

## Project Name: Predicting User Activity by Smartphone Usage

### 1) What is the problem you want to solve?

We are currently living in a technologically advanced world in which our daily life and activities are affected by smartphones and tablets. Obesity rates have risen over the past 30 years due to lack of exercise and maintaining health. However; technology has also improved our education system. I decided to find problems and datasets that relate to smartphone usage and how they affect human activity. This project will focus on the problem of how smartphone usage affects human activity, this can be in terms of walking sitting, etc.

### 2) Who is your client and why do they care about this problem? In other words, what will your client DO or DECIDE based on your analysis that they wouldn't have otherwise?

The clients for this project will be towards the education and health board. They will care about this problem as smartphone usage has an impact on user's health and activity. Based on the data they can monitor when an user does a certain activity. In terms of education they can monitor a student's activity and decide the type of program such as homework help or tutoring system will be helpful for them. In terms of health monitoring a patient's activity through smartphone activity will allow doctors a possible change in medication.

### 3) What data are you going to use for this? How will you acquire this data?

For this project I found the data from Kaggle's competition called: Smartphone User Activity Prediction. This competition has data attached to it; however the issue will be trying to understand the data as there is over 500 features and 3000 records to clean and analyze.

<https://inclass.kaggle.com/c/smartphone-user-activity-prediction>

### 4) In brief, outline your approach to solving this problem

My first approach will be to clean the data and try to understand the features and the values associated for them. This will definitely take the longest time, afterwards I will work on analyzing the data and creating scatter plots based on the different activities. I will contact my mentor and let him know my progress and what I can do to proceed.

### 5) What are you deliverables?

The deliverables will be a slide show presenting the visualizations as well as a report which discusses the scatter plots and how the way a smartphone is used predicts a human's activities.