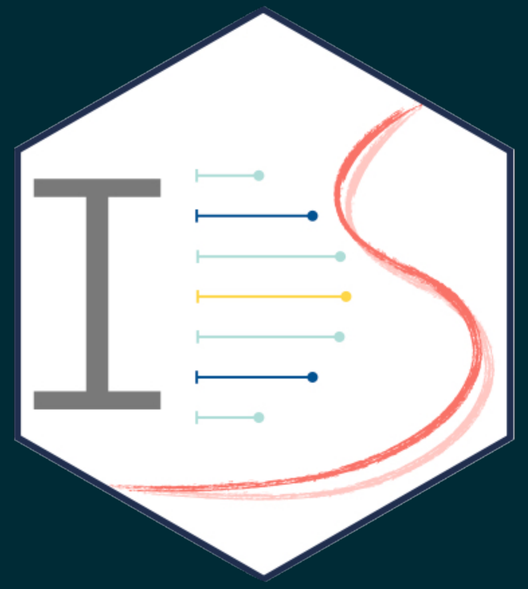
keeping up with



Week 11

Week 10 - Model validation & uncertainty quantification

No.	Title	YouTube	MediaHopper	Slides	Length
1	Keeping up with IDS: Week 10				
2	Cross validation				6:54
3	AE - The Office, Part 1				44:20
4	AE - The Office, Part 2				30:45
5	Quantifying uncertainty				19:53
6	Bootstrapping				28:50
					15:06

Quiz recap - RMSE

Which of the following is false about RMSE?

- RMSE is short for root mean squred error. ✗
- RMSE has the same units as the outcome variable. ✗
- RMSE ranges between 0 to 1. ✓
- Between two models with the same outcome variable, we prefer the one with lower RMSE. ✗

Correct!

Quiz recap - regression

The model below predicts the heart weight (in g) of cats from their body weight (in kg). The coefficients are estimated using a dataset of 144 domestic cats.

term <chr>	estimate <dbl>	std.error <dbl>	statistic <dbl>	p.value <dbl>
(Intercept)	-0.3566624	0.6922770	-0.5152019	6.072131e-01
Bwt	4.0340627	0.2502615	16.1193908	6.969045e-34

2 rows

Which of the following is false?

- ○ The correlation coefficient would not change if body weights were measured in pounds. ✗
- ◉ The slope estimate would not change if body weights were measured in pounds. ✓
- ○ The intercept is meaningless in context of the data and only serves to adjust the height of the regression line. ✗
- ○ The explanatory variable is body weight, and the response variable is heart weight. ✗

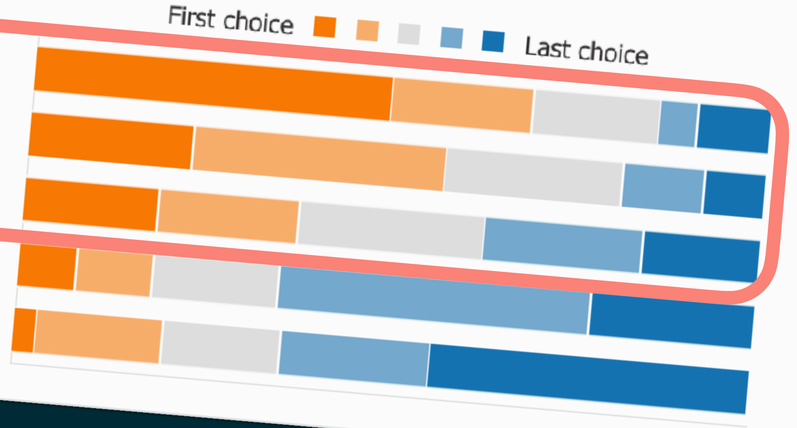
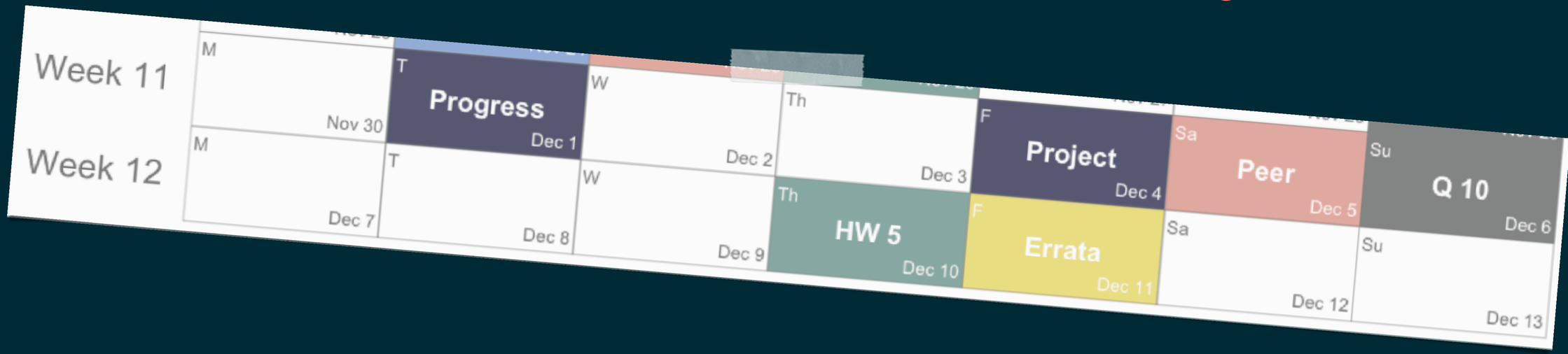
Correct!

Week 11 - Looking ahead

I'd love to cover a couple of topics of interest to you during Week 11. Rank the following in order of your interest (1 - most interested, 5 - least interested). Each of these topics could be a semester-length course, so my goal is not a thorough treatment of any of them, but to provide a brief introduction to the topic.

More Details

Rank	Options
1	Machine Learning
2	Interactive web apps
3	Text analysis
4	Bayesian inference
5	Building R packages



Week 11 - Looking ahead