## Cpr E/S E 491 May1639 Weekly Report 8

Web platform for collecting and indexing publicly available information about common Java files.

Reporting period: October 20<sup>th</sup> - October 26<sup>th</sup> Advisor/Client: Professor Rajan (Com S)
Members: Evan Dye (Team Leader)

Arik Coats (Web Master, Concept Holder)
Robert Kloster (Communication Leader)

## Weekly Summary

- Presented first prototype to Client, received further directives:
  - Improve visual appeal of MyBB forum aesthetics.
  - o Begin work on code frame
  - Begin work on related post frame
  - o Begin work on Stack Overflow API implementation
- Meeting: Evan Dye, Arik Coats, Robert Kloster: October 23<sup>rd</sup>, 12 2:35pm
  - Successfully embedded source code sample text files in website.
  - Begun research on StackExchange API, docs here: https://api.stackexchange.com/docs
  - Begun Design Document V.1, in progress.
- Meeting: Evan Dye, Arik Coats, Robert Kloster: October 24<sup>th</sup>, 10am 2pm
  - Difficulties encountered in learning how MyBB's API can be made to work with Stack Exchange's API - must locate help with MyBB or APIs in general.
  - Discussed possible means of searching for and organizing related posts.
- Meeting: Evan Dye, Arik Coats, Robert Kloster, Prof. Rajan: October 26<sup>th</sup>, 5:30 6:30pm
  - Discussed progress with Professor Rajan, received further directives for next week.

## Goals for next week:

- Complete Design Document V.1
- Display research on current problems to Prof. Rajan.
- Acquire further feedback and objectives.
- Must try to adapt Eclipse JDT for source file parsing.
- Get simple MyBB/Stack Exchange API emulation up and working, as a proof of concept.
- Pull links to related discussions from StackOverflow.

Name	Hours Spent	Contributions	Results
Evan Dye	9	<ul> <li>Discussed possible means of searching for and organizing related posts, including the use of a tag system.</li> <li>Worked on improving the visuals aspects of the forum.</li> </ul>	Made progress on a more visually appealing template for the forums.  Created a mockup of how related discussions will be displayed.
Arik Coats	14	<ul> <li>Researched ways to embed source code within forums.</li> <li>Successfully extrapolated forum name and associated it with the source code to display for relevant forums.</li> <li>Discussed possible means of searching for and organizing related posts.</li> <li>Researched several java parsers to find a way to efficiently extract source code for a java library.</li> <li>Researched ways to extract source code using the Java Reflection API and wrote a test program extracting data from the ArrayList class.</li> </ul>	We can now store source code on the site, and embed the proper file based on the forum's name.  Formed a plan for how to use Eclipse JDT to extract method information.  Successfully used Reflection to extract Class Source code and method declarations. Made a plan for how to extract method source code.
Robert Kloster	7	<ul> <li>Documented Weekly Report 8</li> <li>Began Design Document V.1:         <ul> <li>Overall structure</li> <li>Problem Statement</li> <li>System Requirements</li> <li>Block Diagram of the Concept</li> </ul> </li> <li>Initiating research on Stack Exchange API.</li> <li>Looked around for different means of implementing RESTful API calls on PHP-esque websites.</li> <li>Discussed possible means of searching for and organizing related posts.</li> </ul>	Weekly Report 8 completed, Design Document V.1 began.  Research on Stack Exchange API begun, and a potentially viable plugin has been located for setting up a RESTful API.