## Parts to do:

- 1) Explanatory data analysis to see the relationship between the prices and categories: like "prices" vs "area of housing" can be scatter plots, heatmaps, etc.
- 2) Data preprocessing:
  - a) Cleaning the NAN, null, missing values
  - b) Handling Text and Categorical Attributes (like ocean proximity)
  - c) Feature scaling normalization
  - d) Creating new parameters out of existing? (total\_bedrooms/total\_rooms)

## DATA SPLITS HERE?

- 3) Modelling:
  - a) Linear Regression baseline
  - b) Random Forest
  - c) Lasso
  - d) Elastic Net
  - e) Support Vector Machine?
  - f) Gaussian Processes (<a href="https://scikit-learn.org/stable/modules/gaussian\_process.html">https://scikit-learn.org/stable/modules/gaussian\_process.html</a>)
- 4) Models optimization (hyperparameters tuning)
- 5) Basic error analysis using cross validation (mean squared error)
- 6) Feature extraction/importance (Can experiment with different categories (features, columns) combinations for the models)