**Project 1 proposal**

**Team number:** 3

**Members:** Franco, Joseph, Catherine, Nasrin

**Project title:** Melbourne Property Market Analysis

**Project description (broad)**

* We all know that Melbourne real estate is booming, regardless of the property type. In this project, we want to analyse 3 major factors that will affect the housing prices in Melbourne
  + Distance from CBD
  + Crime rates
  + Schools

**Research question to answer (specific)**

* What research questions do you plan to answer? That is, what are your hypotheses?
  1. The main purpose of the analysis is to prove the correlation between the above-mentioned factors and the housing price market.
  2. HYPOTHESIS 1: The distance from CBD has direct correlation to the housing price. The nearer to the CBD, the higher the house price
  3. HYPOTHESES 2: Crime Rates will affect the house price in the suburb negatively. The higher the crime rate, the less likely the house price will increase.
  4. HYPOTHESES 3: The school zone area is also the main reason for the surge in house prices of specific suburb. Both private and public school play a big role when it comes to choosing the right suburb to live in.
  5. What do you expect to see as a result of your analysis?
     + Accept the hypothesis we set

**Datasets required**

* We are going to use 3 datasets:
  + Sales of houses in melbourne dataset (2016-2018)
  + List of all the schools in Melbourne, including the latitude and longitude info.
  + The crimes rates in different suburbs
* The datasets are both in csv format.
* The possible issue might arise given your choices above could be the age of the data – given it was from 2016-2018
* We did not include recent year data considering the COVID that causes the market to become so volatile.

**Rough breakdown of tasks**

* Nasrin, Catherine, Joseph will work on the hypothesis respectively, Franco will merge the data.

Teacher’s comments:

* *“The house prices jumped every quarter; Suburbs such as east/south-east jump quicker than north/west”*should probably restated so something like “we expect to see house prices increase faster in the southeast suburbs because….“. For what reason do you expect house prices to increase faster in easter suburbs?Likewise you second hypothesis:  
  *“The provided amenities also affect the house price positively”*is very vague. What amenities would you expect would increase hosing price exactly? Schools? Private Schools? Hospitals? Freeways? Airports? I understand this might be a little vague as your are probably exploring the data, but when it comes to your presentation next week it would be good if you could state clear hypotheses with logical assumptions. Overall, you have a good idea and sufficient data to conduct your analysis. I would just consider refining your research question and hypotheses to something a little more specific as they are little vague at the moment. However, I understand you might already be considering to do so as you explore the data further. All good to proceed with your project.