Stage V – Implementation

Team Members: Hunter Dubel, Jeremy Leon, Richard Levenson, Evan Melquist and Zach Nelson

Team Name: Pollution Prognosticators **Project Name:** Pollution Prediction

Date: November 24, 2015

- Learned the Clustering Algorithm under SOAP/app/View/Results/scr. This code was developed by Thomas Borgia as part of the Mentored Undergraduate Research Experience (MUSE). In order to implement the prediction functionality in SOAP, it was critical to understand how the existing algorithm worked. Unfortunately, there were very few comments in this code which made it extremely difficult to use. We decided to spend a large portion of our time commenting this code so that future groups would find it more useful. We tried to comment every line of code in the following files:
 - Commented Chemical.cpp
 - Commented Chemcial.h
 - Commented Clustering.cpp
 - o Commented Clustering.h
 - Commented Facility.cpp
 - o Commented Facility.h
 - Commented PointAnalysis.cpp
 - Commented UpdateClusters.cpp
- Updated search bar on map page
 - We added a latitude and longitude search bar to the map page.
 - Two buttons called "Search" and "Use Current Location" were added below the search bars.
- The SOAP repository that was given to us had issues where the map page was corrupted so that the map would not appear and the facilities list was in the wrong location.
 - We believe this was a merge issue because there were syntax errors in SOAP/app/webroot/js/map.js that indicated so.
 - We tried to fix these errors for SOAP and were able to successfully get the map to appear along with the facilities pins. We also fixed the facility list on this page so that it appeared on the correct part of the page.