

## Scenario

Let's consider more complex logistic regression models to find the best fit, most predictive, and most generalizable model. We might start by adding more predictors into the model and considering possible interaction effects between them. For example, does the effect of Basement\_Area depend on the variable Lot\_Shape\_2, Fireplaces, or both? As we build more variables into the model, we need to be careful of overfitting the data. To systematically build the model and remove ineffective predictors, we can use stepwise selection methods just as before.

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*Statistics 1: Introduction to ANOVA, Regression, and Logistic Regression*

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