How to set up the Clip development environment for Ruby on Rails

1. Install Git:
   1. [Set Up Git](https://help.github.com/articles/set-up-git)
   2. Enter your GitHub username and password each time or [create SSH keys](https://help.github.com/articles/generating-ssh-keys). Be sure the project is cloned using SSH, not HTTPS (otherwise use the git command at [Git push requires username and password](http://stackoverflow.com/a/6565661)).
2. Install a Ruby IDE or text editor:
   1. [What Ruby IDE do you prefer? - Stack Overflow](http://stackoverflow.com/questions/16991/what-ruby-ide-do-you-prefer) (some of these cost money)
   2. Get an [IntelliJ](http://www.jetbrains.com/idea/) license number from the Software Engineering class.
   3. [Notepad++](http://notepad-plus-plus.org/)
3. Install Ruby:
   1. Go to the [RubyInstaller](http://rubyinstaller.org/) homepage.
   2. Click the big “**Download**” button.
   3. Download and install “**Ruby 1.9.3-p194**” (version 1.9.3). When installing, select “Add Ruby executables to your PATH”.
   4. Open a command line and enter “# ruby --version” to verify Ruby installed correctly.
4. Install Ruby Development Kit (DevKit):
   1. Follow steps 1-5 of the “Installation Instructions” in the [Development Kit Documentation](https://github.com/oneclick/rubyinstaller/wiki/Development-Kit). When step 2 asks DevKit to be downloaded from the [RubyInstaller Downloads](http://rubyinstaller.org/downloads/) page, download “**DevKit-tdm-32-4.5.2-20111229-1559-sfx.exe**”.
5. Optional (for debugging only): Install the ri command line tool to view Ruby documentation without a browser [[1]](http://stackoverflow.com/a/6963148/770170) [[2]](http://stackoverflow.com/a/3611257/770170) [[3]](http://mislav.uniqpath.com/poignant-guide/book/chapter-6.html#section3):
   1. Open a command line and enter “gem install rdoc-data”
   2. Enter “rdoc-data --install”.
6. Install Rails:
   1. Follow the instructions at “[Getting Started with Rails](http://guides.rubyonrails.org/getting_started.html)“:
      1. Install RubyGems:
         1. Go to the [RubyGems project in RubyForge](http://rubyforge.org/frs/?group_id=126).
         2. Download and extract “**rubygems-1.8.24.zip**” (version 1.8.24).
         3. Open a command line, navigate to the extracted folder, and enter “# ruby setup.rb”.
      2. Install SQLite:
         1. Go to the [SQLite Download](http://www.sqlite.org/download.html) page.
         2. Download and extract “**sqlite-shell-win32-x86-3071400.zip**” (version 3.7.14).
      3. Install Rails:
         1. Follow the instructions in [Section 3 of](http://guides.rubyonrails.org/getting_started.html#creating-a-new-rails-project) [“](http://www.google.com/url?q=http%3A%2F%2Fguides.rubyonrails.org%2Fgetting_started.html%23creating-a-new-rails-project&sa=D&sntz=1&usg=AFQjCNE8Lr4t9NvjqnY3kYLYIbg8RH2iGA)[Getting Started with Rails](http://guides.rubyonrails.org/getting_started.html#creating-a-new-rails-project)[“](http://www.google.com/url?q=http%3A%2F%2Fguides.rubyonrails.org%2Fgetting_started.html%23creating-a-new-rails-project&sa=D&sntz=1&usg=AFQjCNE8Lr4t9NvjqnY3kYLYIbg8RH2iGA). Only section 3.1 is required to install Rails. Everything after that is a tutorial.
         2. To start the Rails server, navigate to the application you wish to run and then enter the command, “rails server”. You can’t use “rails server -d”, because the “-d” option requires the fork() method to be implemented, but it isn’t on Windows machines.
         3. Populate the SQLite database with data from whichever application you’re about to run.
7. Install CoffeeScript syntax highlighting in Notepad++:
   1. Go to the [CoffeeScript\_notepad\_UDL](https://github.com/blakmatrix/CoffeeScript_notepad_UDL) project.
   2. Download “[CoffeeScript.xml](https://github.com/blakmatrix/CoffeeScript_notepad_UDL/blob/master/CoffeeScript.xml)“.
   3. Open Notepad++.
      1. Open **View** > **User-Defined Dialog...**
      2. Click the **Import...** button and **Open** the copy of “[CoffeeScript.xml](https://github.com/blakmatrix/CoffeeScript_notepad_UDL/blob/master/CoffeeScript.xml)“ you downloaded earlier.
      3. Close the confirmation dialog.
      4. Close the **User Defined Language** dialog.
   4. Restart Notepad++. This will create a new “**userDefineLang.xml**” file in your “**%APPDATA%\Notepad++\**” folder (e.g. “C:\Users\Username\AppData\Roaming\Notepad++\”).
      1. CoffeeScript should now appear at the bottom of the **Language** menu. Open a CoffeeScript file and then select **Language** > **CoffeeScript** to associate that file type with the CoffeeScript syntax highlighting.
   5. The downloaded XML file can now be deleted.
   6. For more information, see “[Creating a User Defined Language in Notepad++](http://weblogs.asp.net/jgalloway/archive/2006/11/25/creating-a-user-defined-language-in-notepad.aspx)“.
8. Install Sass syntax highlighting for Notepad++:
   1. Go to [Sass 3 Notepad++ User-Defined syntax highlighting](http://tech.wiedo.nl/sass-3-notepad-user-defined-syntax-highlighti).
   2. [Download SCSS syntax highlighting file](http://posterous.com/getfile/files.posterous.com/temp-2011-01-10/zBrpwzDJrrbCIdzhJGinqxyxpneBnnGamgBpayzqvryCwaowhwBnjEJdtgkn/userDefineLang_SCSS.xml)
   3. Follow similar the instructions for installing CoffeeScript syntax highlighting in Notepad++, above.
9. Install a viewport resizer for testing.
   1. [Malte Wassermann’s Viewport Resizer](http://lab.maltewassermann.com/viewport-resizer/) is good, but for some reason the “//= require jquery\_ujs” line in “app\assets\javascripts” has to be commented out because it interferes with it, probably because of something to do with preventing the Rails application to be embedded within an iFrame.
10. Keep the project up-to-date by modifying the version numbers in the Gemfile and then running “bundle install” from the command line. See the Clip project’s Gemfile for more information. Also see [De-Railing Security Bugs](http://alistapart.com/blog/post/derailing-security-bugs) (which also recommends running a rake task which doesn’t seem to apply to this project).