



OPENING A NEW GYM IN AVENTURA, FLORIDA

Coursera Capstone Project

SITUATION:

- A group of international investors wants to open up a gym.
- They decided they want to work with luxury equipment, targeting a wealthy demographics.
- They identified the area of Aventura, Florida as one where the gym is likely to succeed.
- However, if they open too close to one competitor (or two), they will not be able to make as much money as they want and will in fact lose all their money and reputation.

We have been hired to minimize the competition the investor group faces by identifying every single nearby gym.

OUR APPROACH:

- We will use all of our learnings to come up with a useful solution in helping the investors identify at least one area of opportunity.
- For this, we shall use the Foursquare API and obtain all the information of every gym and business center in the neighborhood, as well as in the surroundings.
- Once we obtain the data, we will process it, clean it, organize it and present it in a crystal clear way.

WHAT WE STARTED WITH

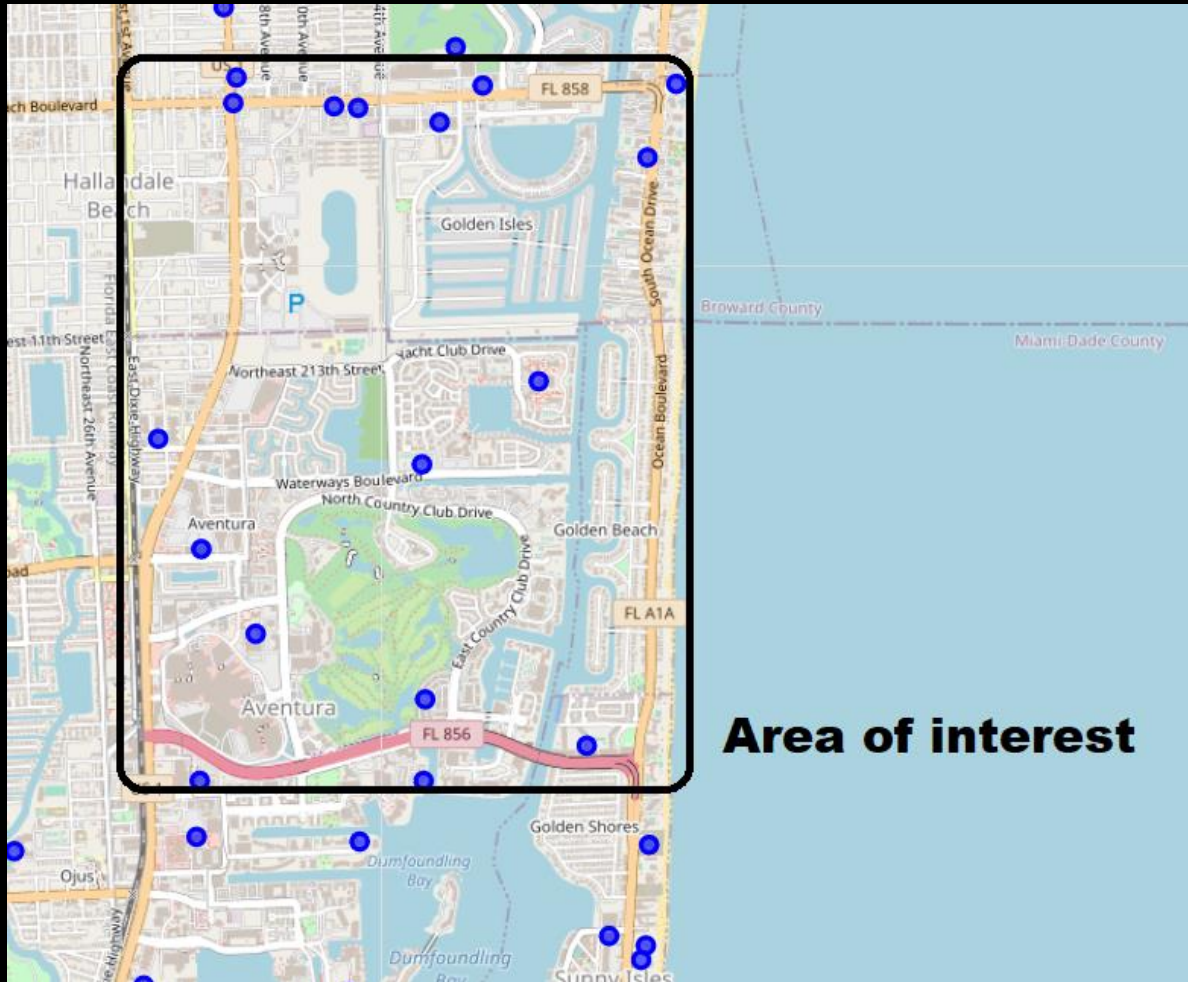
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*This is actually less than 10% of what we obtained

BUT, WE DO CLEAN UP WELL...

Name (of establishment)	Lat (Latitude)	Lng (longitude)
Spa at the Point	25.972220	-80.125839
Acqualina Gym	25.940874	-80.120329
Empower Lift	25.918991	-80.159591
Mystic Pointe Tower 600 GYM	25.952942	-80.132024
Fitness Center At Hyde Resort & Residences	25.986590	-80.118515
Winners Training Center	25.945491	-80.122108
Fitnes Center	25.944984	-80.120090
Radius Gym	26.012565	-80.143425
Aventura Recreation Center	25.950026	-80.135444
<i>(And many more)....</i>		

LET'S MAP IT



- Tons of gyms in the neighborhood!
- Also, ton of water.
- ...and natural parks.

Where should we build?

THE APPROACH; THE SHIFT

After considering multiple resolutions, the approach of maximizing distances from all other gyms seemed like the smartest thing to do. However, geographical limitations come into play:

- What if the best spot is in the water?
- What if it is inaccessible?
- What if it isn't for sale?

THE SOLUTION: ~~BURN THEM ALL~~ A HEAT MAP

Realizing that there is a spectrum of possibility, and also as a way of honoring the local basketball team, the Miami Heat, we decided the best approach was then to construct a Heat Map.

By doing so, instead of coming up with one unique spot, and then another, until we maybe get one that actually Works, we created a 'hot' area where most of the gyms are, and area in which new gyms are more likely to flourish.

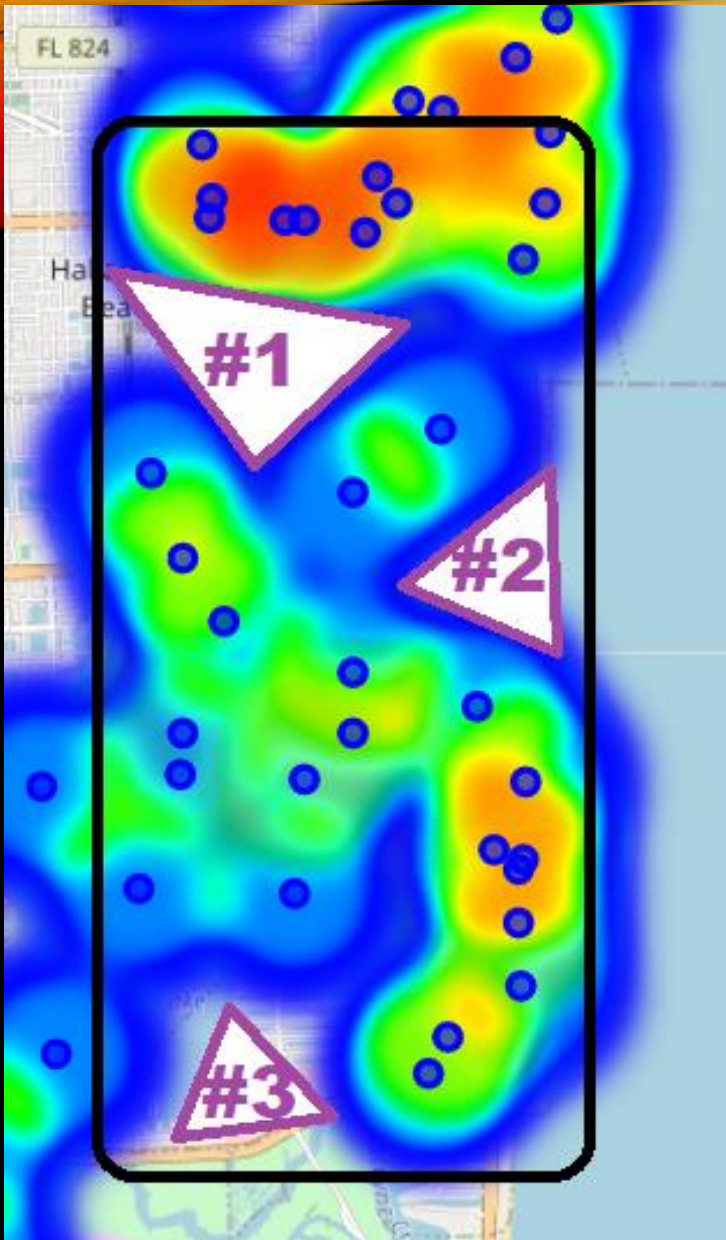
And it went like this:

PRETTY HOT, RIGHT?

Most of the map looks pretty hostile towards new gyms.

However, 3 potential locations were identified





3 DIFFERENT AREAS, PLENTY OF OPPORTUNITY

Within our model, we were able to find 3 areas that are currently “gym free”.

Surface-wise, it is pretty clear that most of the neighborhood will prove to be riskier, however we also believe that there could be opportunities in the 3 regions we identified.

Since it is the same neighborhood, there is no data to further segmentate based on income status of the residents in order to help decide between the 3 of them.

CONCLUSIONS:

Like any business Endeavor, there are multiple risk factors to consider. Currently, our society is trending towards healthier lifestyles and this can pose a benefit to our investors, if they decide to open.

Although it is true that there are multiple gyms in the same area which could lead to lower prices, it can be also a first-hand account of the demand and success that those businesses represent in this particular area.

For future models, it would be better to adjust the weight given to businesses based on other factors such as membership fee, average customer review, perhaps hours of operations, and more, but we were unable to extract that information from Foursquare.

Although lacking much of the information we would have wanted to have, we can positively use what we obtained in order to advise our investors.