Deliverable 4

Introduction

Since our previous deliverable, our group has continued working on implementing our automated testing framework while developing all of our 25 test cases. As we ramp up towards the class' "Final Presentation Day" we are making efforts towards finalizing our documentation, and presentation.

The goals for this deliverable were to:

- Complete the design and implementation of our testing framework (Chapter 2).
- Start working on the poster for our project.
- Write a report using HTML.
- Developing all 25 test cases within OpenAQ-Fetch.

Plenty of time has been spent writing code to fulfill the core requirements of our automated testing framework. Additional code was written in HTML to finalize the results of the automated testing framework into a neat report.

Accomplishments

During project development for Deliverable 4, our group has accomplished writing the rest of our test cases for OpenAQ-Fetch to execute within the automated testing framework we implemented last deliverable. The final poster has been started, including basic information about what OpenAQ is, as well as what we are doing with it. The architectural diagram for describing the automated testing framework has been updated within draw.io. Lastly, our previously written HTML report was updated to make the test case numbers, and labeling more comprehensive to everyone. Added functionality was included in the HTML report by making the tables presented able to sort themselves, adding further comprehensiveness to the person viewing the report.

Learning Outcomes

Our team has gained much patience for testing and debugging code that is producing errors upon minor changes. Our team has improved on writing code in HTML, and BASH. The work done helped develop a further understanding of how to design and implement a comprehensive report without breaking the project. Proper usage of draw.io (online) was made familiar through implementing the Layered Architecture described last chapter.

Problems Experienced

During development of the HTML code for our report of the testing output, we were having trouble writing code that could produce a decent aesthetic for labels, and tables. During our initial solution for making the report comprehensive to view, some of the tests failed when previously passing within the testing framework.

Going forward

The next goal, per specification of our test plan, is to implement fault testing where components within the framework will be tested with malicious input for expected results. As well as finish the project poster and presentation for our "Final Presentation Day".

Second version of our Layered Architecture can be found below