

Full report on Capstone project for Week4 Real estate:

Introduction / Business Problem

As per the course, for any project the essential factor is finding location data, describing places and venues, such as their geographical location, their category, working hours, full address etc. This will be better fit for Real estate agents as they always search for the best locations to accommodate their buyers. In this Real Estate Battle of Neighborhoods, real estate agents need to find the best location for the buyers. Depending on given location given in the form of its geographical coordinates to determine what types of properties exist within a defined radius from the chosen location. The buyers will look for comforts such as restaurants, schools, or parks, or gyms, or community centers exist and are easy to commute.

Buyers also look for amenities with good reviews which is called location data. To satisfy the preferences of the buyers, we can provide a quick data on surrounding properties recently sold in that area by clustering the living areas to quickly tell to which category each property belongs and what are the unique characteristics of that area for example parks, schools and restaurants etc. This information is essential for buyers to decide the location to buy a new home. In real estate point of view there is a battle of neighborhoods.

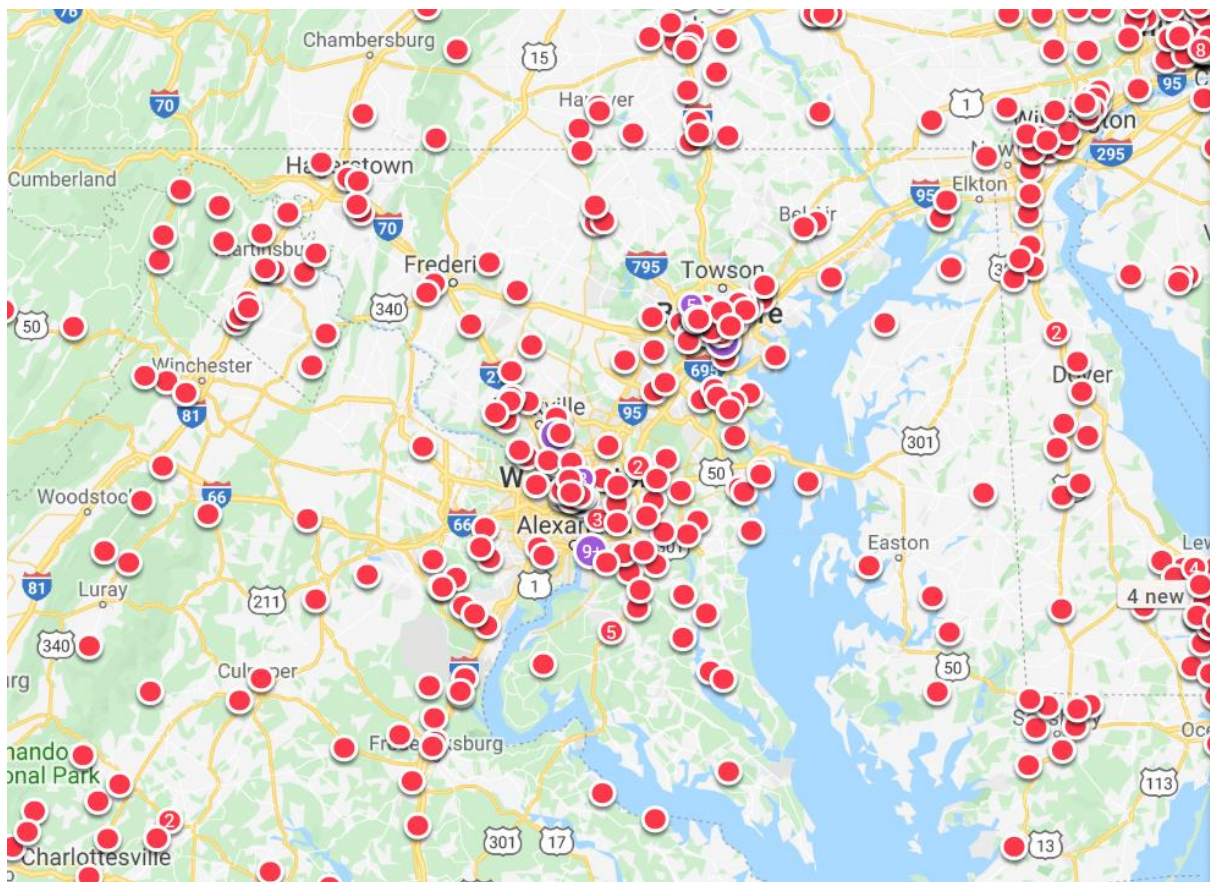
Data

After knowing the requirements of the buyers, agents have to collect the data of the location depending on the preferences of the buyers. Most of the buyers ask for Good neighborhood with good school ratings, moderate commuting time to grocery stores, hospitals and restaurants etc.

To address this, agents can google the wiki pages for neighborhood details setting the options for each customer depending on their preferences. As mentioned in the course, FourSquare API, which is quite straight forward and easier.

Methodology

Buyers also look for the moderate pricing, not too expensive to live in the area. Everyone looks for the reasonable priced homes. To address all these issues, we need to collect the data from all the neighborhoods in each area and along with the information of amenities, price. Then we need to give the information in easy readable format for every customer. It can be price based or school district based or any other preference of the customer. It should look as follows:



Discussion

Fairfax county in Virginia is a rich county, most of neighborhoods have good rated schools, less than 5 minute commute to all nearby stores, restaurants and hospitals. There is a big difference in average m2 housing price inside depending on the school ratings.

Conclusion

This data analysis can be helpful for real estate agents to provide competitive gain. This is more of Statistical based methodology, hence we can use statistical user friendly code to build the application which yields the best results.