Gems

Ruby Gems

A Ruby gem is a software package/module/Library/utility written by other developers, that is designed to achieve a specific goal and can be installed and used in every project on your server. A plugin is a module/Library that you can use inside your project. Ruby comes with multipul gems pre-installed such as rake and there is the option to personal create gems and plugins.

Gems allow a Ruby coder to quickly perform tasks like authentication withouth having to write the code themselves, however they are specific to the Ruby version, so make sure it is for the one you are using.

Gems can be found at rubygems.org or ruby-toolbox.com and can be installed from the command line using ‘gem install <gem-name>’.

Gemfile

To create a list of gems used in a project, install the gem ‘Bundler’ and create a ‘Gemfile’ in the root director. To create the base gemfile use ‘bundle init’.

To install the gems run ‘bundle’ in the command line in project root directory. Any gems listed in the gemfile will then be automatically loaded into the application, unless specified otherwise.

There are several sections to a gemfile:

Ruby version number and optional engine details:

ruby '1.9.3', :engine => 'jruby', :engine\_version => '1.6.7'

Gemfile source:

source 'https://rubygems.org' do

# Gems here

end

Environment groups, which gems are required:

group :test do

# Gems here

end

Gems are defined as:

gem ‘<gem-name>’

There are several options which gems can be defined with:

Version:

* Exact version number:

gem 'rack', '1.1'

* Greater than or equal to, and other operators:

gem 'rack', '>=1.0'

gem ‘rack’, ‘<3.0’

* Best shown by. Greater than or equal to version shown, but less than next major revision. For example if 1.1 was given, it’d get gems upto ‘1.9’ but not ‘2.0’:

gem ‘rack’, ‘~> 1.0.1’

Require:

* Requiring false, means bundler with maintain dependencies, but not require the gem on all runs of the application. For the gem to be used it must be required manually where it is needed:

gem 'rack', require => false

* Requring a directory will specify where the main gem file name is and how to require it:

gem ‘rack’, require => ‘rack/cache’

Source:

* The source of a gem can be set manually:

gem 'my\_gem', '1.0', :source => 'https://gems.example.com'

Git:

* Git repositorys can be used to aquire gems if they have a gemspec file in them:

gem 'nokogiri', :git => 'https://github.com/tenderlove/nokogiri.git', :branch => '1.4'