

# **Story - 5 : What Factors Determine Housing Prices in Ames Iowa**

# Understanding the Data

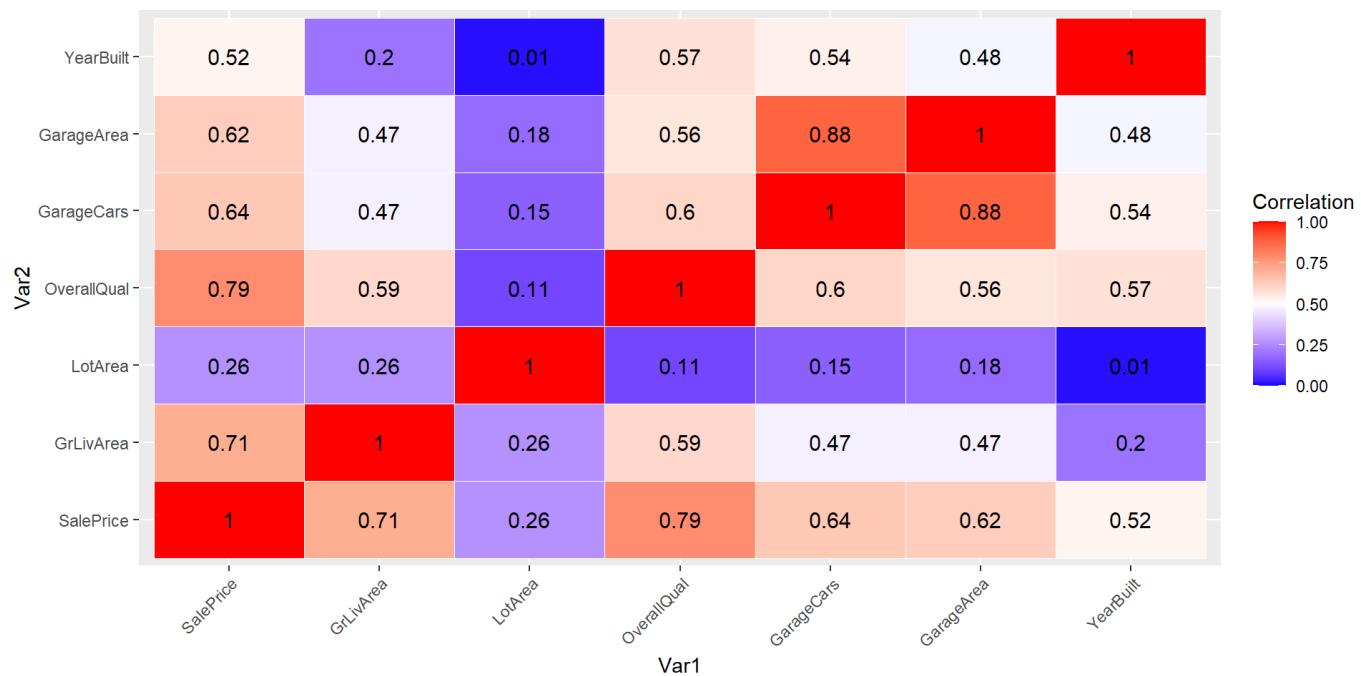
SalePrice	GrLivArea	LotArea	OverallQual
Min. : 34900	Min. : 334	Min. : 1300	Min. : 1.000
1st Qu.:129975	1st Qu.:1130	1st Qu.: 7554	1st Qu.: 5.000
Median :163000	Median :1464	Median : 9478	Median : 6.000
Mean :180921	Mean :1515	Mean : 10517	Mean : 6.099
3rd Qu.:214000	3rd Qu.:1777	3rd Qu.: 11602	3rd Qu.: 7.000
Max. :755000	Max. :5642	Max. :215245	Max. :10.000

GarageCars	GarageArea	KitchenQual	SaleType	Neighborhood
Min. :0.000	Min. : 0.0	Poor : 0	WD :1267	NAmes :225
1st Qu.:1.000	1st Qu.: 334.5	Fair : 39	New : 122	CollgCr:150
Median :2.000	Median : 480.0	Typical :735	COD : 43	OldTown:113
Mean :1.767	Mean : 473.0	Good :586	ConLD : 9	Edwards:100
3rd Qu.:2.000	3rd Qu.: 576.0	Excellent:100	ConLI : 5	Somerst: 86
Max. :4.000	Max. :1418.0		ConLw : 5	Gilbert: 79

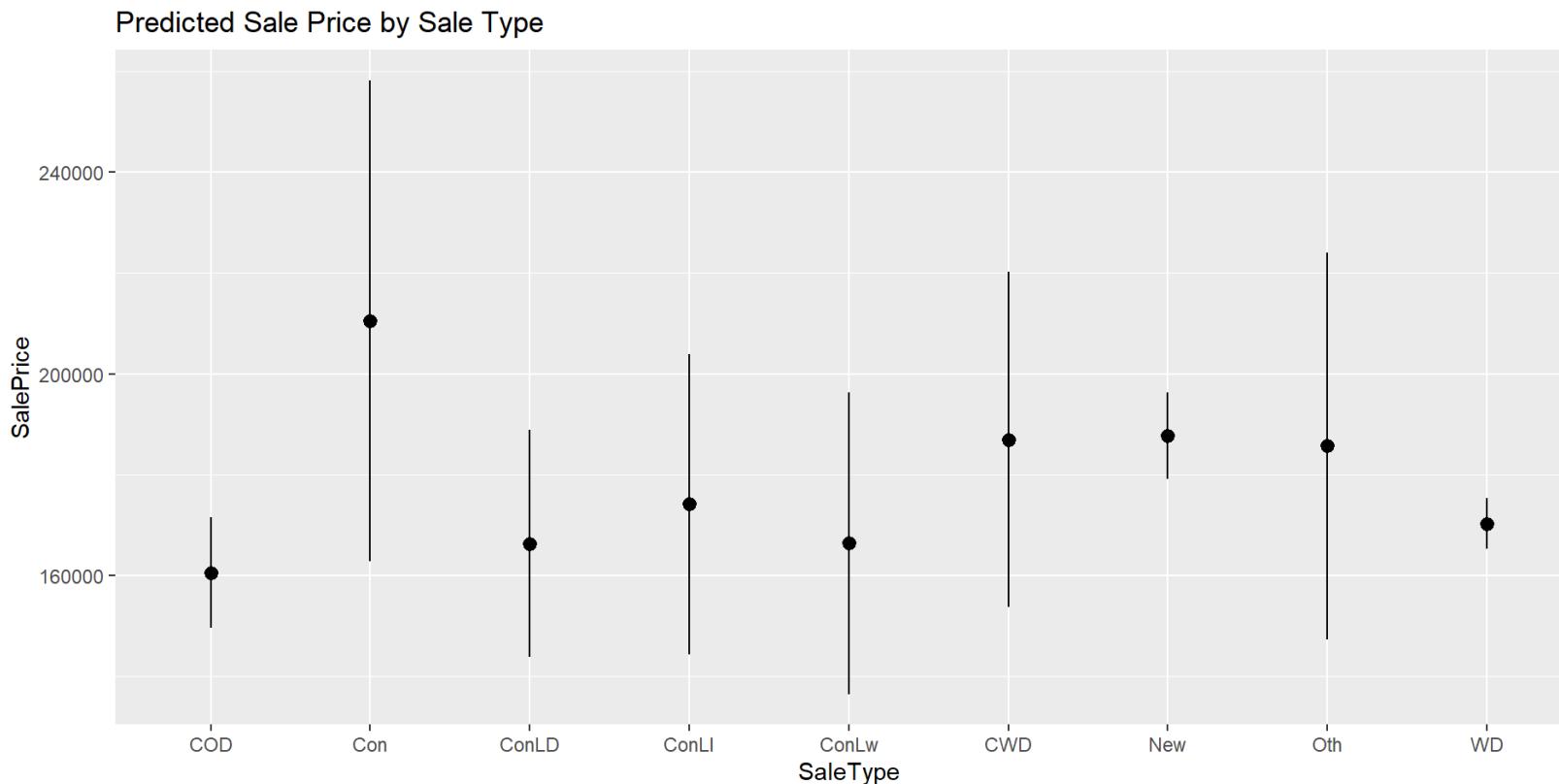
# What's Most Correlated with Price?

- Overall quality(0.79) is the strongest correlated with house price.
- Follow by GrLiveArea(0.71)



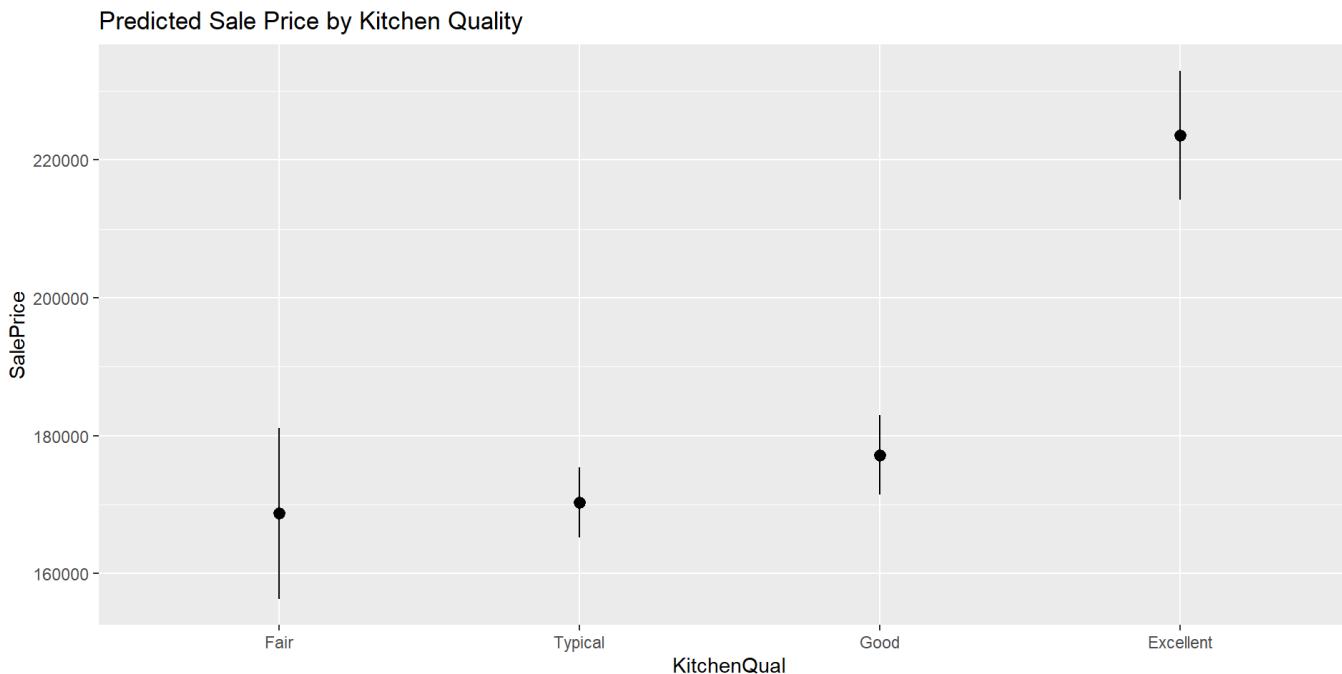
# Predicted Prices by Sale Type

- New construction and contract(Con) are predicted to sell for more.



# Kitchen Quality Makes a Big Difference

- Excellent kitchen quality sales for more price.
- From “Poor” to “Excellent”, the price jump is more than \$50,000 difference in between.



# Neighborhood Really Matters

- Top three neighborhood are 1. NoRidge, 2. StoneBr, 3. NridgHt



# Conclusion: What Drives Price in Ames?

- Quality and size matter – especially Overall Quality, large Living Area, and Kitchen Quality makes house sale higher.
- A house with a poor kitchen doesn't sell as well as an excellent kitchen.
- Location matters- Top three neighborhood are 1. NoRidge, 2. StoneBr, 3. NridgHt