**Prerequisites:**

1 Make sure that ruby 1.9.3+ is installed on machine.

2 Install Redmine on local machine using [Redmine Installation wiki](http://www.redmine.org/projects/redmine/wiki/RedmineInstall).

3 knowledge for Ruby and Ruby on Rails framework at Introductory level is required.

**Redmine Plugin Documentation**

1. Redmine wiki contains excellent tutorial for creating Redmine Plugin which you can find it [here](http://www.redmine.org/projects/redmine/wiki/Plugin_Tutorial).
2. Go through the entire tutorial first and look into the source code of some already implemented plugins to get much clear idea about plugin creation and its working.
3. Here are some basic steps about how you can create Issue Importer Plugin.
4. Open the terminal and go to Redmine Home directory and execute following command

rails generate redmine\_plugin issue\_importer\_xls

You can also checkout already built issue\_importer plugin from github using following command

git clone <https://github.com/aspiresoftware/redmine-import-tasks.git>

1. The plugin structure is created in plugins/issue\_importer\_xls .You can change information like name, author, description and version from plugins/issue\_importer\_xls/init.rb
2. Then restart the application and point your browser to <http://localhost:3000/admin/plugins> where you can see the newly created issue\_importer\_xls plugin.
3. We do not need to store any plugin related fields in our database so we don't create model for the plugin.
4. But we surely need controller .And to create controller execute following command rails generate redmine\_plugin\_controller ExcelSheet
5. You can find the generated controller at plugins/issue\_importer\_xls/app/controllers/excel\_sheet\_controller.rb
6. Create first controller method index

def index

end

1. Create a view inside plugins/issue\_importer\_xls/app/views/excel\_sheet/index.html.erb
2. To read and parse excel files,open office spreadsheets we need **roo and spreadsheet** gem dependencies.
3. Add these gems in Gemfile of the plugin as follows

if RUBY\_VERSION >= "1.9"

gem 'roo'

gem 'iconv'

gem 'spreadsheet',"~> 0.9.7"

end

1. Read documentation about  [Roo](https://github.com/Empact/roo/blob/master/README.markdown) and [Spreadsheet](https://github.com/zdavatz/spreadsheet/blob/master/GUIDE.md) gem to understand its usage.
2. Create another controller method upload\_sheet to read and parse uploaded Excel. Sheet.
3. Add basic validations such as file types should be a valid Excel sheet and check its extension .It must be one of the followings : “.xls” , “.xlsx” or “.ods”
4. Check Excel sheet contains valid data by checking content type of each cell.
5. If all the validation passes create issues for each valid row in excel sheet.
6. Each plugin registered with Redmine is displayed on the admin/plugins page.Support for a basic configuration mechanism is supplied by the Settings controller. This feature is enabled by adding the "settings" method to the plugin registration block in a plugin's init.rb file. Add following line to make the plugin configurable :

**settings :default => {'empty' => true}, :partial => 'settings/issue\_importer\_setting'**

1. Now add some default configurable options to the plugin configuration like following

settings :default => {'task\_column' => 0,'save\_task\_as' => 2,'average\_hour\_column' => 3 ,'start\_date\_column' => 6,'end\_date\_column' => 7 ,'asignee\_name\_column' => 9 ,'task\_description\_column' => 4}, :partial => 'settings/issue\_importer\_setting'

1. Now create a view for Plugin configuration by creating \_issue\_importer\_xls.erb file in

plugins/issue\_importer\_xls/views/settings directory.

1. Add configurable fields in \_issue\_importer\_xls.erb with their valid possible values.
2. Restart the Redmine to see Plugin configuration working.