

# “Business integration trips in the Silesian region”


Applied Data Science Capstone Project

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# Business idea



# Tools

A decorative graphic on the left side of the slide, consisting of several concentric circles in various shades of blue and teal, creating a tunnel-like effect.

NYU Spatial Data Repository website - search for location coordinates of selected cities

<https://geo.nyu.edu/catalog/stanford-xh662zc5620>

Foursquare API - search for natural surrounding (e.g. lake, mountains), entertainment for employees (e.g. bowling) and hotels with conference facilities

<https://developer.foursquare.com/docs/>

IBM Watson Studio - to import all libraries and run codes

<https://dataplatform.cloud.ibm.com/>

Github - to share the project

<https://github.com/>

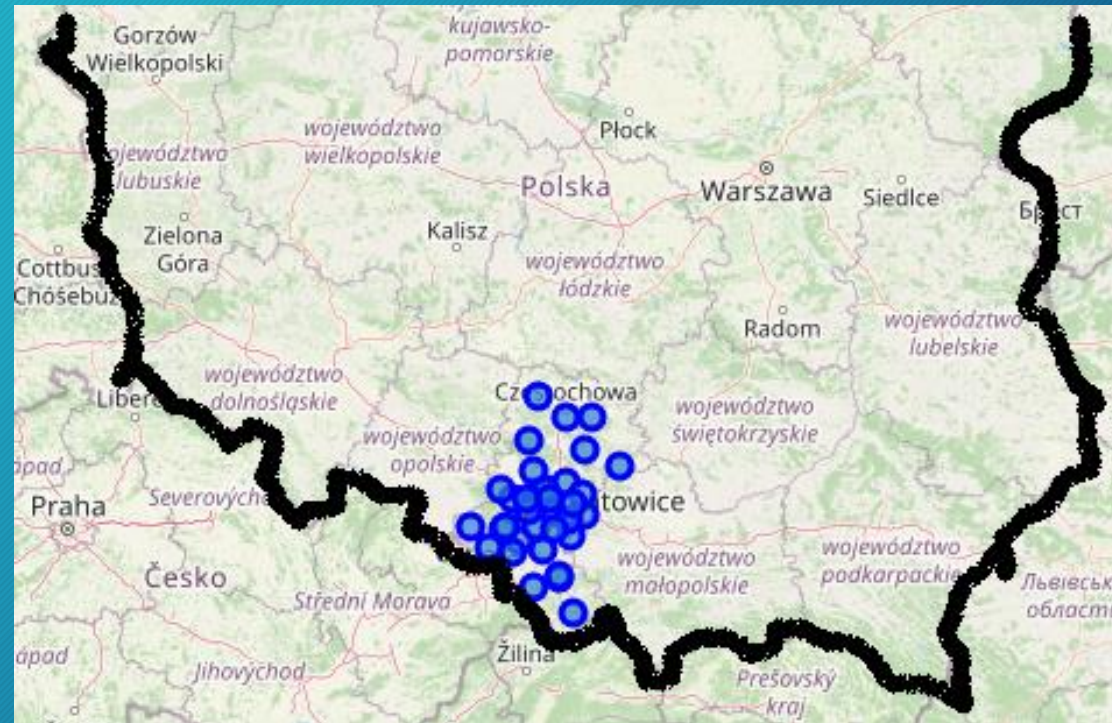


# Maps of Poland and Silesian's neighborhoods

Map of Poland generated from repository json file



Cleaned data representing Silesian's neighborhoods

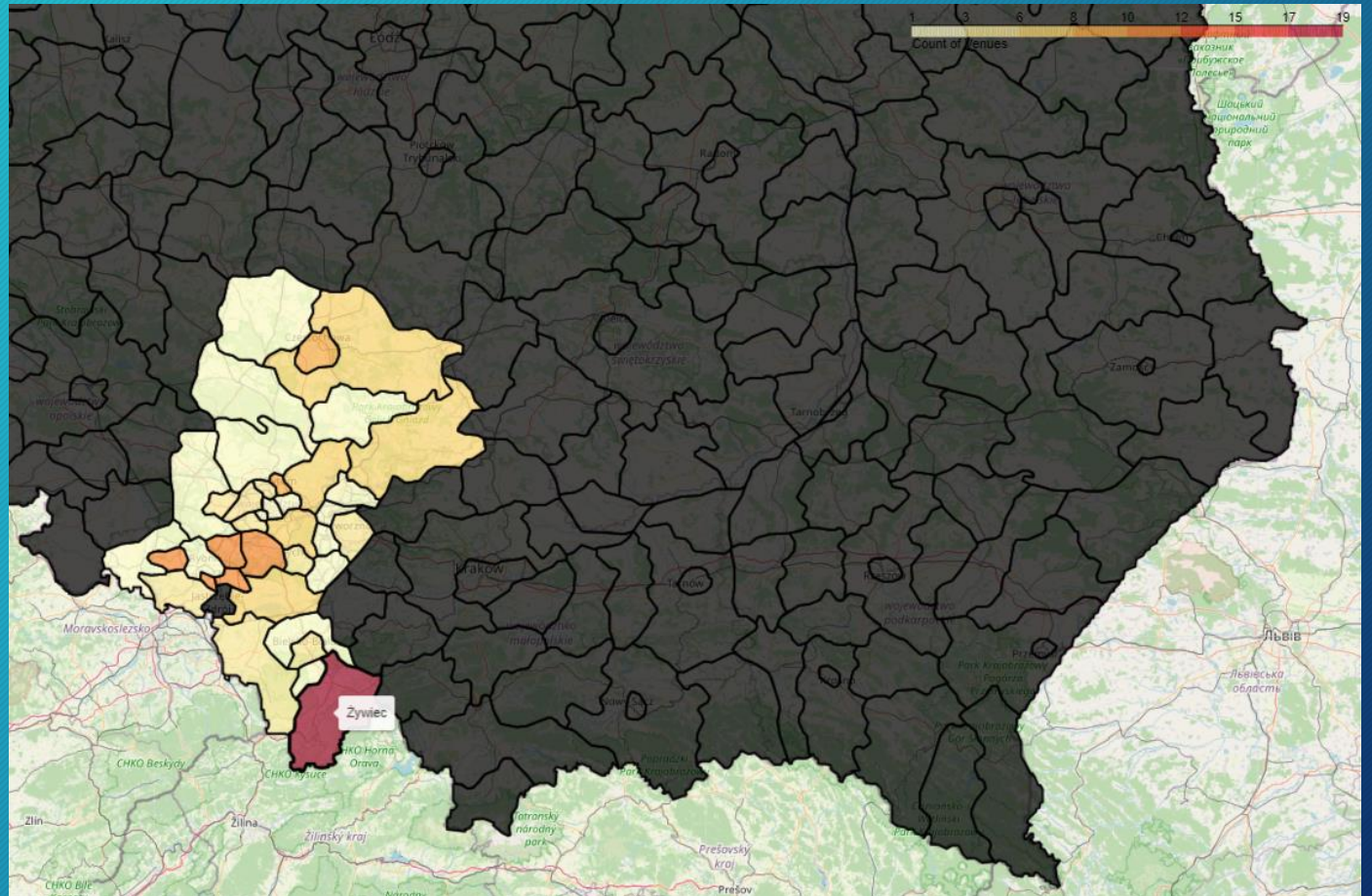




# Distribution of venues in Silesian's neighborhoods

168 recommended venues (belonging to 25 unique categories) of interest were found in all Silesia's neighborhoods.

The area highlighted in red shows the largest number of venues (Zywiec), whereas the light yellow neighborhoods - the smallest number of recommended venues. Grey – no venues of interest.

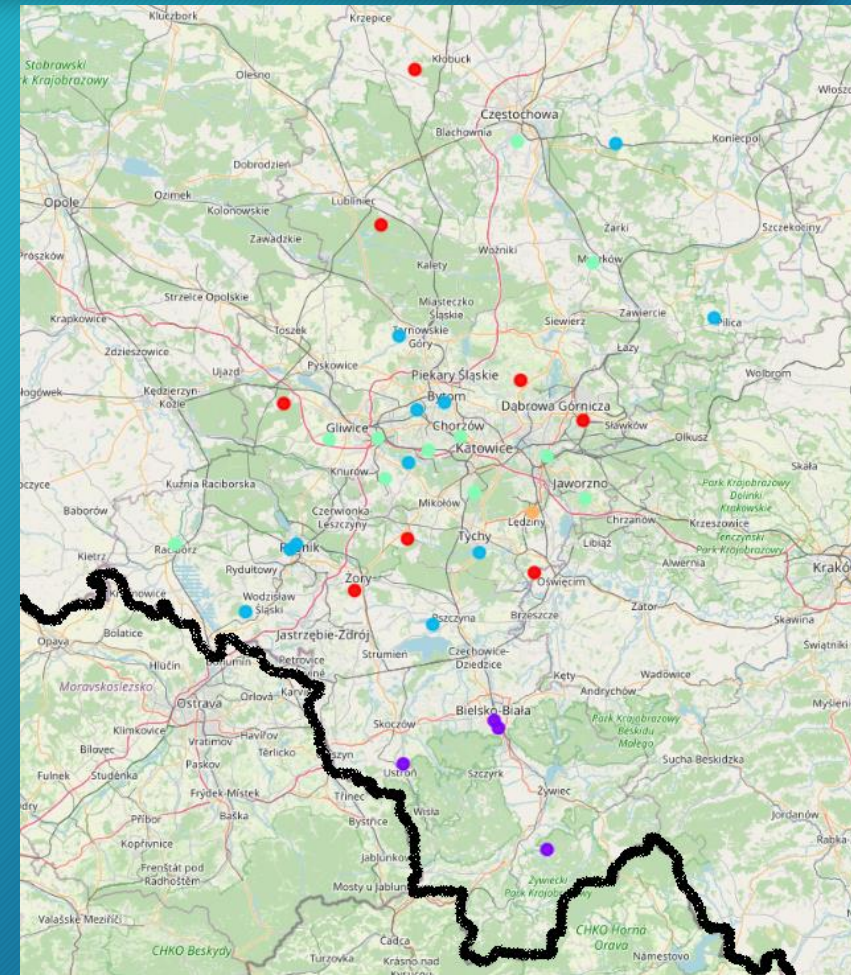




# Clustered neighborhoods

Silesian's neighborhoods grouped into 5 clusters.

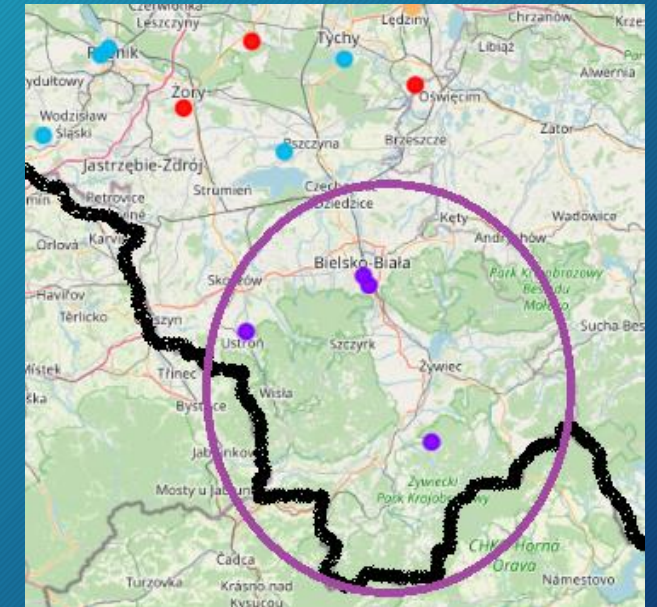
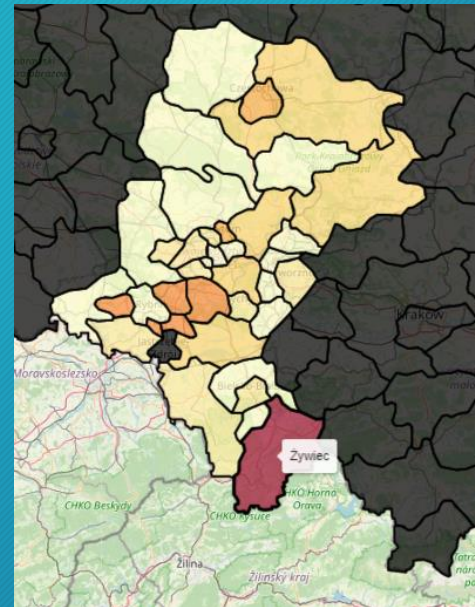
- Purple cluster – highly valued:
  - location surrounding: mountains and trail
  - entertainment: diving, go kart, golf course
- Blue cluster - highly valued:
  - location surrounding: lake, forest
  - entertainment: bowling, diving
- Green cluster - highly valued:
  - locations surrounding: various, not consistent
  - entertainment venues: bowling
- Red cluster - highly valued:
  - locations surrounding: lake and natural preserve
  - entertainment: go kart, paintball
- Orange cluster - highly valued:
  - locations surrounding: scenic lookout, trail
  - Entertainment: go card and golf course





# Discussion

- Analysis of venues show that the southernmost area of Poland (Zywiec Neighborgood) has the largest number of recommended venues of interest.
- Clustering analysis confirms that the same neighborhood has location surrounding that the client values high and entertainment opportunities matching client's requirements





# Discussion

- Further analysis of Zywiec neighborhood shows some high valued hotels with conference facilities.
- Based on customer's rating and opinions Kocierz Hotel & SPA was chosen as a recommended place for an integration trip.
- The venues within 500m from the hotel were investigated in addition to previously found venues for this region.



<https://kocierz.pl/galeria-kocierz-hotel-spa>



# Conclusions

Companies often choose locations outside their offices to have business meetings, trainings and conferences with the aim to integrate employees.

Tools like Foursquare can help decision makers to choose the right spot for they business venues. In this work I show the process, tools and methods that can be used to design an integration trip offering.