Gem Development with RubyMine

A RubyGem, commonly called just a gem, is a packaged Ruby library, which installation allows you use the functionality of a common library in your application. This tutorial is meant to explain how to create and deploy a RubyGem.
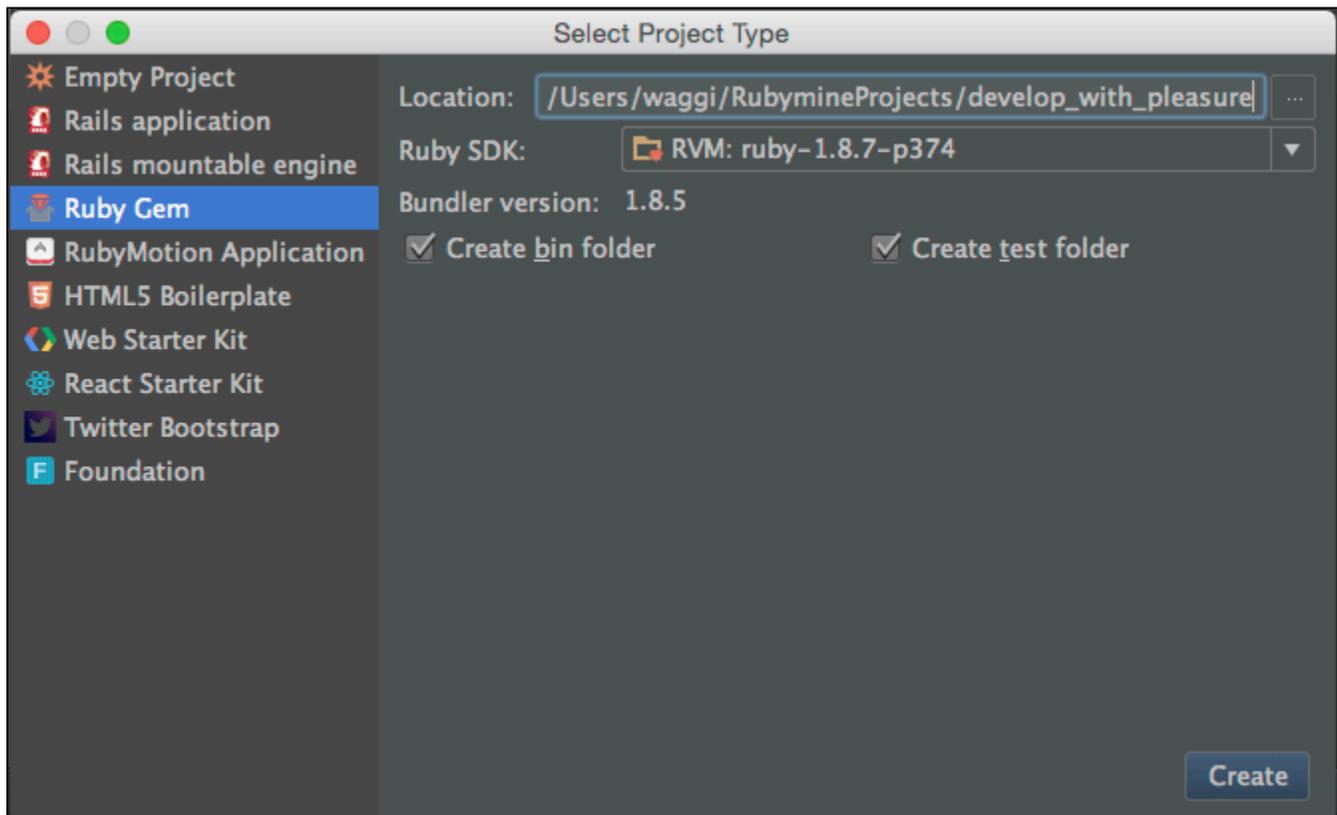
0. Prerequisites

Make sure the following prerequisites are met:

- RubyGems gem is installed.
- Bundler gem is installed.

1. Creating a New Gem App

Creating a new gem can be done by going toFile | New Project...and choosingRuby Gem. Specify location and name of the project, then choose Ruby SDK supposed to be used for the project and setCreate bin folderandCreate test folderif these folders are required to be generated for the project:
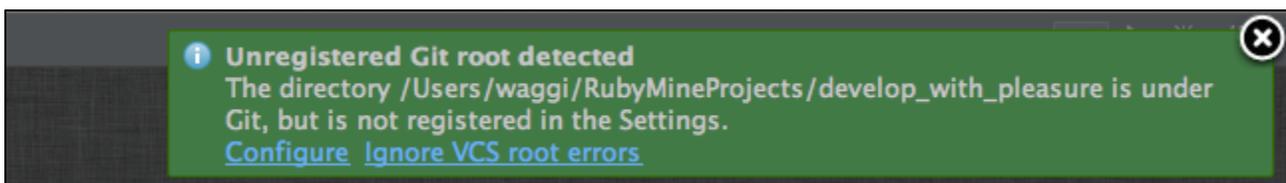

The skeleton of the application is automatically generated:

```
Project                    ⊕ ╪ | ✿ ▾ ▐←    💙 develop_with_pleasure.rb ×
▼ 📁 develop_with_pleasure (~/RubyMineProjects/deve    require 'develop_with_pleasure/version'
     📁 bin
  ▼  📁 lib                                          🔵 ⊟module DevelopWithPleasure
    ▶  📁 develop_with_pleasure                           # Your code goes here...
        💙 develop_with_pleasure.rb                   ⊟end
     📁 test
     📄 .gitignore
     💙 develop_with_pleasure.gemspec
     💙 Gemfile
     📄 Gemfile.lock
     📄 LICENSE.txt
     💙 Rakefile
     📄 README.md
▶ 📚 External Libraries


Run ▶ develop_with_pleasure: bundler

▶▶   ↑    /Users/waggi/.rvm/rubies/ruby-1.9.3-p374/bin/ruby -e $stdout.sync=true;$stderr.syn
■    ↓          create  develop_with_pleasure/Gemfile
                create  develop_with_pleasure/Rakefile
📧   📲          create  develop_with_pleasure/LICENSE.txt
                create  develop_with_pleasure/README.md
💫   📥          create  develop_with_pleasure/.gitignore
                create  develop_with_pleasure/develop_with_pleasure.gemspec
✖    🗄          create  develop_with_pleasure/lib/develop_with_pleasure.rb
                create  develop_with_pleasure/lib/develop_with_pleasure/version.rb
     🗑     Initializating git repo in /Users/waggi/RubyMineProjects/develop_with_pleasure

           Process finished with exit code 0
```

2. Configuring Git Root

Unregistered Git root notification appears as soon as the application structure is ready:


```
        ⓘ  Unregistered Git root detected                                          ⊗
           The directory /Users/waggi/RubyMineProjects/develop_with_pleasure is under
           Git, but is not registered in the Settings.
           Configure  Ignore VCS root errors
```
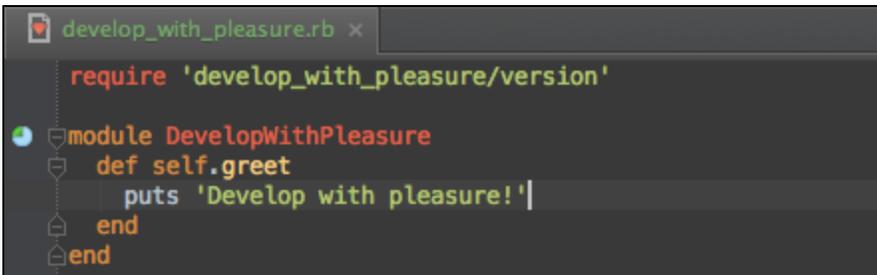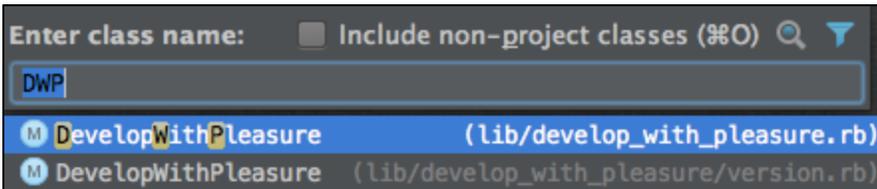
PressConfigureor go toSettings -> Version Controland add application root to version control if required:


```
Unregistered Git root: /Users/waggi/RubyMineProjects/develop_with_pleasure        Add root
```
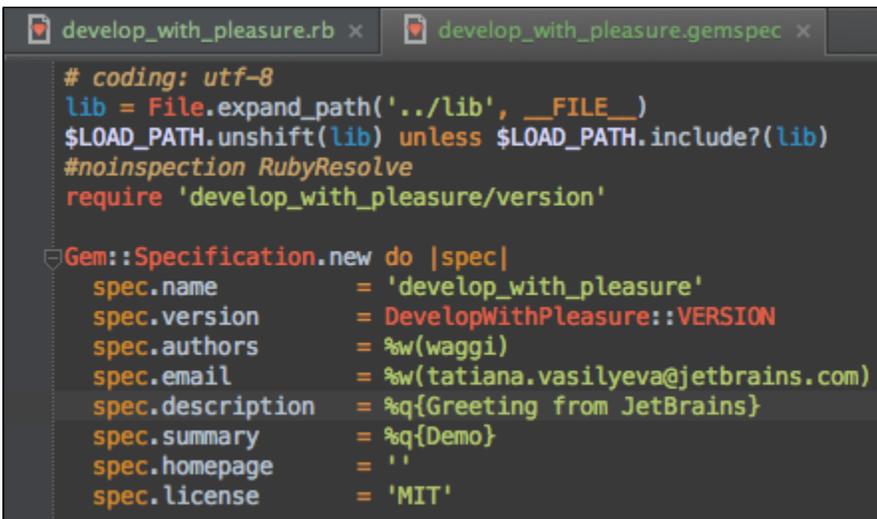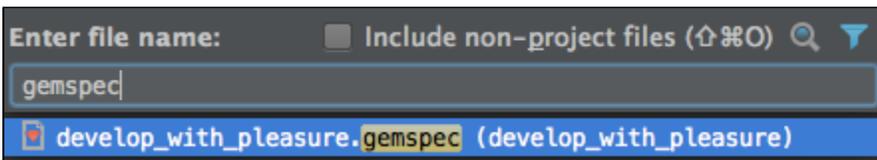
3. Adding Working Code

Navigate to the main module (O/Ctrl+N) and add the code expected to be doing something:

```
Enter class name:      ☐ Include non-project classes (⌘O)  🔍 ▼
DWP
 Ⓜ DevelopWithPleasure          (lib/develop_with_pleasure.rb)
 Ⓜ DevelopWithPleasure  (lib/develop_with_pleasure/version.rb)
```

```
develop_with_pleasure.rb  ×

  require 'develop_with_pleasure/version'

● module DevelopWithPleasure
    def self.greet
      puts 'Develop with pleasure!'
    end
  end
```

Then navigate to Gemspec file (O/Ctrl+Shift+N) and set up the summary and description sections:

```
Enter file name:       ☐ Include non-project files (⇧⌘O)  🔍 ▼
gemspec
 📄 develop_with_pleasure.gemspec (develop_with_pleasure)
```

```
develop_with_pleasure.rb  ×    develop_with_pleasure.gemspec  ×

  # coding: utf-8
  lib = File.expand_path('../lib', __FILE__)
  $LOAD_PATH.unshift(lib) unless $LOAD_PATH.include?(lib)
  #noinspection RubyResolve
  require 'develop_with_pleasure/version'

  Gem::Specification.new do |spec|
    spec.name           = 'develop_with_pleasure'
    spec.version        = DevelopWithPleasure::VERSION
    spec.authors        = %w(waggi)
    spec.email          = %w(tatiana.vasilyeva@jetbrains.com)
    spec.description    = %q{Greeting from JetBrains}
    spec.summary        = %q{Demo}
    spec.homepage       = ''
    spec.license        = 'MIT'
```
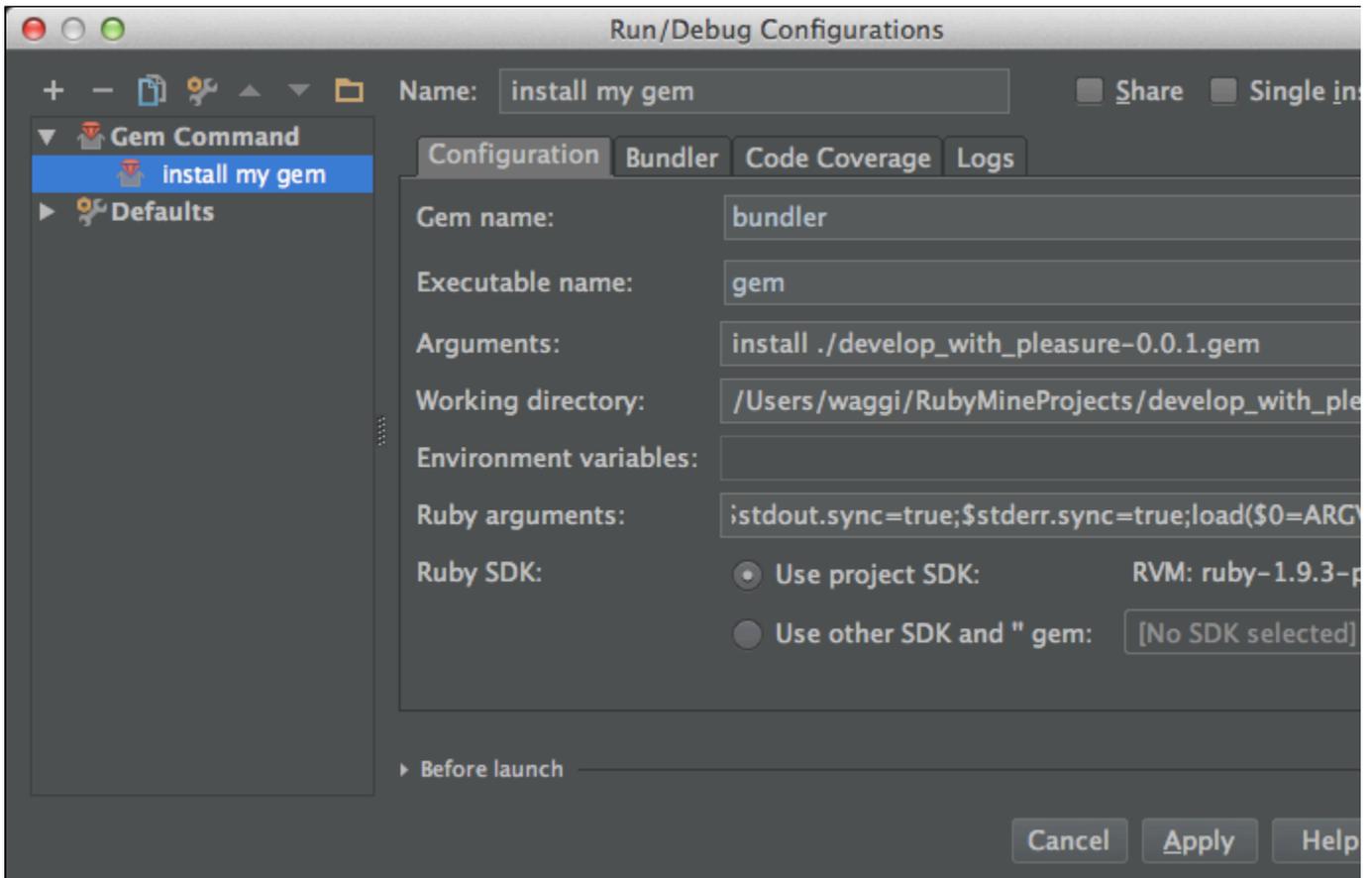
4. Building Gem

Go to theTools | Gemmenu and selectBuild Gemoption. After the gem is built a file with the gem extension can be found in the project view:
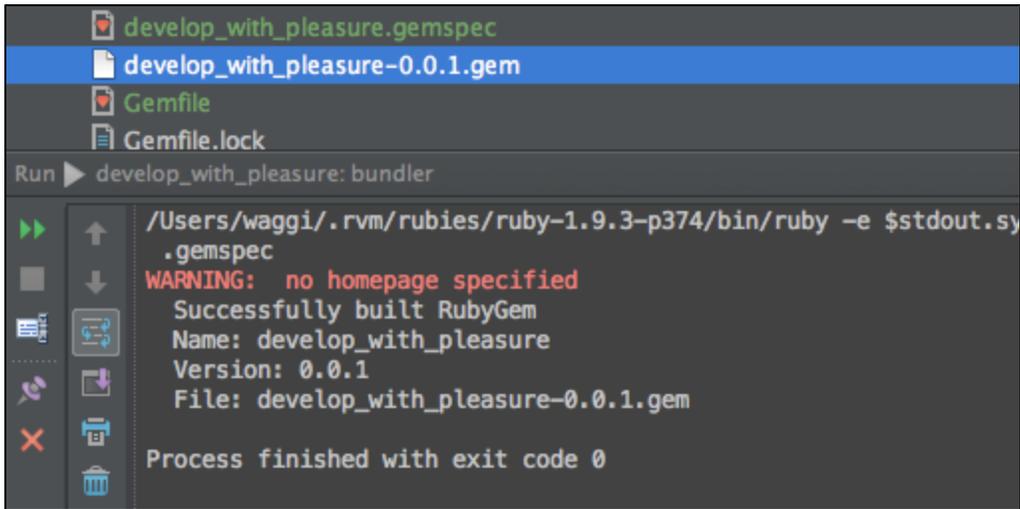
5. Installing Gem Locally

Before being uploaded to RubyGems repository the gem needs to be tested, so lets install the gem. Go toRun | Edit Configurations...and add a newGem Commandas described:

Apply the changes and run the configuration (R/Shift+F10), wait for the gem being installed:

```
Run  🐞  install my gem

▶   ⬆    /Users/waggi/.rvm/rubies/ruby-1.9.3-p374/bin/ruby -e $stdout.sync=true;$stderr.sync=true
         ./develop_with_pleasure-0.0.1.gem
■   ⬇    Successfully installed develop_with_pleasure-0.0.1
         1 gem installed
⏸   🔄    Installing ri documentation for develop_with_pleasure-0.0.1...
         Building YARD (yri) index for develop_with_pleasure-0.0.1...
🖳   📥    Installing RDoc documentation for develop_with_pleasure-0.0.1...

📞       Process finished with exit code 0

✕   🗑
```

6. Smoke Testing with IRB

To test the gem run IRB console (Tools | Run IRB Console...) and call the methods of the newly installed gem:

```
Run  🗔  IRB console

↻   ⬆    /Users/waggi/.rvm/rubies/ruby-1.9.3-p374/bin/ruby -e $stdout.sync=true;$
         Switch to inspect mode.
■   ⬇    >> require 'develop_with_pleasure'
         => true
🖳   🔄
         ?> DevelopWithPleasure.greet
📞   📥    Develop with pleasure!
         => nil
✕   📇
```

7. Gem Publishing

Gem can now be pushed withTools | Gem -> Push Gemoption:

```
Run  ▶  develop_with_pleasure_mine: bundler

⏩   ⬆    /Users/waggi/.rvm/rubies/ruby-1.9.3-p374/bin/ruby -e $stdout.sync=true;
          develop_with_pleasure-0.0.1.gem
■   ⬇    Pushing gem to https://rubygems.org...
         Successfully registered gem: develop_with_pleasure (0.0.1)
🖳   🔄
         Process finished with exit code 0
📞   📥
```

If you want to use your own gem repository, please change your .gemspec file according to RubyGems guides:

```
Gem::Specification.new 'develop_with_pleasure' do |spec|
  # ...
  spec.metadata['allowed_push_host'] = 'https://gems.my-company.example'
end
```