Cross Validation Notes

- The book introduces Cross-Validation in the section of chapter 2 titled "Better Evaluation Using Cross-Validation".
- [sklearn's brief introduction to cross validation](#)
- [sklearn.model_selection.cross_val_score](#)
- [Model evaluation, selection.cross_val_score's scoring parameter](#)
- Using `scoring="neg_mean_squared_error"` for `cross_val_score` means the scores that are returned are from the negated MSE. But, each of the k-fold fits will use the regressor's internal fitting score to minimize. For example, Lasso will still minimize MSE + alpha*L1(theta), LinearRegression will minimize MSE and RidgeRegression will minimize MSE + alpha * L2(theta). However, `cross_val_score` won't report their internal scores. Instead it just reports MSE.
- To do your own customized scoring function you can pass a callable object that calculates the score to report. Be careful though. You want to be able to directly compare the scores for the results of different models.