Weekly Report

Team Dec 15-12

Week 1: Jan. 19th - Jan. 25th

Advisor Dr. Rajan

Client Dr. Rajan

Team Members Dalton Mills Webmaster

David Johnston Team Lead

Kristin Clemens Communication Lead
Trey Erenberger Key Concept Holder

Project PaniniJ Eclipse Plugin

Weekly Summary

Our focus this week has been to set up times when we are all available for meetings, including with our Advisor. We also wanted to get a grasp on the scope of this project and what it all includes.

We met on Sunday with Sambhav, a member of Dr. Rajan's lab who works on the Boa project. He gave us a demonstration eclipse plugin development with XText, a framework for developing plugins for DSL which looks like it will be an appropriate starting point for our plugin. Supposing that we use this framework, this meeting gave us a good idea of the structure of the project and some of the key components that will need to implement.

Dr. Rajan was kind enough to create and give us access to a Bitbucket repository, https://bitbucket.org/panini/ecp, to serve as the long-term location for plugin development.

We have chosen to not use Bitbucket for direct collaboration. We have move a copy of Dr. Rajan's repository to https://github.com/dwtj/panini-ecp. For now, we will be using GitHub to share code, track issues, make a wiki, and manage pull requests. This repository (including issues and the wiki) can later be automatically imported into the Bitbucket repository.

We are doing this for three reasons. First, we are already familiar with GitHub development. Second, we already agreed to use GitHub for development. and Third, we believe that this will make it easier for each of us to use our senior design work as a portfolio piece. Each of us can keep a fork of our most recent work on the plugin on our publicly visible GitHub accounts, then when we are no longer involved with the project, others in Dr. Rajan can continue on the Bitbucket repository.

Technical Progress

This week we set up our Eclipse IDEs for Eclipse plugin development and familiarized ourselves with some of the terms, technologies, and tools that will be used moving forward. These included

- Xtext/Xterm,
- manifests and build properties,
- plug-in dependencies,
- creation of visual UI elements, and
- programming of hooks and callbacks for interaction with UI elements.

Meetings

Weekly Administrative Meeting

Members Present: All

Additional Participants: N/A

Date & Location: Tuesday 20th in Molecular Biology 1414

Minutes:

- Confirmed team membership in project.
- Set team member roles.
- Determined times during which all team members could be present for meetings with our advisor, Dr. Rajan.
- Initialized team mailing list.
- Confirmed time for future weekly collaboration meetings.

Weekly Collaboration Meeting

Date & Location: Sunday 25th online and in Atanasoff 216

Members Present: All

Additional Participants: Sambhav Srirana

Minutes:

- Demonstration of Eclipse plugin development by Sambhav.
- Installation of PaniniJ.
- Compilation and running of Sample Panini Files.

Individual Contributions

- Trey Erenberger: Attended administration and collaboration meetings. Installed and troubleshot panini installation on home computer and laptop. Previewed Eclipse Plugin Development documents.
- **David Johnston:** Scheduled meetings. Attended meetings. Helped draft weekly reports. Installed PaniniJ. Set up GitHub repository.
- Dalton Mills: Attended meetings and did research on what PaniniJ is and how it's
 different from Java. Managed to get PaniniJ programs to run and compile on home
 system. Upgraded to latest versions of Panini, Java and Eclipse. Created google doc
 template for weekly reports.
- Kristin Clemens: Attended meetings. Initialized mailing list. Set up Eclipse with technologies necessary for plugin develop. Learned how to create a new plugin and export it from source to the proper Eclipse plugin format. Installed Boa for future reference during creation of the PaniniJ Eclipse Plugin.

Individual Hourly Contributions

Trey Erenberger 4 Hours

David Johnston 6 Hours

Kristin Clemens 5.5 Hours

Dalton Mills 4.5 Hours

Tentative Plans for Week 3

The main objectives for Week 3 is finalizing our code repository setup, deciding on a consistent development platform (Eclipse, Java, Panini Versions), and creating high-level milestones by which we can measure our progress over the entire semester.