

Setting Up Your Development Environment

Setting up your Ruby on Rails (Rails) development environment can be challenging for a number of reasons, including the fact that both the Ruby language and the Rails framework are updated quite often, along with the fact that installation requirements vary widely according to the operating system you're using, and perhaps even the version of that operating system.

Thus, rather than providing step-by-step installation instructions for each operating system, which would be out-of-date very soon after posting them, I will provide some hints and guidelines that I believe will be more useful to you. Most importantly, please be persistent, and ask for help on the forums (dedicated to each operating system variant) if you have problems. Once you get your Rails development environment set up, you'll be well on your way to an immensely rewarding experience learning about web application architectures through Rails.

The best site I have found for providing up-to-date instructions for installing Rails is:

<http://railsapps.github.io/installing-rails.html>

From this site, find your operating system, and then follow the instructions, which will involve installing RVM, Ruby and the Rails. I'll describe each of these in more detail next.

What to Install

In this section I will detail the most important software products and tools that we will use in the class – most were mentioned in Lecture 5 in Module #1.

- RVM (Ruby Version Manager) – A command-line tool that allows you to install, manage and work with multiple Ruby programming language versions. You should install this first, and then use it to install the latest stable version of Ruby. To check to see if you have RVM installed, at the command prompt in a terminal window, type:

```
$ rvm -v
```

(Note: DO NOT TYPE THE \$. Throughout the course I use \$ to denote the command prompt in your terminal window.)

If you type the following command:

```
$ rvm list known
```

You will see a list of the Ruby versions you have installed – probably none,

but that should change shortly. A list of all rvm commands is provided by typing:

```
$ rvm help
```

- Ruby – As mentioned above, after installing RVM, use it to install the Ruby programming language. Generally, this is accomplished typing the following command in your terminal window:

```
$ rvm install ruby
```

This should install the latest stable version of Ruby. You can use the previous command to list the Ruby version you have installed, and you can also see the current default version you are using by typing:

```
$ ruby -v
```

- Ruby on Rails (Rails) – Rails is a Ruby software package (library). In Ruby, it is common to use the RubyGems package management, and the package themselves are then referred to as Gems. To learn more about Gems, see:

<http://guides.rubygems.org>

To install the Rails gem, at your command prompt, type:

```
$ gem install rails
```

This should install the latest stable release of Rails. To check the version you have installed type:

```
$ rails -v
```

Then you're good to go!

I suggest that you try to install your development environment from scratch in the manner I have described above – this is the preferred approach. However, if you're having difficulties, you may want to consider the other options I provide below.

Other Options

If you having difficulties setting up your development environment from scratch, there are at least two other options:

- **Use a virtual machine** – this involves first installing a virtualization system on your computer that will allow you to run other operating systems within

that environment. Two of the leading vendors of virtualization systems are VMware and VirtualBox, the latter is free works very well. Once you have installed the virtualization system, you can download a Linux virtual machine that has RVM, Ruby and Rails pre-installed from:

<https://bitnami.com/stack/ruby/virtual-machine>

I believe this is your second best deployment option.

- **Use a hosted development environment** – [Nitrous.io](https://nitrous.io) provides a hosted development environment that you can access from your web browser, i.e., you will be using a Rails environment hosted in the cloud. If all else fails, use this! For installation instructions, visit:

<http://railsapps.github.io/rubyonrails-nitrous-io.html>

Historically, installing a Rails environment on a Windows platform has been difficult. This may be a good choice if you're a Windows user, and just can't make the methods above work for you. Finally, if you're using a Chromebook (i.e., a system running the Google Chrome OS), this is obviously the option you should use, as you can only use a cloud service.

Good luck, and get that Rails environment set up!