

IMPLEMENTATION & MANAGEMENT OF PROJECT USING REDMINE TOOL

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ABSTRACT

Redmine is an open source technology which got released under the terms of the GNU General Public License v2 (GPL). It is user-friendly project management web application, written using the Ruby on Rails framework. Redmine is a cross-platform and cross-database application which is also used as issue tracking tool. It permits many team members to supervise numerous projects and allied subprojects simultaneously. It exhibits many advantages over project based forums, time tracking, and role based access control. Redmine also provides a calendar and Gantt charts to assist graphical vision of projects and their deadlines.

I. INTRODUCTION

Redmine is a Project management software tool, which helps to manage and develop large projects very easily. It comes with Bug/feature tracking system which detects bugs & errors in software projects & it saves users time in detection & removal of bugs. It provides a Platform for collaboration between projects and subprojects. Redmine is much useful in Planning tasks, Organizing work & Managing resources. Redmine supports more than 35 languages so non-native English speakers will not be having any difficulty in getting used to the software. It further supports multi-project management [2].

II. IMPLEMENTATION

2.1 Redmine application

Get the Redmine source code by either downloading a packaged release or checking out the code repository [1, 2, and 3].

- **Create database**

Create database, named as redmine. Database Server used as MYSQL.

- **Database connection configuration**

To configure your database settings Edit config/database.yml file, set the production environment values like

Production:

Adapter: mysql

Database: redmine

Host: localhost

Username: redmine

Password: pass123

- **Dependency installation required**

Then you can install all the gems (Collection of Ruby code) required by Redmine using the following command: `Gem install bundler`

- **Additional dependencies (Gemfile.local)**

If any of gem required for particular functionality, create a local file named `Gemfile.local` at the root of your Redmine directory. When Bundle gets operates, it will be install automatically.

- **Session store secret generation**

Here it auto creates a random key by Rails to encode cookies storing session data.

Command is: `bundle exec rake generate_secret_token`

- **Database schema objects creation**

Create the database structure, by running the following command under the application root directory:

Set `RAILS_ENV=production`

`bundle exec rake db: migrate`

- **Database default data set**

Insert default configuration data in database, by running the following command:

`RAILS_ENV=production bundle exec rake redmine:load_default_data`

- **File system permissions**

If required need to take file permission using following command

files (storage of attachments)

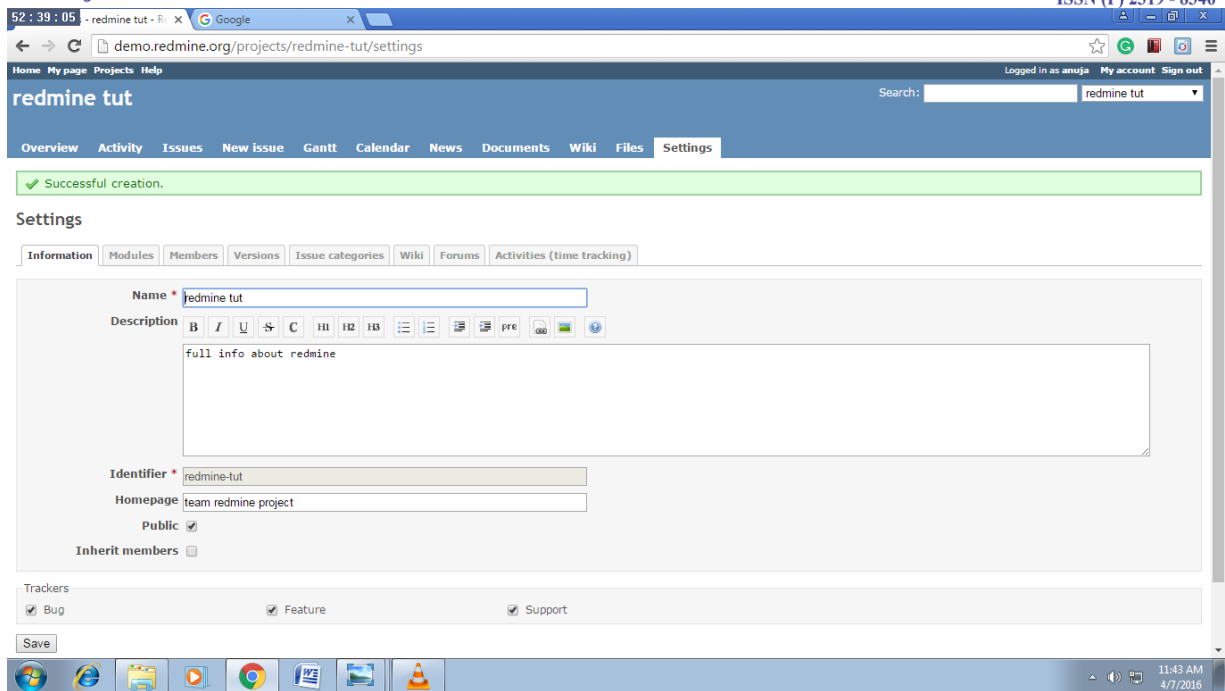
log (application log file `production.log`)

III. FEATURES IN REDMINE

Once we installed Redmine, can access pages of Redmine in any browser. The users can have a different role on each project & each project can be declared as public or private. Project Level Modules can be enabled / disabled. It detects and fixes bugs and manages related project parts as subprojects of a main project [4].

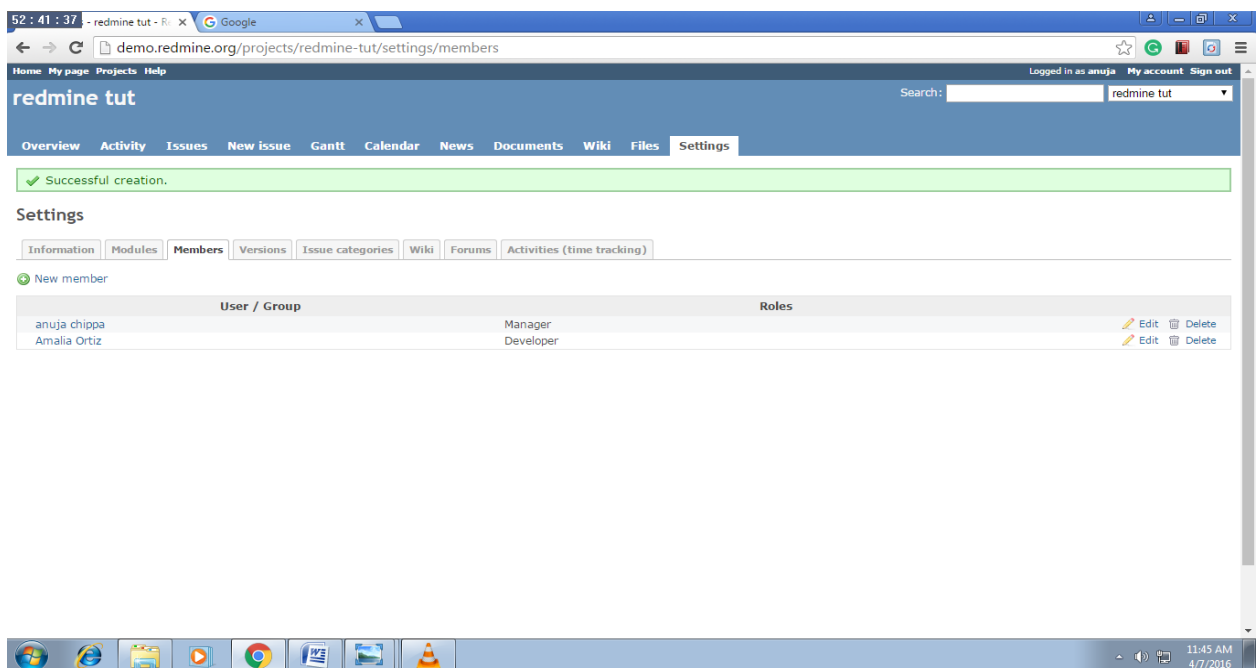


Screenshot 1: Home page of Redmine application after installation



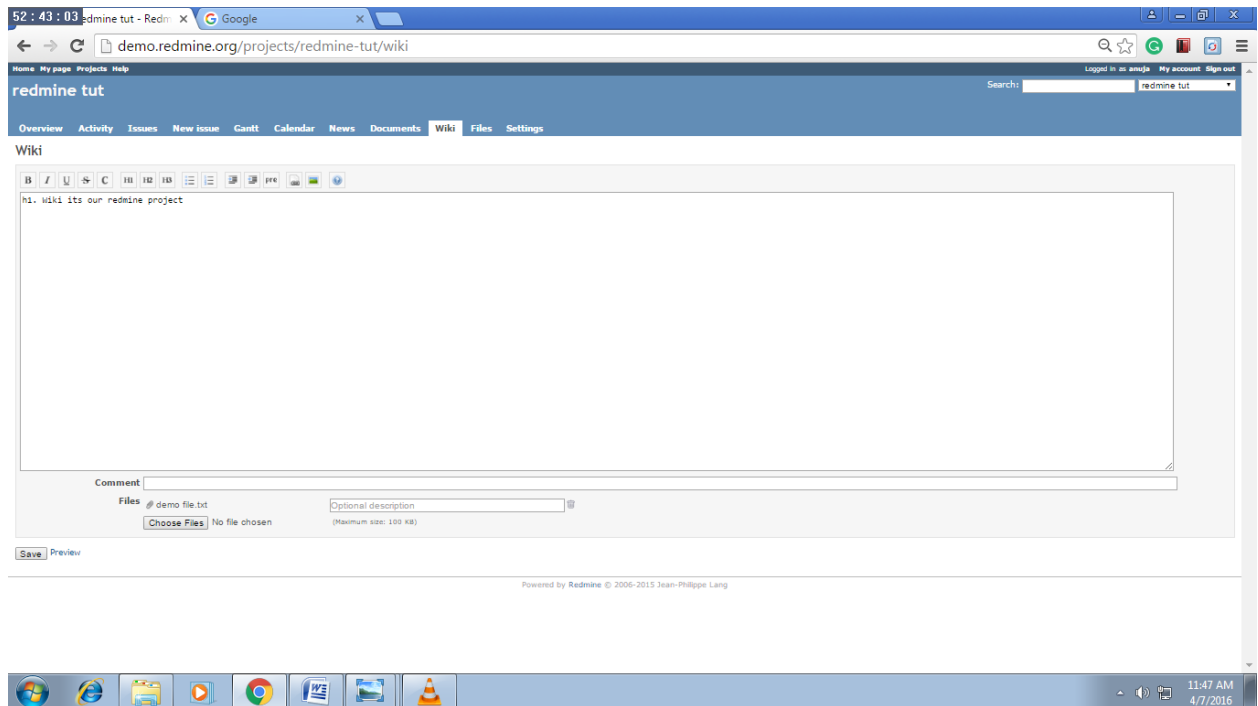
Screenshot 2: Create project for mangement

It is feasible to work for large and complex project management and development. Issue tracking system is made flexible and allows access to only authorized users. It is having some special graphical features like Gantt chart, graphs, calendar, News, documents & files management process.



Screenshot 3: Adding users to a project role

Feeds are provided for from favorite pages; articles and web & can receive and send email notifications. Wiki and forums are available per project for content modification from browser. Time calculator is for project time tracking, time entries. It supports self-registration for users, Multilanguage and Multiple databases.



Screenshot 4: Wiki available for per project.

IV. CONCLUSION

Redmine is an open source, web-based efficient project management and issue tracking tool. In our academic practices; it helps to find project teams performance, Manage team workload and to track work progress. By using this tool we also equipped with planning and guidelines for project management so that our student and project guides are always be in touch with each other to make their project-work operational. Even Head of Department can always find project progress with respect to time and based on this he can provide the next guidelines to project guides and students. This exposure definitely helps students for their future life in industry as well as theirs personal business.

REFERENCES

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