Introduction: Business Problem

The objective of this project is to determine a location for a new business within the municipality of Denver, Colorado USA. This business will be a Wine Bar. It will feature a tasting menu as well as a variety of interesting wines from around the world. Wines will be available by the bottle, glass, or in flights.

Craft beer has been popular in Colorado for a long time, but wine is also popular. Many of the wine bars are outside of Denver in the surrounding suburbs. Over the past ten years or so there have been many, trendy neighborhoods that have been attracting more affluent millennials and others who enjoy living in a bustling urban area close to parks and quality restaurants.

The stakeholders want to capitalize on these trends and place a wine bar in one of these hot, trending neighborhoods. They would also consider a more established neighborhood with the correct demographics that is lacking a similar business.

Data

The data to be considered for this project will come from the following sources:

- A list of 78 distinct Denver Neighborhoods found on the Denver Government web page
- An article in the popular local magazine, 5280, called The 25 Best Neighborhoods in Denver
- Data downloaded utilizing the Foursquare API including: most popular venues and locations of wine bars
- Neighborhood Latitudes and Longitudes will be acquired using the Nominatim package from geopy.geocoders.

The data will be used to determine which of these neighborhoods already have wine bars. Popular venue lists as well as a statistic in the 5280 article which combines a number of demographic information called the "x" factor will help determine where the wine bar will be placed. From the article:

"Each category is weighted: 30 percent for year-over-year percentage increase in home values; 25 percent for safety; 15 percent for neighborhood school ratings; and 30 percent for the X factor."

5280's data comes from the Denver Police Department web page, American Community Survey's 2013-2017 neighborhood data, and School Performance Framework.

This report will include maps of all of the Denver neighborhoods overlaid with the wine bar locations. It will use the venue data to find a location near other higher end restaurants but not too close to any of the existing wine bars. Multiple data analysis and visualization methods utilizing Python will be used to determine the best placement for this new business.