

Individual Milestone 5 Report

Executive Summary

This report records my activities related to Earth project development for Milestone 5 period from 18-August-2008 to 6-September-2008.

In this sprint, I have finished the following main tasks: re-implement the files' metadata feature using RSP tables, design a flexible architecture for (earth daemon) plugins and finally converts file-monitor and my metadata files into plugins for earth daemon.

Tasks and Activities Assigned

- Re-implement the files' metadata feature using RSP tables.
 - Sub-task 1:
 - * Description: Adding metadata for files feature was implemented in milestone 4. Now, I re-implemented it using RSP tables. This makes the implementation more efficient and generic.
 - * Idea/Solution: avoid redundancy in the database and make all records in the same table having the same type.
 - * Affected files:
 - lib/earth-plugins/filemonitor.rb,
 - lib/earth-plugins/metadata.rb,
 - lib/earth-plugins/rsp-metadata.rb and
 - lib/earth-plugins/search.rb
 - * Git commits: I have created a separate branch in my personal repository for this task named: fileMetadata. There are 12 commits under that branch related to this task:
You can find all the commits in: <http://github.com/mfbDev/earth/commits/fileMetadata>. They started with
commits/fileMetadata/0a9ffc836301f9b916. and ended with
commits/fileMetadata/9063828060000a.
 - * Estimated time taken (planned): 18 hours
 - * Actual time taken: 20 hours
 - Sub-task 2: testing
 - * Description: test the new functionality with the new design
 - * Idea/Solution: N/A.
 - * Affected files: N/A
 - * Git commits: N/A
 - * Estimated time taken (planned): 5 hours
 - * Actual time taken: 6 hours
- Design a flexible architecture for (earth daemon) plug-ins
 - Sub-task 1: reading
 - * Description: read about existing plugin architectures
 - * Idea/Solution: N/A.
 - * Affected files: extension-points-design.doc
 - * Git commits: N/A
 - * Estimated time taken (planned): 5 hours

- * Actual time taken: 3 hours
- Sub-task 2: design and coding
 - * Description: design a new plug-in architecture for earth daemon and implement it
 - * Idea/Solution: The main idea was using extension-points.
 - * Affected files:
 - lib/earth-plugin-interface/plugin-manager.rb,
 - lib/earth-plugin-interface/extensions.rb,
 - lib/earth-plugin-interface/earth-plugin.rb,
 - lib/earth-plugins/file-monitor.rb
 - * Git commits: There are 10 commits related. All can be found under earth/commits/metadata-as-plugin
 - Started with: commits/metadata-as-plugin/9063828060000a
 - Ended with: commits/metadata-as-plugin/30d8813d82236c148
 - * Estimated time taken (planned): 15 hours
 - * Actual time taken: 10 hours
- Sub-task 3: testing
 - * Description: test the new architecture and test file-monitor as a plug-in
 - * Estimated time taken (planned): 5 hours
 - * Actual time taken: 5 hours
- Add metadata as a plug-in for file-monitor
 - Sub-task 1: adding rsp-metadata as a plug-in for file-monitor
 - * Description: create extension points in file-monitor. Link rsp-metadata to these extension points.
 - * Affected files:
 - lib/earth-plugins/file-monitor.rb,
 - lib/earth-plugins/metadata.rb and
 - lib/earth-plugins/rsp-metadata.rb,
 - * Git commits: There are about 18 commits related.
 - All can be found in: earth/commits/metadata-as-plugin.
 - Started with:
 - commits/metadata-as-plugin/35a48ac6b3f4f92
 - Ended with:
 - commits/metadata-as-plugin/8434625e07aac85
 - * Estimated time taken (planned): 5 hours
 - * Actual time taken: 4 hours
 - Sub-task 2: testing
 - * Description: testing metadata feature while it is working as a plug-in
 - * Affected files: N/A
 - * Git commits: N/A
 - * Estimated time taken (planned): 2 hours
 - * Actual time taken: 4 hours
 - Sub-task 3: loading code from database instead from disk
 - * Description: I start the work by loading plug-in files from the disk which make things easier for me. After that, I change the implementation so extensions will load plug-ins from the database.
 - * Affected files: same as previous
 - * Git commits: included with the previous item
 - * Estimated time taken (planned): 1 hours
 - * Actual time taken: 3 hours

Resource Contributions

I estimated that I will spent about 70 hours for this milestone. I have spent about 60 hours including meeting times.

Milestone Observations

I believe this milestone was more productive than the previous one because there was more communication between the group members.