

# Capston project Final presentation

Find the a great location to start a new business in switzerland (bakery)

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## Introduction and Business Problem

- Mario wants to start a new business. He wants to open a bakery. It is important to him to start his business near a large town in switzerland. He doesn't know how to find the best location.
- In order to find the best location for mario we need to get information about the near environment of the largest cities in switzerland.
- We need to find a location with not too much competition but with enough customers to run a successful business.

## Data

- To help Mario to find the perfect location for his bakery we will need to access following data:
- Mario wants to open his bakery in a large city in switzerland. The main cities with the total number of citizens we will get from
- wikipedia: [https://de.wikipedia.org/wiki/Liste\\_der\\_St%C3%A4dte\\_in\\_der\\_Schweiz](https://de.wikipedia.org/wiki/Liste_der_St%C3%A4dte_in_der_Schweiz)
- The coordinates (latitude, longitude) of these Localities we will get from Open Street Map APIs
- From Foursquare we will need following venues data: (exact infomation can be obtained here: <https://developer.foursquare.com/docs/resources/categories>)

bakery data location data and names

offices / working places location data and names

universities / school location data and names

leisure and nature spots data and names

- We will use this data to find out which loaction is most suitable for marios bakery.

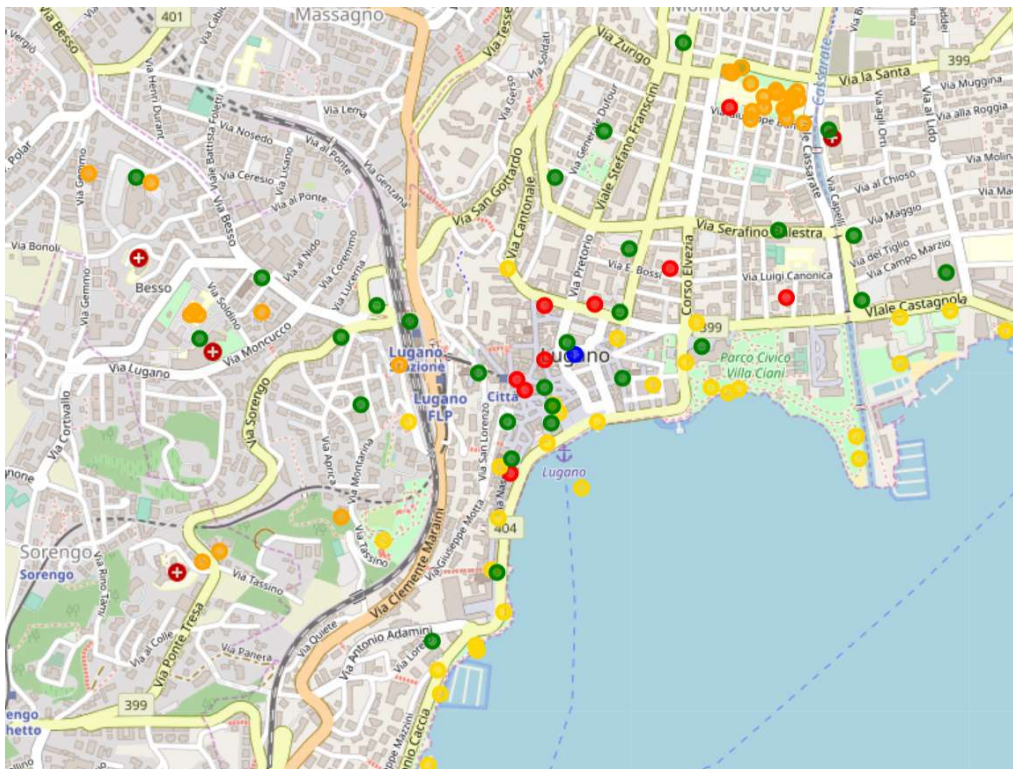
## Methodology

- The captial locations are dynamically collected from a wikipedia site.
- For each location the following data was collected from the „Foursquare“ API: Working places, nature/leisure spots, bakery data and universities/ schools.
- For each capital the sums of the categories are calculated.

- For each category a weight or penalty score is defined and used to identify the best location:
  - Other bakery shops have been weighted with a negative number, because we want to avoid competition
  - The other categories get weighted according to their positive effect.
- The weights can be modified according to the importance of each category.
- At the end a score was computed for each location.

## Results

- The best location with a score of 110 is Lugano. Mario should open his new bakery there.
- The next best location would be Wintherthur followed by Biel/Bienne and Neuenburg.
- By choosing Lugano as the location Mario reduces the competition. At the same time the location suits his needs best because the spot is near crowded areas. That is why he should have enough potential customers.



## Improvements / Recommendations

- To improve the analysis the categories should be filtered in more detail. I mainly worked with the top categories to get enough results
- The size of the capital (number of citizens) could have an impact on the potential customers per day.

- In the location itself, the distance between all potential customer „spots“ could be measured and weighted. At the moment all customer spots are equally weighted.
- Rent prices are not considered, but could make a difference if you are planning to start a business somewhere.

