# IBM Applied Data Science Capstone

## Researching a Neighborhood before Buying a House in Southwest Houston

### Dante A. Zorrilla

# Introduction

➢ Background: Researching real estate market as per preference and budget along with looking into the neighborhoods is time consuming, therefore this project is looking forward to easing the process by applying data science methodology.

➢ Target Audience: This project is useful for people looking to buy a property in Southwest Houston area.

# Required Data

➢ Zillow: List of properties for sale in Southwest Houston

➢ Neighborhood Scout: Crime index data per neighborhood

➢ Geojson.io: Geojson file of the neighborhoods in Southwest Houston

➢ Foursquare API: List of popular spots around a property of interest

# Methodology

➢ Extracting and processing data from Zillow.

➢ Getting crime index from Neighborhood Scout.

➢ Creating Geojson file of the neighborhoods in Southwest Houston.

➢ Creating the choropleth map using the Geojson file, and crime index dataframe.

➢ Locating the houses for sale into the choropleth map.

➢ Using Foursquare API to get popular places around a house of interest.

# Results

➢ Choropleth map of crime index showing houses for sale in Southwest Houston.
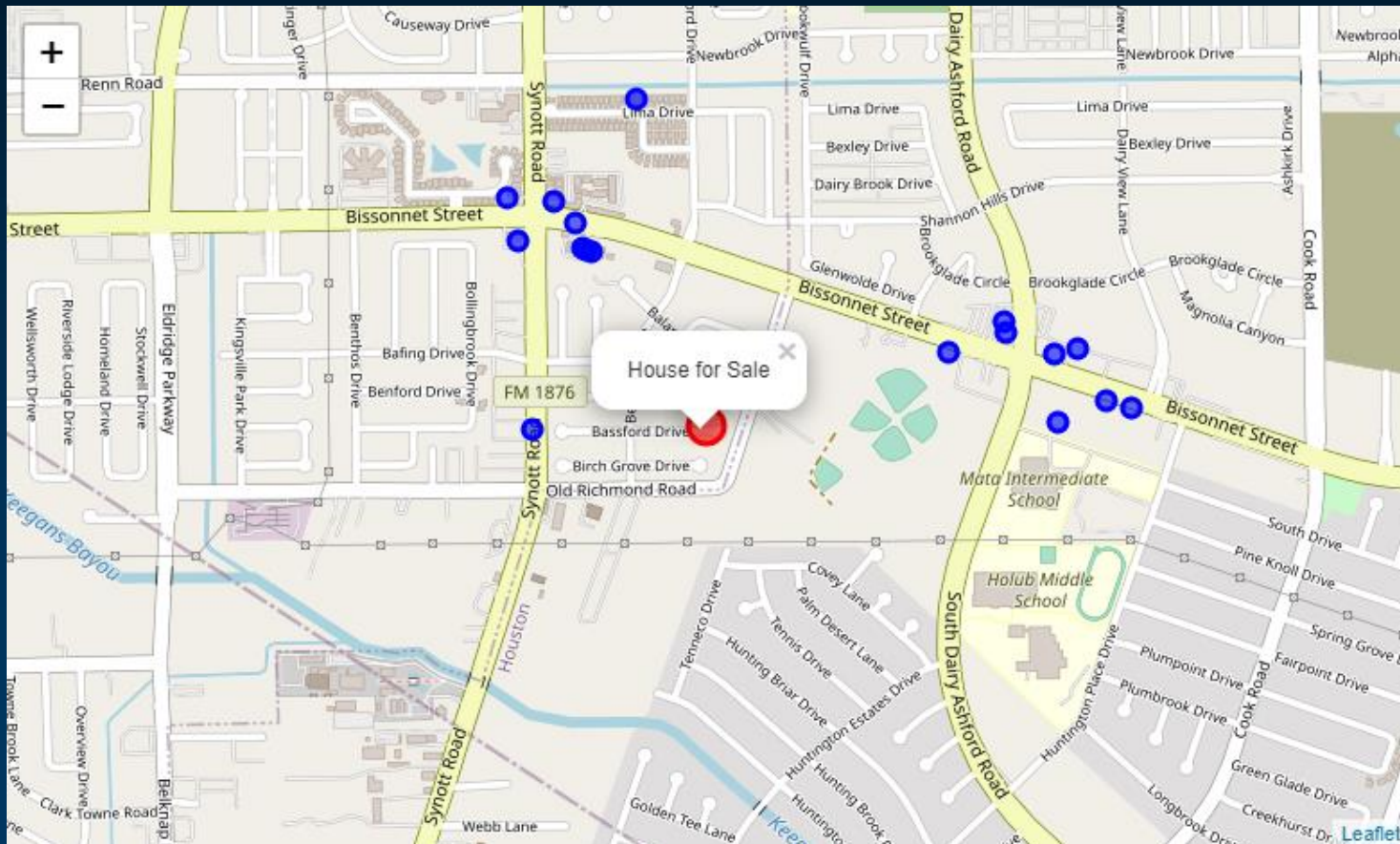
# Results

➢ List of popular places around a property of interest.

# Conclusion

➢ Using Python we were able to gather real estate information, neighborhood crime index, and popular spots around an area of interest, creating a script useful for people thinking in buying a property in Southwest Houston.