Individual Report

This is our labor division: two students are responsible for the client-side and connection of the server-side and client-side, two students are in charge of the server-side, and one student is responsible for the calculation of the statistics and plotting the graph using D3. I am the one doing the server-side work, we wrote all the server codes and fetching codes on the client-side, then after everyone basically has done their part, we did all the debugging work including server-side bugs and client-side bugs, this took really long time to finish, because the whole codes are from 5 people, when we first saw their codes, we even didn't know the meaning of their variables, but there are so many errors.

The most challenging thing is definitely debugging the whole codes, compared to the process of writing the codes, the process of debugging is far more difficult, then compared to debugging our own codes, it is more difficult to debug other's codes, we need to communicate fully with others to understand the algorithm of their codes, and read the codes line by line to try to find where the bug is. We did have a lot of communication throughout, I found working with teammates is also a process of learning from each other, when someone are unknown about some knowledge, others would explain to her/him. In this progress, I also think I have learned some debugging tricks to help me more efficient, such as we can see the network of the web browser to see those fetches' status (if it is 200 or 400) to know if those fetches are executed successfully. I also learn a lesson for this practical, if we have partners to build a web application together, the server side codes should be written after the client side codes are done, this is for keeping the same structure of the data conveyed between

server and client. This time, we wrote the codes at the meantime, but when we made the combination, we found that there were small inconsistency for the data structure although we had reached an agreement about the data structure before, this inconsistency brings us more extra work. And

The whole debugging process is me and another groupmate looking at one computer screen to debug together, we both found this way is far more efficient that debugging by ourselves, sometimes I found the method of fixing bugs firstly, and sometimes, she found how to fix more quickly, we kept communication, which is very helpful for cleaning our thoughts. (There is no my pushing records in the git log is because we used the my partner's computer to make changes when bugging and at the beginning I directly sent my codes of sever side to her to combine hers as a file to push to the git repository).