School of Science, Computing and Engineering Technologies

COS30045

LAB 4.1 Design Studio

Overview

In this lab you will be given a sample data set and asked to identify the different data and attribute types. You will also think about some questions about this data set that might be answered by a visualisation.

ardd\_fatalities\_Jan2020\_0.xlsx (download from Canvas)

Download and review this data set before attempting this exercise.

1 Interpreting the data set

Complete the LAB 4.1 Quiz.

2 Visualisation Design

Think of three questions you would like to answer with that require a data visualistion.

For each data question you will need to consider the following:

Which data attributes (columns) do you need to answer this question?

Do you need to transform any of the data?

Does the data type change when you transform the data? If so how.

Make a sketch of how you think your visualisation might look and add to this document.

Your Question 1:

What is the distribution of road fatalities by age group?

Relevant columns: Age Group

Data transformation: None required

Data type change: No

Visualisation idea: A bar chart with X-axis:

Your Question 2

How do road fatalities vary by time of day?

Relevant columns: Time of day

Data transformation: None required

Data type change: No

Visualisation idea: A line chart with X-axis: Time of day (e.g., Morning, Afternoon, Night) and Y-axis: Number of fatalities.

Your Question 3

What is the gender distribution of road fatalities?

Relevant columns: Gender

Data transformation: None required

Data type change: No

Visualisation idea: A pie chart showing the proportion of fatalities by gender (Male vs Female).

Include this file as evidence for your Demonstration 2