Class 2: Introduction to ggplot2

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https://andrewcparnell.github.io/dataviz_course

PRESS RECORD

Learning outcomes

- ▶ Learn the basics of how to use `ggplot2`
- ▶ Be able to add simple features to existing ggplots
- ▶ Be able to perform basic customisation of ggplots

The philosophy behind the grammar of graphics

Reminder: the penguin data

```
library(palmerpenguins)
penguins %>% glimpse

## Rows: 344
## Columns: 8
## $ species           <fct> Adelie, Adelie, Adelie, Adelie, Adelie, Adelie
## $ island            <fct> Torgersen, Torgersen, Torgersen, Torgersen, To
## $ bill_length_mm    <dbl> 39.1, 39.5, 40.3, NA, 36.7, 39.3, 38.9, 39.2,
## $ bill_depth_mm     <dbl> 18.7, 17.4, 18.0, NA, 19.3, 20.6, 17.8, 19.6,
## $ flipper_length_mm <int> 181, 186, 195, NA, 193, 190, 181, 195, 193, 19
## $ body_mass_g       <int> 3750, 3800, 3250, NA, 3450, 3650, 3625, 4675,
## $ sex               <fct> male, female, female, NA, female, male, female
## $ year              <int> 2007, 2007, 2007, 2007, 2007, 2007, 2007, 2007
```

Data formats, aesthetics, geoms

Every ggplot has:

- ▶ A data set (usually a data frame or a tibble)
- ▶ An **(aes)thetic** which maps the data to graphical elements
- ▶ A **(geom)etry**
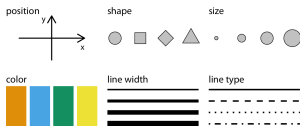
Creation of simple univariate and bivariate plots

Adding layers in ggplot

Basic plot customisation and themes

Summary

- X
- Y
- Z