Introduction

`simplevis` is a package of `ggplot2` wrapper functions that aims to make beautiful `ggplot2` visualisation with less brainpower and typing!

This blog will provide an overview of:

- the visualisation family types that `simplevis` currently supports
- how visualisation families support combinations of colouring (by a variable), facetting. both or neither.

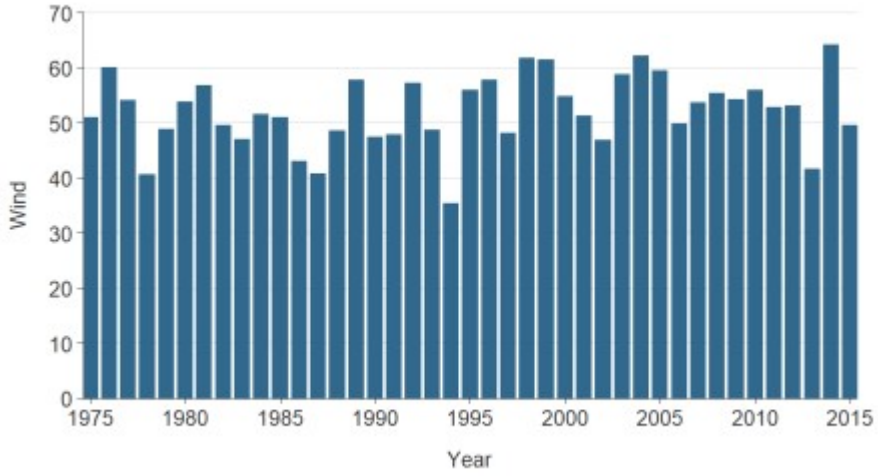
```
library(simplevis)
library(dplyr)
library(palmerpenguins)
```

Visualisation family types

bar

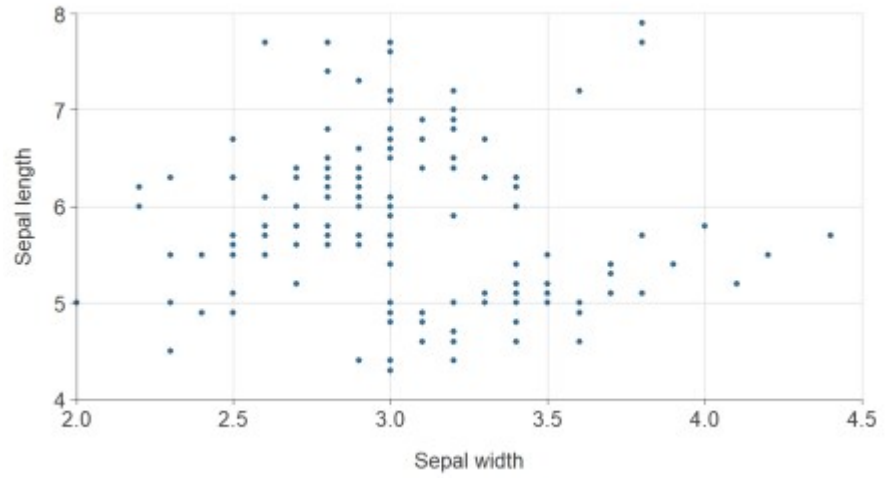
```
plot_data <- storms %>%
  group_by(year) %>%
  summarise(wind = mean(wind))

gg_bar(plot_data, year, wind)
```



point

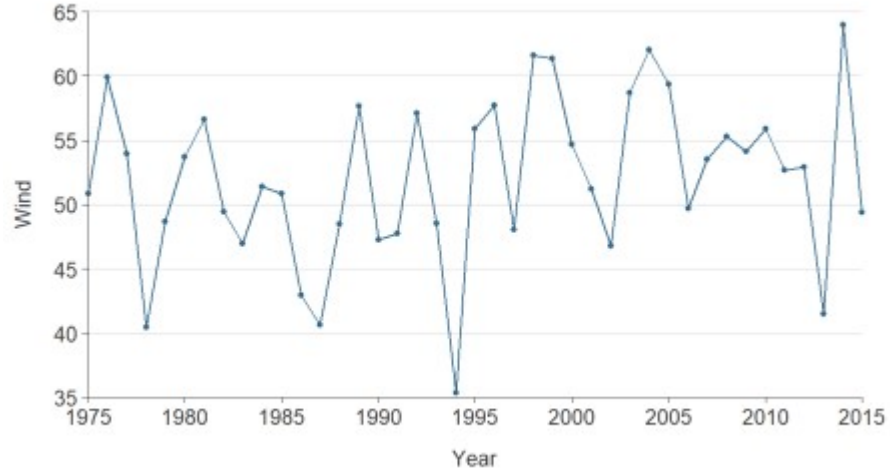
```
gg_point(iris, Sepal.Width, Sepal.Length)
```



line

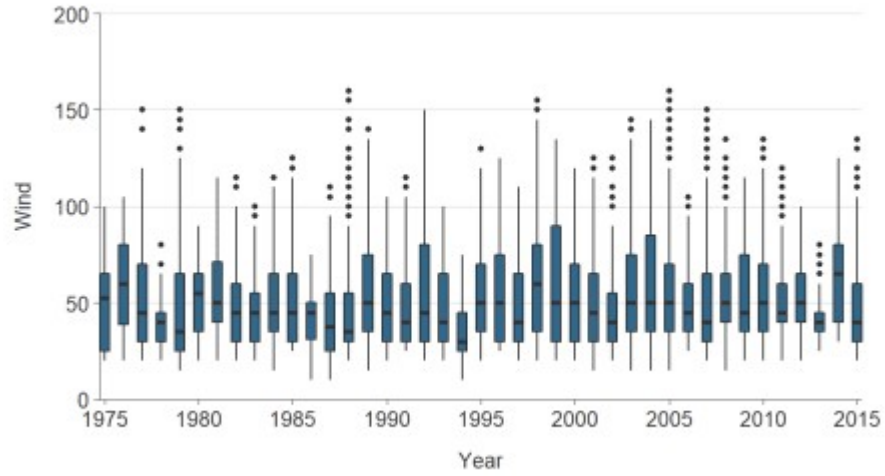
```
plot_data <- storms %>%
  group_by(year) %>%
  summarise(wind = mean(wind))

gg_line(plot_data, year, wind)
```



boxplot

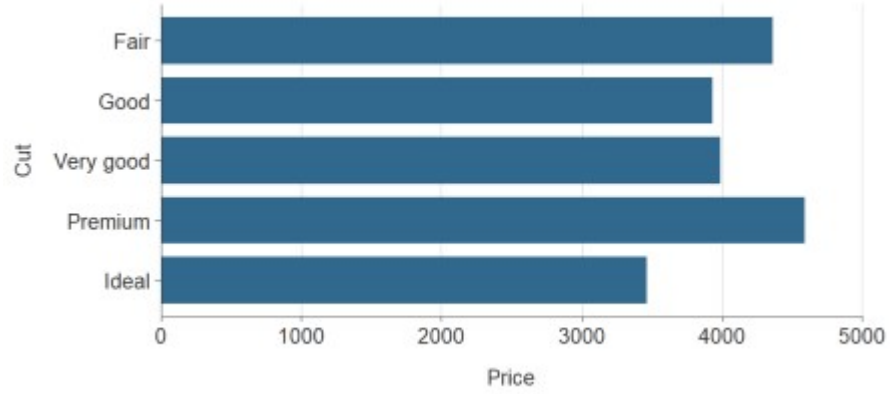
```
gg_boxplot(storms, year, wind)
```



hbar (i.e horizontal bar)

```
plot_data <- ggplot2::diamonds %>%
  group_by(cut) %>%
  summarise(price = mean(price))

gg_hbar(plot_data, price, cut)
```



sf (short for simple features map)

```
gg_sf(example_sf_point, borders = nz)
```

Colouring, facetting, neither or both

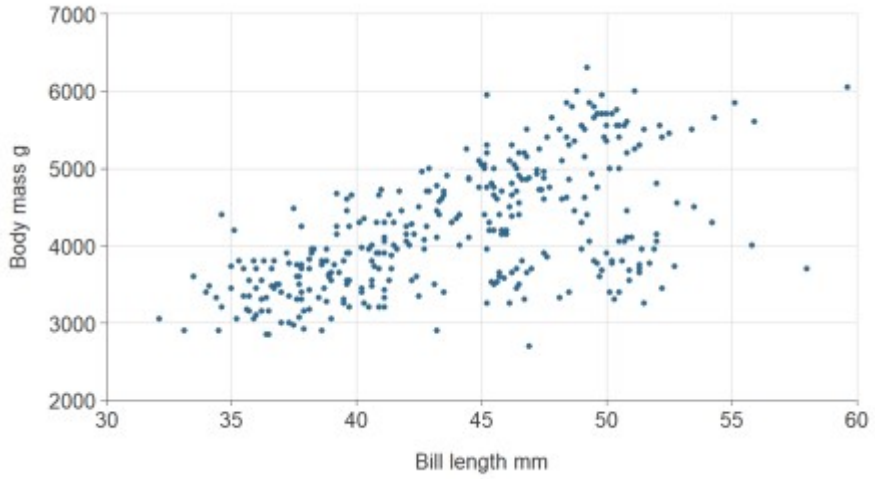
Each visualisation family generally has 4 functions.

The function name specifies whether or not a visualisation is to be coloured by a variable `*_col()`, facetted by a variable `*_facet()`, neither `*()` or both of these `*_col_facet()`.

Colouring by a variable means that different values of a selected variable are to have different colours. Facetting means that different values of a selected variable are to have their facet.

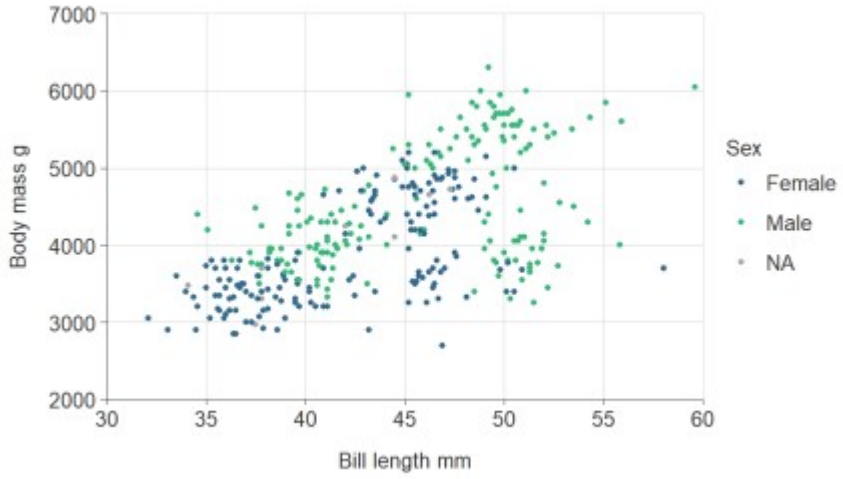
A `*()` function such `gg_point()` requires only a dataset, an x variable and a y variable.

```
gg_point(penguins, bill_length_mm, body_mass_g)
```



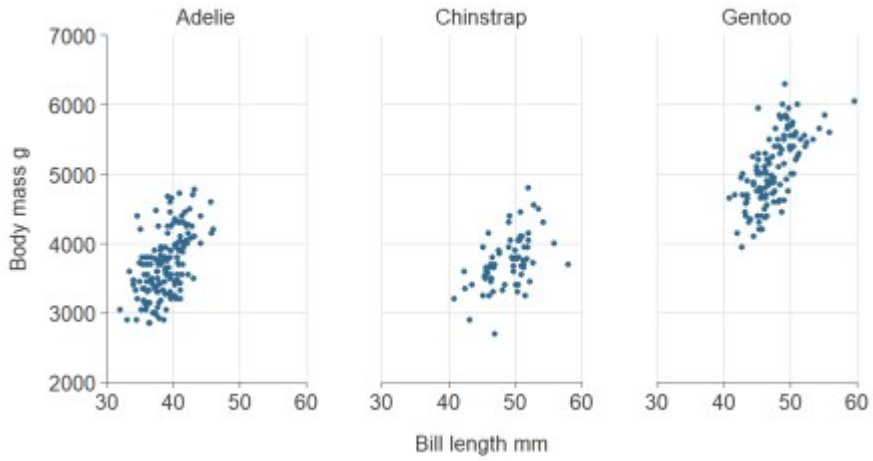
A `*_col()` function such `gg_point_col()` requires only a dataset, an x variable, a y variable, and a colour variable.

```
gg_point_col(penguins, bill_length_mm, body_mass_g, sex)
```



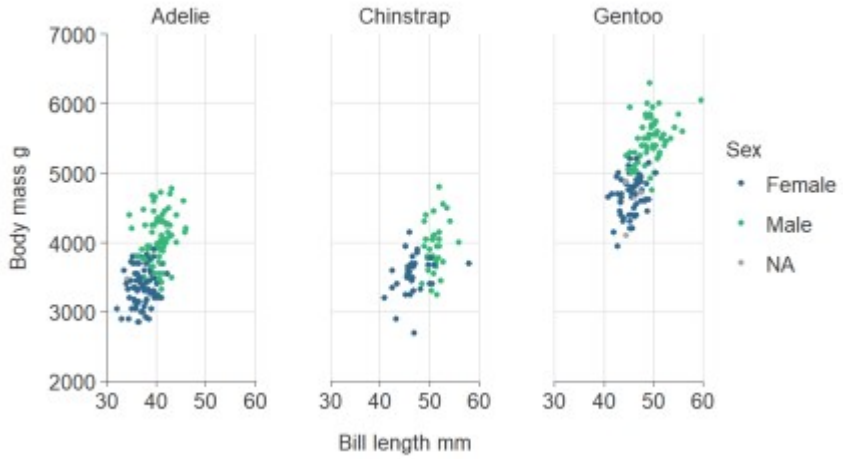
A `*_facet()` function such `gg_point_facet()` requires only a dataset, an x variable, a y variable, and a facet variable.

```
gg_point_facet(penguins, bill_length_mm, body_mass_g, species)
```



A `*_col_facet()` function such `gg_point_col_facet()` requires only a dataset, an x variable, a y variable, a colour variable, and a facet variable.

```
gg_point_col_facet(penguins, bill_length_mm, body_mass_g, sex, species)
```



Data is generally plotted with a stat of `identity`, which means data is plotted as is. Only for boxplot, there is a different default stat of boxplot, which means data will be transformed to boxplot statistics.