Handling Strategies

| Variable Names | Data Quality Issue | Handling Strategy |
|-------------------------|----------------------------------|--|
| DateofSales(dd/mm/yyyy) | Some dates failed the tests. | Update the incorrect date. |
| Address | High cardinalities. | Keep as is. |
| PostalCode | Missing values(80.67%) | Extract postal code from 'Address' column, or refill by 'N/A'. |
| PostalCode | Some instances failed the tests. | Remove the incorrect postal code information. |
| County | None. | Keep as is. |
| Price(€) | Outliers. | Remove the outliers. |
| NotFullMarketPrice | None. | Keep as is. |
| VATExclusive | Some instances failed the tests. | Update the incorrect information. |
| DescriptionofProperty | None. | Keep as is. |
| PropertySizeDescription | Categories overlap. | Combine the overlapped categories. |
| PropertySizeDescription | Missing values(89.45%) | Keep as is. |

Descriptive Statistics for cleaned categorical features

| | count | unique | top | freq | %missing |
|-------------------------|-------|--------|--|------|-----------|
| Address | 9454 | 9440 | 12 CHURCH ST, HOWTH,,Dublin 13 | 2 | 0.000000 |
| PostalCode | 9454 | 23 | N/A | 7563 | 0.000000 |
| County | 9454 | 26 | Dublin | 2792 | 0.000000 |
| NotFullMarketPrice | 9454 | 2 | No | 8983 | 0.000000 |
| VATExclusive | 9454 | 2 | No | 7877 | 0.000000 |
| DescriptionofProperty | 9454 | 2 | Second-Hand Dwelling house /Apartment | 7877 | 0.000000 |
| PropertySizeDescription | 1019 | 3 | greater than or equal to 38 sq metres and less | 745 | 89.221494 |

Descriptive Statistics for cleaned continuous features

| | count | mean | std | min | 25% | 50% | 75% | max |
|----------|--------|---------------|---------------|--------|----------|----------|----------|----------|
| Price(€) | 9454.0 | 211410.339013 | 125294.849686 | 5963.0 | 115000.0 | 191094.5 | 285337.5 | 594714.0 |