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Lab 4: Building a Regression Model

* Progress 1 - Screen shot pipeline ready to replace classifier with regression model
* Progress 2 - Screen shot performance of model on training and test sets.
* Progress 3 – Analysis: Compare performance and argue if model is underfitting the training set.
* Progress 4 - Screen shot linear fit
* Submission 5 – Analysis
  + a) Will more training data improve the fit?
  + b) Is the model under or over fitting?
* Submission 6 - Explain
  + Did adding age improve the model?
  + Propose an explanation for the results.
* Progress 7 - Scatter graph
  + Scatter graph with cubic model displayed
  + Propose an explanation
* Submission 8 – Explain
  + Does the polynomial fit do better?
  + Where does it fit the best?
* Progress 9 - Screen shot of scatter plot with degree 8 polynomial fit
* Submission 10- Explain
  + a) Compare degree 3 and degree 8 fits
  + b) Is the increase in performance big enough to justify the degree 8 fit?
* Progress 11 – Screen shot of scatter plot with degree 8 Elastic net.
* Submission 12 – Explain
  + Compare coefficients for regular and elastic net for degree 8.
  + Which ones have been reduced in elastic net?