

# Prague beer trip

# Goal

The map with rated beer venues for the future trip to Prague

Each place should be marked according to its Foursquare rating as

- Gold (highest rating),
- Silver (medium rating),
- Bronze (minimal rating) and
- Green (non rated yet)

# Data

- Open data is used to get Prague districts:
  - [http://opendata.iprpraha.cz/CUR/DTMP/TMMESTSKECASTI\\_P/WGS\\_84/TMMESTSKECASTI\\_P.json](http://opendata.iprpraha.cz/CUR/DTMP/TMMESTSKECASTI_P/WGS_84/TMMESTSKECASTI_P.json)
- For each district a central point is calculated
- The Foursquare request return all venues in radius 10 km from central point
- Received venues are filtered to use only beer related like:
  - **'Beer Bar', 'Bar', 'Beer Garden', 'Restaurant'**
- Rating for each filtered venue is received

# Data example

	id	name	categories	lat	lng	district	inDistrict	rating	url
5	5f691897501fe94186d60c6e	Beer & Beer	Beer Bar	50.078335	14.426868	praha 1	True	-1.0	<a href="https://beerandbeer.cz">https://beerandbeer.cz</a>
10	5c18ea09efa82a002c26e77d	Beer Story	Beer Bar	50.089230	14.422927	praha 1	True	5.8	
11	58dd50378cfe546add9e2a9	Prague Beer Museum	Beer Bar	50.084971	14.413799	praha 1	True	7.0	<a href="http://www.praguebeermuseum.cz/cz/">http://www.praguebeermuseum.cz/cz/</a>
12	52fe5f8111d2a858a202b3ca	Beer challenge	Beer Garden	50.081594	14.416927	praha 1	True	-1.0	
16	5de032da2401ec00086a78e9	Beer Point	Bar	50.078776	14.429829	praha 1	True	-1.0	

# Methodology

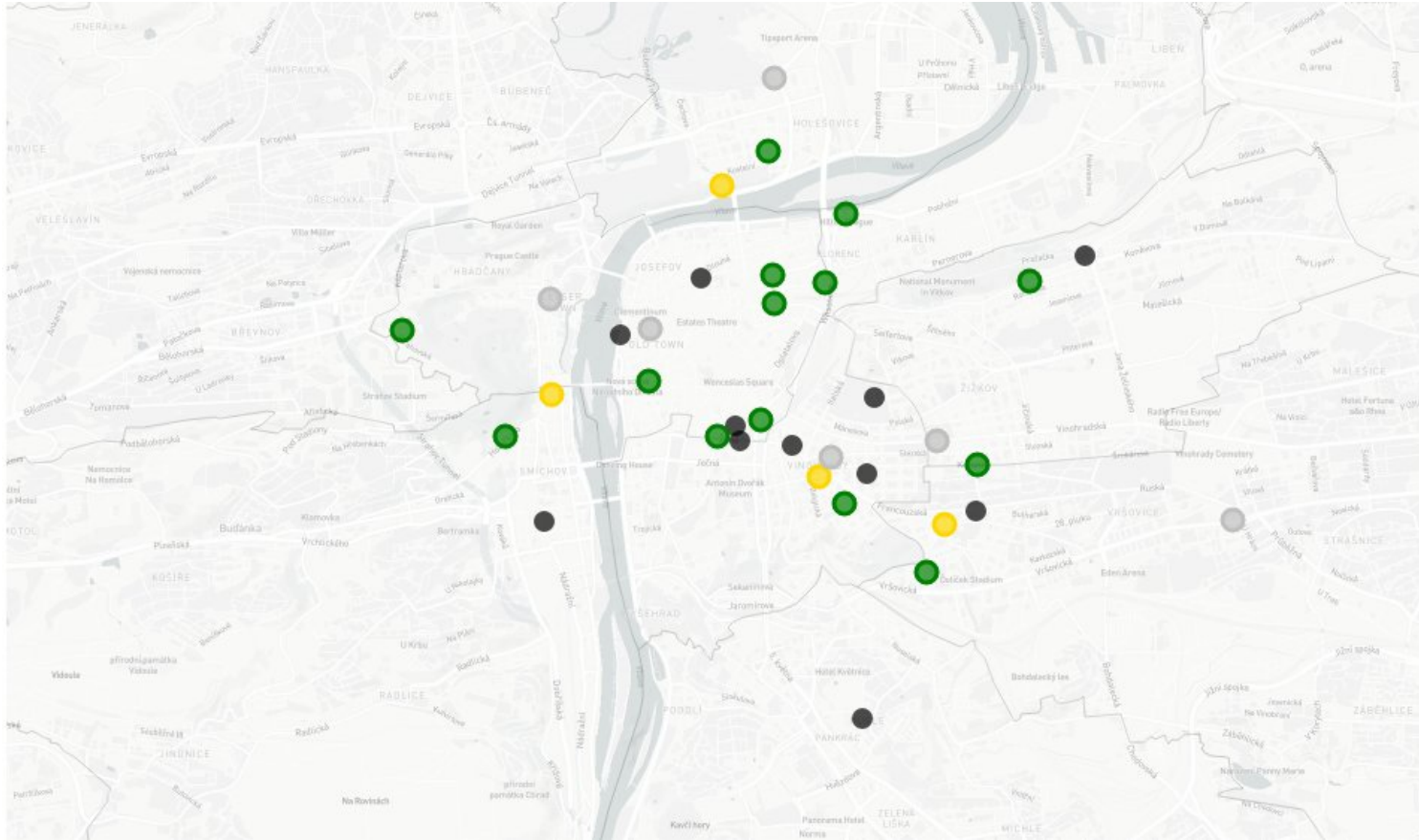
Classification approach:

- There are 3 bins related to
  - Gold,
  - Silver,
  - Bronze,
  - Green
- Bins calculation logic:
  - the highest rated places - from 75% to max value of rating,
  - the medium - from mean to 75% of rating,
  - the minimal - from 0 to mean rating value
  - All Foursquare non rated venues have rating -1

# Bins calculation

- Positive rated venues dataset description:
  - count 25.000000
  - mean 7.864000
  - std 1.100333
  - min 5.800000
  - 25% 7.200000
  - 50% 8.200000
  - 75% 8.800000
  - max 9.100000
- Bins edges:
  - [-1.1 0. 7.864 8.8 10. ]

# Result



# Discussion

The interactive map above shows all beer related venues in Prague according to Foursquare data. As we can see there is a big amount of venues are not rated yet, which gives a chance to any visitor to rate it.

Probably the visitor of Prague don't actively use the Foursquare. As expected the beer venues concentrate near to central city's part, but there are some interesting places in bedroom communities quite far from the centre.



# Conclusion and future directions

According to the collected data and chosen beans the low rating is less than 7.864, and minimum rating is 5.8. Such rating is high for many cities, so to classify correctly all beer venues the more "beans" are needed.

Anyway, the above map gives a start for Prague's beer venues exploring.

The main goal - collect all beer-related venues, show them on map and set appropriate markers - is achieved.