FIT5147 Data Exploration and Visualisation

Programming Exercise 2: R Shiny

# Reflection and Justification of your PE2 Visualisation Design

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For each section of your submitted visualisation, justify how and why you have used

* the visualisation type (e.g., scatter plot, violin plot, stream graph, choropleth map)
* the visual variables (e.g., colour hue, length, position, orientation) and map projections
* the layout (e.g., position of interactive elements) and any additional elements

You can also reflect on any issues you identified with your design, including any aspects of your implementation that you think are inadequate or not fit for purpose.

This should be approximately 100-200 words per section. Any additional reflection may be an extra 0-100 words.

### **Section: VIS 1**

I used a coloured stacked bar chart for vis 1. I believe that a bar chart is the easiest way to illustrate the differences in number of events at a venue, as it is a numeric and quantifiable. Colour hue is used to distinguish the primary genres comprising it as it is easy to divide up a bar chart with colour hue, and primary genres are categorical. As there are only 2 variables to encode – number of events and category of event – nothing more complicated is necessary.

### **Section: Interactive Map**

I used coloured circle markers which were mostly transparent as circles are perhaps the easiest shape to identify the size of, and to compare the size of next to other identical shapes. The circles were made mostly transparent as there are many overlapping circles. They were also enlarged as they were otherwise difficult to see at a glance, which I prioritized glance value over visual inspection clarity. The slider for the year range is positioned below the map as it is the most intuitive location to be at the bottom of the map, rather than at the top or side.

### **Additional Reflections**

The interactive map is much better at identifying the heatmaps of where the events were happening, but the bar chart visualization is much better at identifying the magnitude of differences in events. Without the bar chart visualization, I would not have realized Carlton had so many more events than any other venue, and without the interactive map, I would not have realized that most of the other event venues were clustered around Melbourne CBD.