Setting up Quarto

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1 Introduction

Quarto is an extension of the Rmarkdown ecosystem. It leverages the power of `Pandoc`. From my perspective it provides a number of useful additional tools for literate programming and blogging.

I'm using quarto for my lab's home page with an embedded blog. rgtlab blog.

Refererences:

Useful archive:

mcanouil/awesome-quarto: A curated list of Quarto talks, tools, examples & articles! Contributions welcome!

Consider some ideas from

- Rob Hyndman - Template of quarto website
- Eric Ekholm - Modifying the Default Quarto Blog Structure

- Allison Hill - We don't talk about Quarto
- Nick Tierney - Notes on Changing from Rmarkdown/Bookdown to Quarto

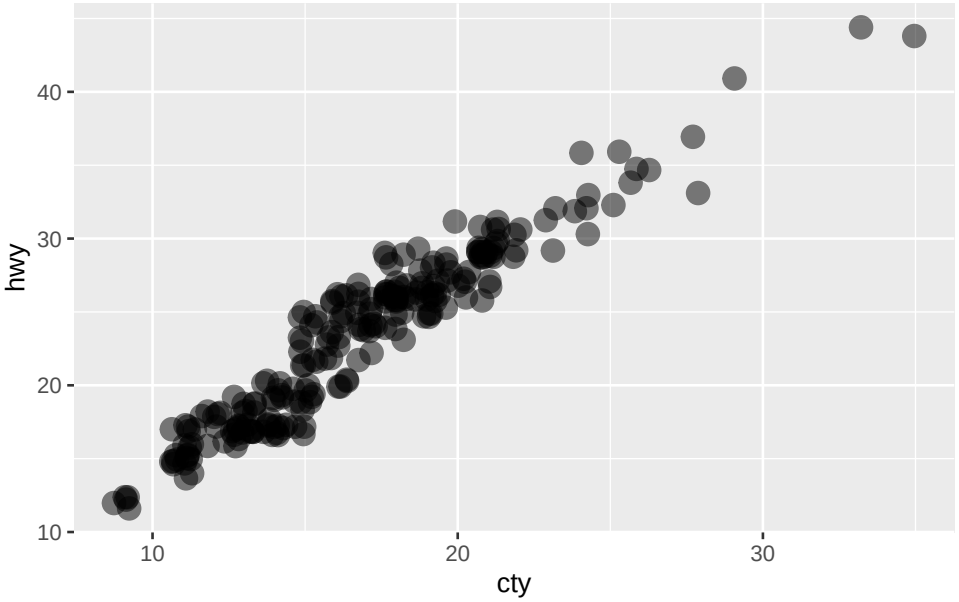
This post will include some of the most useful and interesting quarto tools presented in the context of a `Palmer Penguins` data set analysis.

2 - Code

This is `inline` code plus a small code chunk.

```
library(tidyverse)

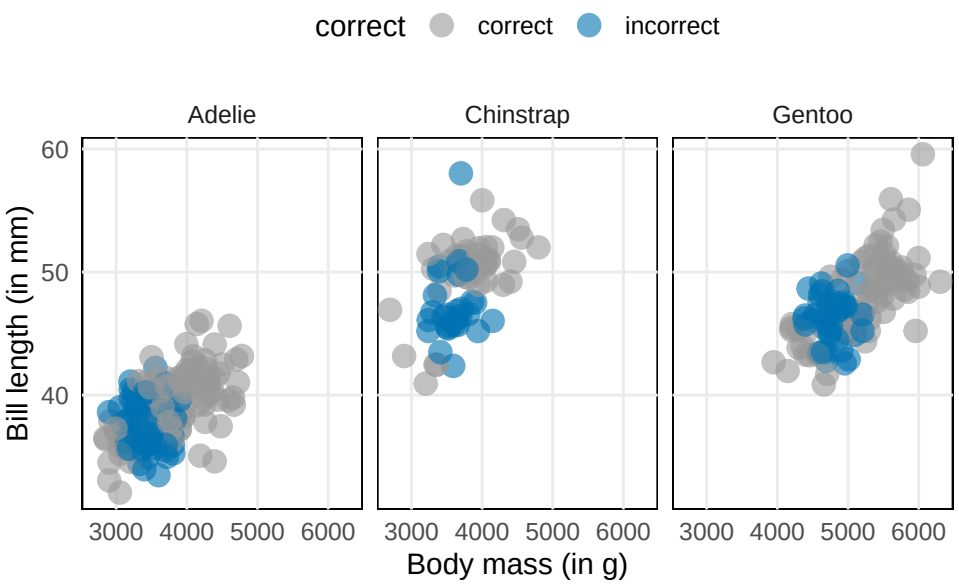
ggplot(mpg) +
  geom_jitter(aes(cty, hwy), size = 4, alpha = 0.5)
```



2.0.1 - Tabsets

2.0.1.1 Transforming OLS estimates

```
preds_lm %>%
  ggplot(aes(body_mass_g, bill_length_mm, col = correct)) +
  geom_jitter(size = 4, alpha = 0.6) +
  facet_wrap(vars(species)) +
  scale_color_manual(values = c('grey60', thematic::okabe_ito(3)[3])) +
  scale_x_continuous(breaks = seq(3000, 6000, 1000)) +
  theme_minimal(base_size = 12) +
  theme(
    legend.position = 'top',
    panel.background = element_rect(color = 'black'),
    panel.grid.minor = element_blank()
  ) +
  labs(
    x = 'Body mass (in g)',
    y = 'Bill length (in mm)'
  )
```



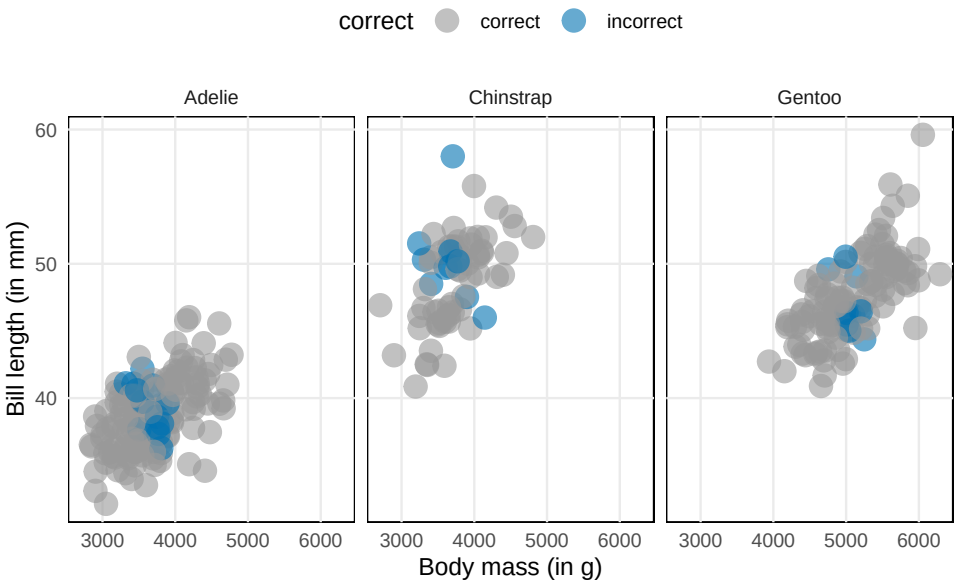
2.0.1.2 Maximizing likelihood

```
glm.mod <- glm(sex ~ body_mass_g + bill_length_mm + species, family = binomial, data = dat

preds <- dat %>%
```

```
  mutate(
    prob.fit = glm.mod$fitted.values,
    prediction = if_else(prob.fit > 0.5, 'male', 'female'),
    correct = if_else(sex == prediction, 'correct', 'incorrect')
  )


preds %>%
  ggplot(aes(body_mass_g, bill_length_mm, col = correct)) +
  geom_jitter(size = 4, alpha = 0.6) +
  facet_wrap(vars(species)) +
  scale_x_continuous(breaks = seq(3000, 6000, 1000)) +
  scale_color_manual(values = c('grey60', thematic::okabe_ito(3)[3])) +
  theme_minimal(base_size = 10) +
  theme(
    legend.position = 'top',
    panel.background = element_rect(color = 'black'),
    panel.grid.minor = element_blank()
  ) +
  labs(
    x = 'Body mass (in g)',
    y = 'Bill length (in mm)'
  )
```



2.0.1.3 - Some math stuff

$$\int_0^1 f(x)\ dx$$

2.1 2 - Columns

```
geom_density(
  mapping = NULL,
  data = NULL,
  stat = "density",
  position = "identity",
  ...,
  na.rm = FALSE,
  orientation = NA,
  show.legend = NA,
  inherit.aes = TRUE,
  outline.type = "upper"
)
```

```
stat_density(
  mapping = NULL,
  data = NULL,
  geom = "area",
  position = "stack",
  ...,
  bw = "nrd0",
  adjust = 1,
  kernel = "gaussian",
  n = 512,
  trim = FALSE,
  na.rm = FALSE,
  orientation = NA,
  show.legend = NA,
  inherit.aes = TRUE
)
```

2.2 2 - Margin captions

```
ggplot(data = gapminder::gapminder, mapping = aes(x = lifeExp, fill = continent)) +
  stat_density(position = "identity", alpha = 0.5)
```

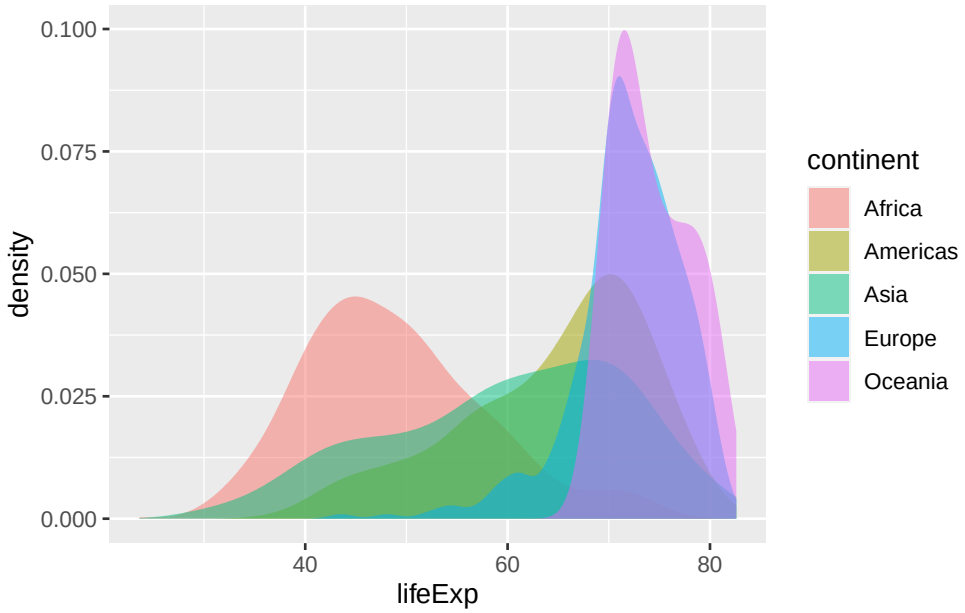


Figure 1: Bla bla bla. This is a caption in the margin. Super cool isn't it?

Start with running quarto create-project at `~/prj` level

```
  quarto create-project qblog --type website:blog

Creating project at /Users/zenn/Dropbox/prj/qblog:
  - Created _quarto.yml
  - Created index.qmd
  - Created posts/welcome/index.qmd
  - Created posts/post-with-code/index.qmd
  - Created about.qmd
  - Created styles.css
  - Created posts/_metadata.yml
```

- cd to ~/qblog/posts/
- create a new directory, say setupquarto
- cd to ~/qblog/posts/setupquarto
- vim index.qmd

````
To create a minimal shell of a blog type:
```sh
> quarto create-project minimal_blog --type website:blog
````
````

This creates the following file structure:

```
> tree --charset unicode
.
|-- _quarto.yml
|-- about.qmd
|-- index.qmd
|-- posts
|   |-- _metadata.yml
|   |-- post-with-code
|   |   |-- image.jpg
|   |   `-- index.qmd
|   `-- welcome
|       |-- index.qmd
|       `-- thumbnail.jpg
|-- profile.jpg
`-- styles.css
```

My current blog looks like: