**Project 1 proposal**

**Team number:** 9

**Members:** Nicklas Ringdahl, Samir Barua, Mime Liu

**Project title: Crime rates and COVID**

**Project description (broad)**

* Brief overview of your project (3 - 4 sentences). Provide an overview of the project scope and broadly define the research questions.

We are interested in comparing Victoria’s current lockdown data with last year’s lockdown to find out about the effectiveness of both lockdowns and people’s general compliance.

**Research question to answer (specific)**

* What do you plan to show with your data analysis?

1. Correlations between daily increase and number of lockdown rule breaches;
2. Comparing the crime rates in both lockdowns, and finding correlation between the crime rates and daily case increase;
3. Comparing the crime types in both lockdowns;
4. Comparing the covid outbreak hotspots during both lockdowns;

* What research questions do you plan to answer? That is, what are your hypotheses? What do you expect to see as a result of your analysis?
  1. Certain crimes have decreased due to the lockdown (Breaking and entering for example) while others will have increased (Domestic violence as example)
  2. Areas with higher crime rates will overlap with areas showing high number of covid cases;
  3. Crime will have dropped early in lockdown and then slowly increased throughout the year;
  4. There will be a big shift in locations of crimes from outdoors to domestic situations.

**Datasets required**

* What data sets will you access?

Data VIC; ABS; ABS Data API (?)

* How will you access the data? (e.g. via an API or downloading the data)

API (?) and downloading the csv or excel spreadsheets

* What problems might arise given your choices above?

Lack of access to real-time data; Lack of API for the data required

* Is your data sufficiently large?

Yes

* Is your data messy or relatively clean?

Relatively clean as it’s government data

**Rough breakdown of tasks**

* Who will be doing what?
* What tasks can you divide between team members?

## Phase 1 - Data collection and cleaning

N - Crime data (types, amount etc)

S – Covid Hotspot types and locations

M – Covid daily case changes, infectious cases in the community etc

## Phase 2 - Data processing

N - Crime data (types, amount etc)

S – Covid Hotspot types and locations

M – Covid daily case changes, infectious cases in the community etc

## Phase 3 – Data analysis and visualisation

N – Crime data and Covid hotspots

S – Covid hotspot and daily case changes

M – daily case changes and crime data

## Phase 4 – Presentation and report writing

N – Crime data and Covid hotspots

S – Covid hotspot and daily case changes

M – Daily case changes and crime data