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SEGP2 Plugin Group Milestone 6 Report
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Total Hours Spend: approx. ??? hours

Executive Summary

Milestone 6 began by reviewing what were the leftover work and issues needed to be addressed. The following were the tasks that had been set by the group at the beginning of the sprint:

- Finish up the 3rd pillar of plugins: deployment.

- Create plugins and apply what was created and set up plugins development into them.

- Front-end plugins union: Finalize and have the plugins framework set.

The first and second items were taken up by Ida, Mohammad, Fil and Ken, while Xiaodong, Keane and Huang Jian were assigned to the last item.

Ida managed to update the `plugins_manager.rb` to support extension point, introduced by Mohammad, during the installation of a daemon plugin. She also managed to add an uninstall method and accessor script to uninstall the a plugin from Earth. Mohammad provided his expertise to assist Ida in getting the implementation correct. Ida had spend ?? hours on updating the scripts, while Mohammad spend ?? hours to lend his expertise to her, while implementing the file metadata as an extension point.

Ken created the `list_plugins` script to enable the administrator to see what plugins had been installed. Also, he unified all the plugins related scripts (`sign_plugin`, `install_plugin` and `uninstall_plugin`) into `earth_plugins`. This root accessor script will call the appropriate script to perform the required plugin task. Ken had spend 4 hours creating the scripts. He also spend 3 hours to help in preliminary integration tasks.

Fil created a daemon plugin that redirects the daemon status to the front-end. He spend ?? hours on it.

Xiaodong, Keane and Huang Jian had conceptualized and implemented their versions of GUI plugins framework into functional prototypes.

Xiaodong and Keane's implementation used the Rails plugin generation mechanism to get the plugins installed. They require the user to add specific codes into the controllers to activate the plugins. On the other hand, Huang Jian's implementation used his own way to get the plugins installed, without any code activation in the controller. Both ways are similar, but the difference is only in the ways the framework is implemented. Thus, they have agreed to work togather further to consolidate the ideas, or finalize one one as the final framework, while the other as a proof-of-concept branch.

All three spend ?? hours in bringing the concepts to functional implementations.

Individual Reports

Attached are the individual reports of each member of the group.

<u>Ken S'ng's Milestone 6 Report</u>

Executive Summary

I suggested to improve the way the daemon plugins are to be managed, as I find it is not very organized to have a several scripts to manage the plugins. I have created a main script that consolidates all the plugin management scripts (installation, uninstallation and signing). Besides that, I also have added a script to list all the currently installed plugins, as there is no way to know whether what plugins has been installed prior to the script was written. Besides that I provided my assistance to another subgroup to investigate how integration can be done.

Tasks and Activities Assigned

- Overseeing the progress of the developments of the plugins mechanism development.

  - Plugins deployment retrofitting

    * Description: This task is geared towards retrofitting plugins install scripts from RSP to support the latest additions to the plugins framework.
    * Affected files: `script/list_plugins`, `script/earth_plugins`, `lib/earth_plugins_interface/plugin_manager.rb`
    * Git commits: (`pamalite/earth`) `96828da9db7b7c5f19ac67f0b336727052d18b9e`
    * Estimated time taken (planned): 5 hours
    * Estimated time taken (actual): 4 hours

- Helping out on pre-integration investigation and analysis.

  - Description: This is not outlined in the M6 plan. I was engaged to help out on figuring out how to use `git` to merge all the subgroup repositories as a preliminary step before the actual integration begins.
  - Idea/Solution: N/A
  - Affected files: N/A
  - Git commits: *Not relevant as the commits done were experimental.*
  - Estimated time taken (actual): 3 hours

Resource Contributions

For this milestone, I have estimated that I had spend about 12 hours (including 5 hours meeting time) over the spread of 3 weeks. I have budgeted 45 hours (15 hours per week) for this semester. The other 15 hours were spend on my research project.

Looking at the hours I felt that I have had a productive sprint, though I am only using a fraction of my budgeted hours. The rest of the hours were used for other academics commitments. However, I managed to further integrate the group to get the daemon and GUI plugins retrofitted and implemented, respectively. Besides that, though being the main contact of the group, I still get to do some coding to help the group further, and lend my assistance to the other subgroup on the integration preliminaries.

Rooms for Improvement

- Better time estimation needed for paper work and small coding parts. Previously, the budgeted time was huge as there were a lot of things needed to be done. However, it became

a habit to give huge budget, and for this sprint, where the main aim is to prepare for the finishing of the project, only required minimal budget. I should give more time for paper work for this sprint.