**HOUSE PRICE PROJECT RESULTS**

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| **Variables** | |
| **MSZone** | Identifies the general zoning classification of the sale. |
| **LotArea** | Lot size in square feet |
| **LotShape** | General shape of property |
| **OverallCond** | Rates the overall condition of the house |
| **YrSold** | Year Sold (YYYY) |
| **SalePrice** | Price of the sale |

for more detailed information, review the description document in the Data folder.

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| 1. **Relationship between Lot Area Vs Sale Price** | |
| A close-up of a number  Description automatically generated | A graph showing different colored dots  Description automatically generated with medium confidence |
| The correlation shows us that there is a positive correlation between Sale Price and Lot Area, but it is not strong. | |

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| 1. **Relationship between Overall Cond vs Sale Price** |
| A graph with different colored boxes  Description automatically generated |
| |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | **OverallCond** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | | **mean** | 61000.0 | 141986.4 | 101929.4 | 120438.438596 | 203146.914738 | 153961.59127 | 158145.487805 | 155651.736111 | 216004.545455 | | **median** | 61000.0 | 85000.0 | 89500.0 | 115000.000000 | 185000.000000 | 142750.00000 | 145000.000000 | 142500.000000 | 176200.000000 | |
| In this plot we can observe that the most expensive houses do not seem to be directly related to the overall conditions, the two most expensive groups are the 5 and the 9. It's important to mention that group 5 has the most sales by far. |

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| 1. **Relationship between Sale Prices and MSZoning through YearsSold** |
| A graph of different colored bars  Description automatically generated with medium confidence |
| In this plot, we can notice that the sale prices were maintained similar through the years of selling, also, we can observe that the MSZones are constant with the prizes, except for C(all) in 2007. |

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| 1. **Relationship between Lot Shape vs Lot Area** |
| A graph of a box plot  Description automatically generated |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **LotShape** | **IR1** | **IR2** | **IR3** | **Reg** | | **mean** | 11894.545455 | 23733.658537 | 41338.2 | 8876.915676 | | **median** | 10638.000000 | 13682.000000 | 19078.0 | 8800.000000 | |
| In the graph, we can see that the regular lots are the smallest. Also, we can notice that the outliers are affecting the mean in the IR2 and IR3 types of lots. |