**Day 80 Goals: what you will make by the end of the day**

Calle de una ciudad

Descripción generada automáticamente

Welcome to Boston Massachusetts in the 1970s! Imagine you're working for a real estate development company. Your company wants to value any residential project before they start. You are tasked with building a model that can provide a price estimate based on a home's characteristics like:

* The number of rooms
* The distance to employment centres
* How rich or poor the area is
* How many students there are per teacher in local schools etc

**Today you will:**

1. Analyse and explore the Boston house price data
2. Split your data for training and testing
3. Run a Multivariable Regression
4. Evaluate how your model's coefficients and residuals
5. Use data transformation to improve your model performance
6. Use your model to estimate a property price

Imagen que contiene Diagrama

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**Download and add the Notebook to Google Drive**

As usual, download the .zip file from this lesson and extract it. Add the .ipynb file into your Google Drive and open it as a Google Colaboratory notebook. All of today's challenges and explanations are contained in the notebook itself.

**Add the Data to the Notebook**

The .zip file also includes a .csv file. This is the data for the project. Add this file to your notebook.

**Solution & Learning Points**

Well done! This was the most challenging data science project to date!

**Today you've learned**

* How to quickly spot relationships in a dataset using Seaborn's .pairplot().
* How to split the data into a training and testing dataset to better evaluate a model's performance.
* How to run a multivariable regression.
* How to evaluate that regression-based on the sign of its coefficients.
* How to analyse and look for patterns in a model's residuals.
* How to improve a regression model using (a log) data transformation.
* How to specify your own values for various features and use your model to make a prediction.

Gráfico, Gráfico de dispersión

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You can download the completed code for today in this lesson.

Imagen que contiene Forma

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