# Opening a retail-entertainment center in Ukraine

# Business problem

## Objective

Help investors to choose a place for the construction of a new retail-entertainment center

## Business question

Where would be a good place to build a retail-entertainment center in Ukraine?

# Data

- list of top 8 big cities of Ukraine (Kyiv, Kharkiv, Odessa, Dnipro, Zaporizhia, Lviv, Kryvyi Rih, Kherson)
- list of districts
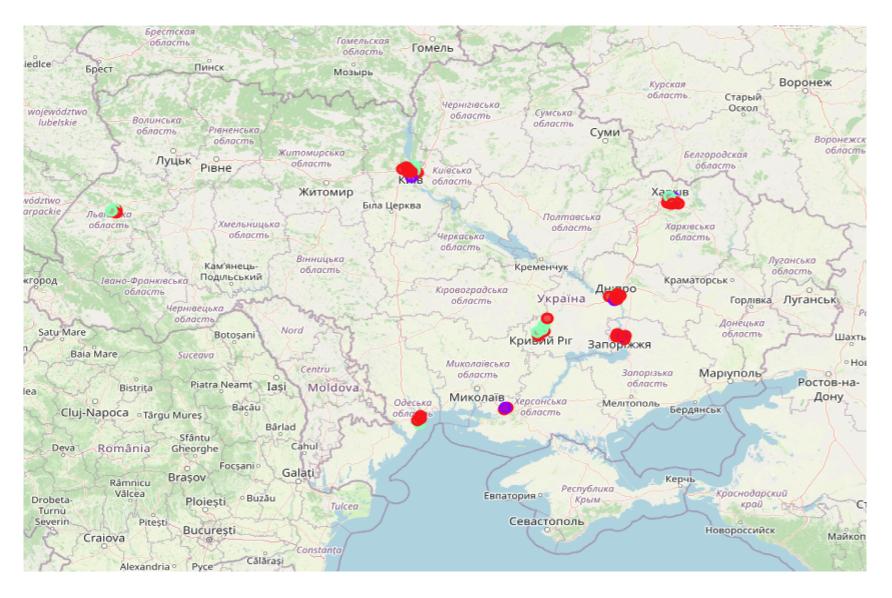- latitude and longitude of districts
- venue data

# Methodology

- receiving districts data from file
- receiving districts data from Foursquare API
- filter district category by 'Shoppin Maul'
- filter for retail-entertainment center from 'Shoppin Maul' category
- count amont of  retail-entertainment centers
- perform clustering on data with k-mean method
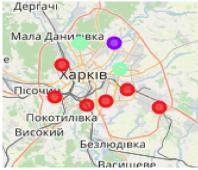
# Results

- Cluster 0. High number of retail-entertainment centers (with 2 or more retail-entertainment centers per district);
- Cluster 1. Moderate number of retail-entertainment centers (with 1 retail-entertainment center per district);
- Cluster 2. Without retail-entertainment centers (with 0 retail-entertainment center per district).
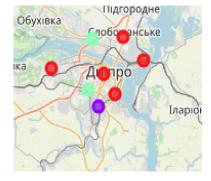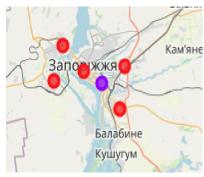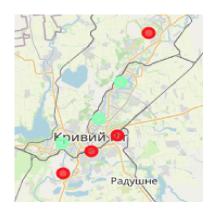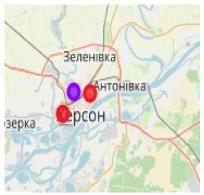
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# Discussion

I would recommend to build a new retail-entertainment center in Cluster 0 or Cluster 1. Cluster 0 would a good choice to avoid competition, while Cluster 1 would provide a competition with stable revenue. The competition in Cluster 2 is bad idea, because you just drop an income from retail-entertainment center.