**COP 5611 - Advanced Operating Systems**

**Weekly Project Report - 5**

**Team: Diablo**

**Coding Implementation Design:**

As we noticed that the running time of the code was too long with a log file in the order of gigabytes, we decided to come up with a sort of windowing mechanism. We were informed that, the log files that we would receive as inputs, would be arriving in real time. Hence there was no point in just taking a file at a time and processing it. So, we went on with the idea of using inputs of log entries of a certain order at one time. An instance of code would work on a window, giving way to another instance working on a separate window when the former had finished processing and a new input of entries had arrived. The window size is a variable parameter. We also decided that the SessionMS.pl (our main code) should be called by a separate instance of code running the separate log files as inputs. We also decided that the pattern information that was created at an earlier instance would be of no use in the future. So, decided that the code calling our main code with new input files would also delete the previously collected information. Another segment of code was written for this latter purpose. This code file would also be instantiated with a system command in the new code file. We also decided to include and consider only those web pages in the logs which had HTTP status code as 200 (for OK).

**Team member: Harish Chetty**

I worked on the following part related to the implementation:

I worked on the windowing scheme of inputs. Each file would not be directly read and processed on. There would be a certain window of log entries per log file that would be processed on at a time. The lines of windowed entries is a variable that can be set at the start of the program. This was an optimization scheme that was implemented. The sliding window technique would also undergo further changes in the weeks to come. These changes would be performance related.

**Team member: Gaurav Sinha (gs13h)**

I worked on the following part related to the implementation:

I developed code for the module in which a separate instance of code would remove the old information about the patterns developed. I also wrote the code for the removal of old pattern related information. The formerly mentioned module of code would also use separate inputs of log files to be run under separate instance of SessionMS.pl (our main code). I implemented the HTTP status code change.