**House Hunters** 

Discussion Write Up

The code was built to efficiently create a home search tool that would pull homes for a customer based on their preferences. These preferences were found through weighting their answers to what they considered to be the ideal price, ideal lot size, ideal square footage, ideal number of bedrooms, ideal number of bathrooms, ideal building year and ideal home. This required insight that was possible through using the Zillow API, setting up a module which had the functions to allow us to call from the API, and then building an excel file we pull the information from when we run our code.

The difficult part of this process was scraping information from the internet. The process requires understanding how web pages work, so we could parce through the webpage to find the appropriate information. This is on top of having to know Python and how it functions with gathering data.

The information was consolidated into lists using the append function, and then put into a dataframe for us to pull our queries from. Once a dataframe was built, we had to pull from it, which required us to add inputs for potential home buyers to rank their ideal requirements in a home. Ranking buyer preferences required properly weighing the answers, which involved probabilities and formatting that brought in data at the right time. Standardizing the data was important as it gives appropriate weights for all of the inputs.

Once this was done, the information was formated to an int, set into a new dataframe, and the input was run through a forloop that would pull out the final answer. This provides the customer with their perfect choice, but is also capable of giving information on the market.

Competitive data can be gleaned from the function and Dataframes provided.