CSE 535 Assignment 2

Due Date: November 5th, 2020 midnight.

The assignment has two parts:

1. Mobile Side: Here you will add one more sensor, GPS data using which you will access the location
   1. The location should be an extra column in the database
   2. Add one more button to upload the database to a server. You can either choose the IMPACT server to upload data or develop your own server to upload data.
2. The main purpose of part 2 is to write a server side code that extracts location information from 11 subjects for the past 7 days and determines a contact graph. The contact graph will have 11 nodes. If a subject has been in contact with another subject then there will be an edge between those two nodes. If not then no edge. Since we are in a time where it is not ideal to be outside we are going to use a pre-existing data set for this part.

Data used: Yonsei dataset, that consists of database files for 11 subjects including location information.

<https://drive.google.com/drive/folders/0B1Un1MahpW82OFhUS2djY3V6YUE?usp=sharing>

Steps required

1. Install an Nginx server in your local machine
2. Write a indexLoc.html file that takes a subject ID and day as input
3. It then calls a .js script that in turn calls process.php. The php script runs a python code in your local machine.
4. Write your database read and contact graph building code in python.
5. Return a text file with the adjacency matrix of the contact graph.

Submit

1. Demonstration of mobile app showing GPS access, updating the database and uploading it in a server.
2. All code for the app that you have developed
3. indexLoc.html, .js file and process.php file as well as the python code for database read and contact graph building code in Canvas.