## Where to open a bakery in the city of Amsterdam?

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## 1. Introduction/business problem

Entrepreneurs that want to open a bakery are interested in the best location to do this. However, not every location is suitable and it is not that easy to find the perfect spot based on Google Maps only. They want to make a comparison of locations based on the characteristics and based on their wishes. Therefor we are looking for the best location to open a bakery in Amsterdam.

Based on location data we are going to find the best location for a bakery in Amsterdam. The best location has to meet the following criteria:

- There are no other bakeries nearby
- The location is close to the city center of Amsterdam

With the help of Data Science techniques we will find the best location.

## 2. Data

The Google Maps API is used to gather the location of the city center of Amsterdam.

The location of the existing bakeries in and around the city center will be obtained using Foursquare API.

As there can no information be found about the location of the neighbourhoods in Amsterdam, we make use of a hexagonal grid. This divides the area in equally 'neighborhoods'.

We will use the Google Maps API to gather approximate locations of the centers of those neighbourhoods. This will be done based on the latitudes/longitudes which are generated algorithmically.