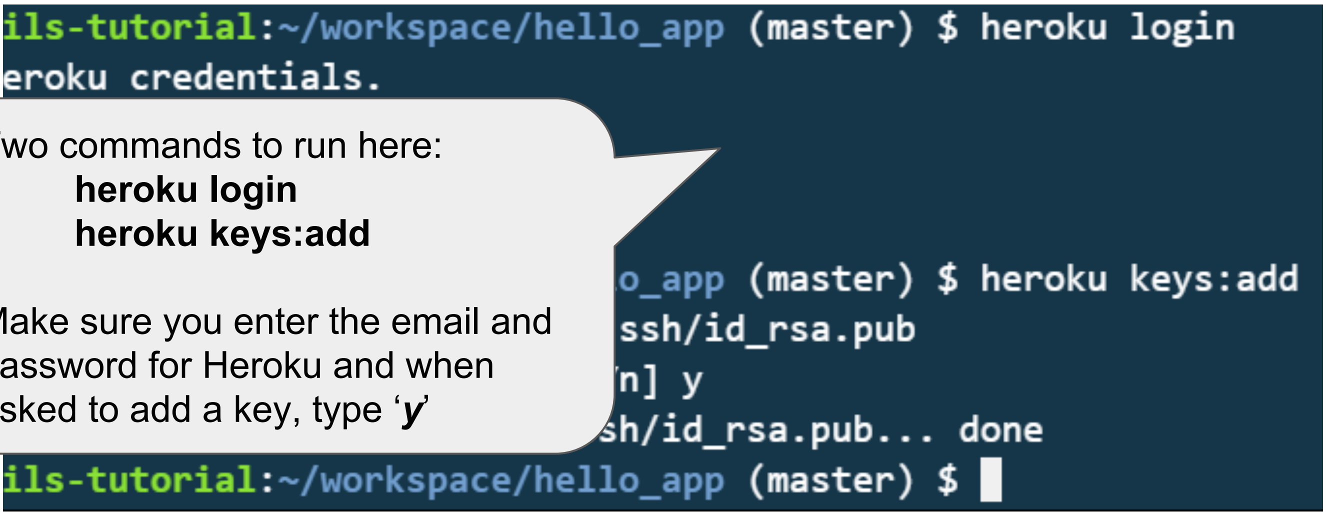
commit our changes.

3

HEROKU

Sign up for a free account at Heroku.
Remember the email and password you use!

4



```
ils-tutorial:~/workspace/hello_app (master) $ heroku login
eroku credentials.

o_app (master) $ heroku keys:add
ssh/id_rsa.pub
n] y
sh/id_rsa.pub... done
ils-tutorial:~/workspace/hello_app (master) $ █
```

Two commands to run here:
heroku login
heroku keys:add

Make sure you enter the email and password for Heroku and when asked to add a key, type '***y***'

MY FIRST RAILS APP

DEPLOY!

Card **9** of **10**
I'm Learning: **The Ruby on Rails Framework**

Let's deploy!

1

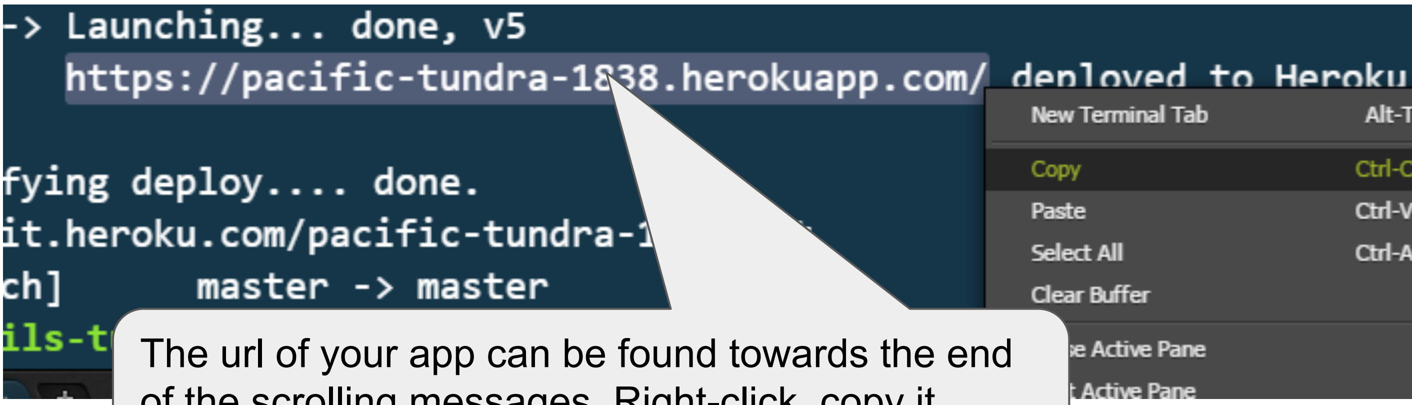
```
$ heroku create
```

create a place on the Heroku servers for our app to live.

```
$ git push heroku master
```

Use git to send all the files to heroku. This may take some time.

2



```
-> Launching... done, v5
   https://pacific-tundra-1838.herokuapp.com/ deployed to Heroku

fying deploy.... done.
it.heroku.com/pacific-tundra-1
ch]        master -> master
ils-t
```

The url of your app can be found towards the end of the scrolling messages. Right-click, copy it paste into a browser tab.

3

If all went as planned, you have published your first app!
Well done!!

MY FIRST RAILS APP

NEXT STEPS

Card 10 of 10
I'm Learning: **The Ruby on Rails Framework**

See if you can make some of the changes listed below

1

- Can you change 'hello, world" to display 'Hola, mundo!" instead?
- Can you add a second action called goodbye, which renders the text "goodbye, world!". You should edit the routes file so that root route goes to goodbye instead of hello.

2

Read the following statements and see if they make sense to you:

- Ruby on Rails is a web development framework written in Ruby
- Ruby is a programming language
- Cloud9 lets us create an online development environment (IDE)
- We can install Rails for our IDE
- Once Rails is installed, we can use commands such as rails new and rails server
- We can edit text files using our IDE
- We can add a controller action and change the root route to display a message
- We can use a local rails server to view our app as it will be seen by others
- We use Git so we can deploy to Heroku
- Git will send our files to Heroku, once we create a space for it on the Heroku servers

3

Ask your mentor if you would like to go through all the steps again.

You can start Chapter 2 of https://www.railstutorial.org/book/