PROJECT 4

Due Date: 3rd of April

In this project you will analyze the privacy leakages caused by Google data collection program. Google Maps collects significant amount of location data from mobile phones. This data could be used to estimate the future locations of a user. In this project you are provided a dataset of a WPI employee collected by Google over a period of 5 weeks. You are required to use a regression method to estimate the location of the user. You should decide which regression method is suitable to given data. You can train your regression method using the first 4 weeks data. The aim is to estimate the label with a high accuracy for each timestamp in the next weeks. To validate your model you can use week5.mat data to find the correct label and calculate the estimation accuracy.

Your final grade will be determined by testing week6.mat data in your model. Your code should find the correct label and it should give a confidence accuracy. The average accuracy of week6.mat will be your project grade e.g. if you achieve 86% confidence rate for the correct labels, then you will get 86/100. Please write your code in Matlab or Python. The code should be commented out and submitted on Canvas since TA will separately run your code in his platform to test week6.mat. The week6.mat data will be available to you **after** the submission deadline to have an idea on how well your method is working.

The data can be accessed from this link: https://github.com/bgulmezoglu/Cyber-security-Project4