# Australian fatalities

## Name:

## Student Number:

## Intoduction

The website is structured as below:

The main `index.html` file is located in the root directory with the individual analysis folders in a different `analysis\_pages` folder.

The analysis is a comparison between road fatality in 1989 and 2017 with bar graphs being dran tomatch the respective time periods.

## Website Overview.

1. Fatality comparison in months.
2. Fatality comparison in states.
3. Fatality comparison according to crash type.
4. Fatality according to road user roles
5. Fatality according to age of the diseased.

### Design and functionality.

Given a set of data, python is used to read the sample csv file and group data according to the year of study, in this case,2017 versus 1989.

Upon obtaining the respective year data,it can be furhter categoized according to the item of study, be it comparing fatalities per month ,state and so on. The input value fo the use would be the column to compare fo the two years. For the vizualization, external libraries, namely pandas(to read the data from the csv) and bokeh(to vizualize the data in html pages) are used. The pages ae then linked together using a single `index.html` page located in the root folder of the website which gives a start page and links to the external pages and back.

For analysis, two main functions are used: compare\_data and draw\_bar\_chart. These work as their names suggest with the compare\_data function returning a list of lists and a file name. The list of lists contains:

* A list of the latest collected data according to the selected column.

In escence, if a column is selected from a year on which data collection is incomplete,the analysis should be made to include only the data from that collected period and compare it with the same timeframe from the previous year, essentially 1989.

* A list of data from the latest year record: 2017
* A list of data from the initial analysis year:1989

The filename is that of a file with summary statistics from the named years,a csv file.

This data will be converted to a html table by the function draw\_bar\_chart and inserted to the html file using the `insert\_statistic` function in the same diirectory.

Notebook cells have been grouped each to serve their purpose. That is,there is one for importing libraries, one for functions to avoid repetitive actionand another for calling the functions with the needed queries.

The initial cell is for a desciption of the file as well.