

HW 4

For the initial 5% we decided to output the zip code of the entered location.

For the extra credit portion, we created an application that exceeds what was expected of us. We added multiple additional features that combine together to allow the user to input two locations, plot both of them on the map, and calculate the distance in kilometers between the two locations. We believe that this entire feature deserves **15%** extra added on to our grade.

This feature required us to add another call to the geocoding app, which seems very easy, but it was tricky to only make two calls when it was necessary, and it was tricky to keep track of all the information we were receiving from either the one call or both calls. We were then required to plot both points on the map, which wasn't any different than what was required in the first part. We then had to calculate the distance between the two points, using the longitudes and latitudes that we received from the API call. This required a decent amount of calculations which required us to read up on this on the internet.

In all, we feel like this additional feature required enough work (about 3 hours extra) to get the extra **15%** on the assignment.