**Residential property prices – Dublin, Ireland**

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# **Task 1 – Data Analysis**

## **Summary**

For our first task we will use 11 (from 2010 to 2020) datasets produced by the Property Services Regulatory Authority (PSRA), these datasets are publicly available at data.gov.ie.

During this task, we will get an insight into of the residential property prices in Dublin, Ireland based on the price on which a property was sold.

We will observe:

* The data distribution of the residential property prices.
* How the residential property prices have changed throughout the years 2010 – 2020.
* In which district residential property prices are higher and lower (using the median value).
* In which district residential property prices are higher and lower (using the mean value).

## **The data distribution of the residential property prices**

* Red line: mean value.
* Yellow line: median value.

Gráfico, Histograma

Descripción generada automáticamente

Figure 1 Histplot of data distribution of residential property prices.

## **How the residential property prices have changed throughout the years 2010 – 2020.**

* Dots: prices in which a property was sold.

Gráfico, Gráfico de dispersión

Descripción generada automáticamente

Figure 2 Scatterplot of prices in which a property was sold from 2010 to 2020.

## **In which district residential property prices are higher and lower (using the median value).**

Gráfico, Gráfico de barras

Descripción generada automáticamente

Figure 3 Barplot of in which district residential property prices are higher and lower (using the median value).

## **In which district residential property prices are higher and lower (using the mean value).**

Gráfico, Gráfico de barras

Descripción generada automáticamente

Figure 4 Barplot of in which district residential property prices are higher and lower (using the mean value).

# **Conclusions**

Succeeding our procedures of data analysis, we can say that the data distribution of residential property prices is a Skewed Gaussian Distribution since our mean and median values are not equal as shown in Figure 1, in this particular case, our data is positively skewed.

Furthermore, according to our Figure 2, we note that prices have remained relative stable throughout the years, in addition, observing at Figure 3 and Figure 4 we are able recognize that district Dublin 10 has the lower residential property prices overall, whereas the district with the higher residential property prices is Dublin 6, considering that we are giving the median value more importance since the median value is not affected by possible outliers.

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