**Group 3 - Project 1 – Data Analytics Bootcamp**

**Project title:**

Exploring and identifying potential healthcare holes in Victoria

**Team Members:**

Jalaj Sharma, Pedro Azpurua, Richard Thornton, Shelly Wong, Shrushti Shah

**Project Descriptions / Outline**

Identifying areas of population growth in Victoria and the health services available to the corresponding areas. Visualizing the relationship between population growth and corresponding health outcomes and mortality rate.

**Research Questions to Answers**

1. Identifying areas of population growth in Victoria as defined by LGAs (Local Government Area) – Shelly Wong
2. Health services defined by Tertiary (hospitals)and primary healthcare services (GP clinic and pharmacy) available – Richard Thornton
3. Comparing patient wait times at hospitals in Victoria and identifying correlations to population growth + appropriate hypothesis testing – Pedro Azpurua
4. Compare access to healthcare services and mortality rates (deaths per 100,000) in Victorian LGAs
5. Identify the percentage of the population that have higher health care needs (e.g., population-dense in o-4-year-olds and >70-year-olds) in our top 14 LGAs. Make recommendations for the future – Shrusthi Shah / Shelly Wong

**Datasets to used – (timeframe of data: 2017 to 2022)**

* GeoAPIfy – data on hospital and primary healthcare providers by geographical location
* Australian Bureau of Statistics – showing population growth in Victoria, healthcare services available by location, life expectancy data
* DEWLP
* Medicare
* Australian Institute of Health and Welfare (AIHW)

**Rough breakdown of Tasks**

* Data collection and cleaning and plotting: Everyone
* GitHub enthusiast: Jalaj Sharma
* Presentation: Shrushti Shah