Lab 2: Data Visulization

2022/09/26

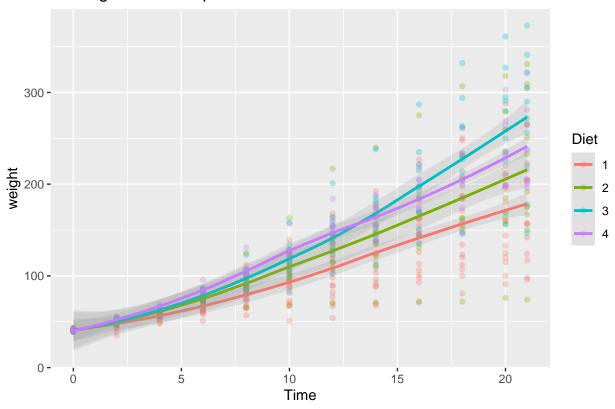
Today's agenda: data visualization with ggplot2. Get help on dataset ChickWeight by ?ChickWeight. Play with the following R code to figure out what we are doing here.

First plot

```
p1 <- ggplot(ChickWeight, aes(x=Time, y=weight, colour=Diet)) +
    geom_point(alpha=.3) +
    geom_smooth(alpha=.2, size=1) +
    ggtitle("Fitted growth curve per diet")
p1</pre>
```

'geom_smooth()' using method = 'loess' and formula 'y ~ x'

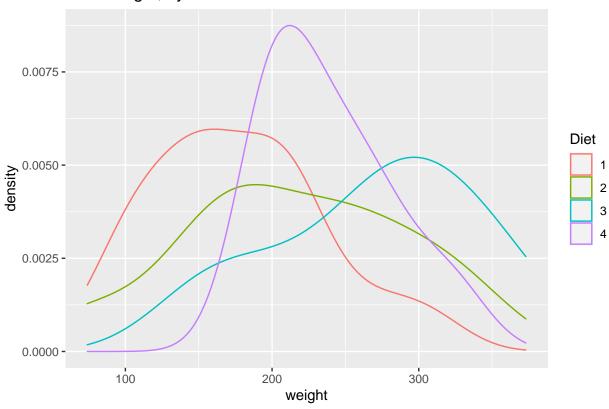
Fitted growth curve per diet



Second plot

```
p2 <- ggplot(subset(ChickWeight, Time==21), aes(x=weight, colour=Diet)) +
    geom_density() +
    ggtitle("Final weight, by diet")
p2</pre>
```

Final weight, by diet



Third plot

```
p3 <- ggplot(subset(ChickWeight, Time==21), aes(x=weight, fill=Diet)) +
    geom_histogram(colour="black", binwidth=50) +
    facet_grid(Diet ~ .) +
    ggtitle("Final weight, by diet") +
    theme(legend.position="none")  # No legend (redundant in this graph)
p3</pre>
```

