Coursera Capstone Project Where Do We Meet?

The Problem

Meeting in a common place is essential but the decision depends on a few things;

- How far are the groups (3 km, 15 miles etc.),
- How is the transportation (by car, by public transportation etc.),
- Do groups have special needs/preferences in a meeting place (children, restaurant, disabled people etc.),
- Is there an appropriate place in between, within the transportation?

We answer each of these questions, and that takes time.

We will decrease this time.

The Audience

We chose an extraordinary group: Refugees and Asylum Seekers in Netherlands.

They do need to meet with other people, but the decision time can be unexpectedly long because of lack of general information about the country and the vicinity.

The Problem revisited:

We will decrease the search time of AZC guests in Netherlands for finding meeting and entertaining places with friends.



Data

The main source of data is foursquare.com (fs)

The AZC location data is gathered from official AZC management site.

Methodology

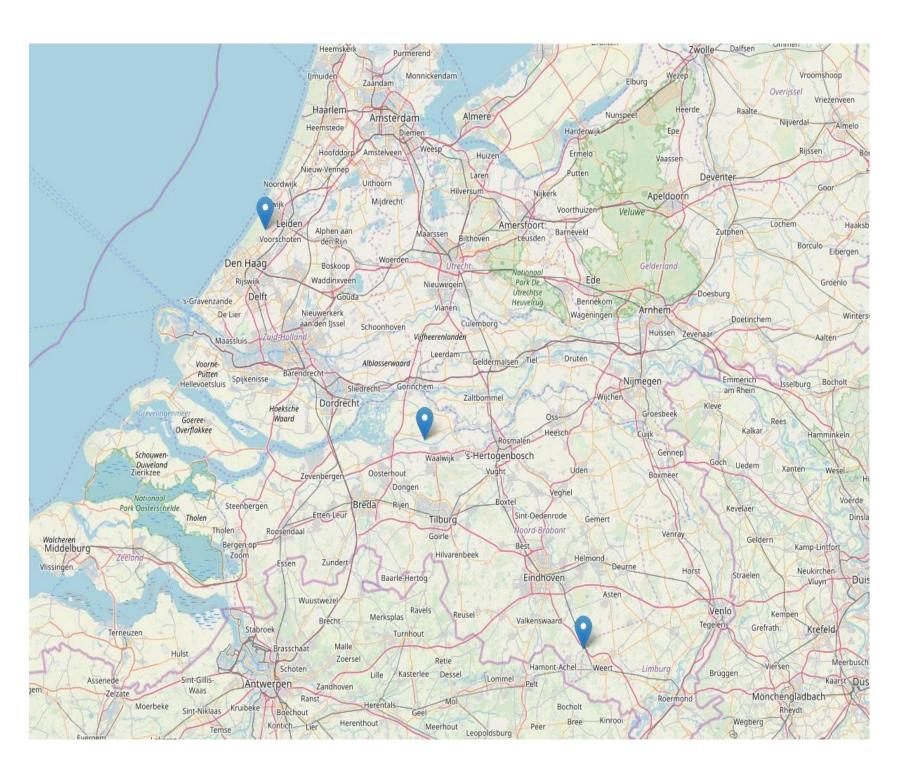


The site was downloaded, and scrubbed for the location information of AZC's.

When we plot it on the map we see that the AZC's are dispersed all around the Netherlands.

We choose 2 of these AZC's to go through an example.

Methodology

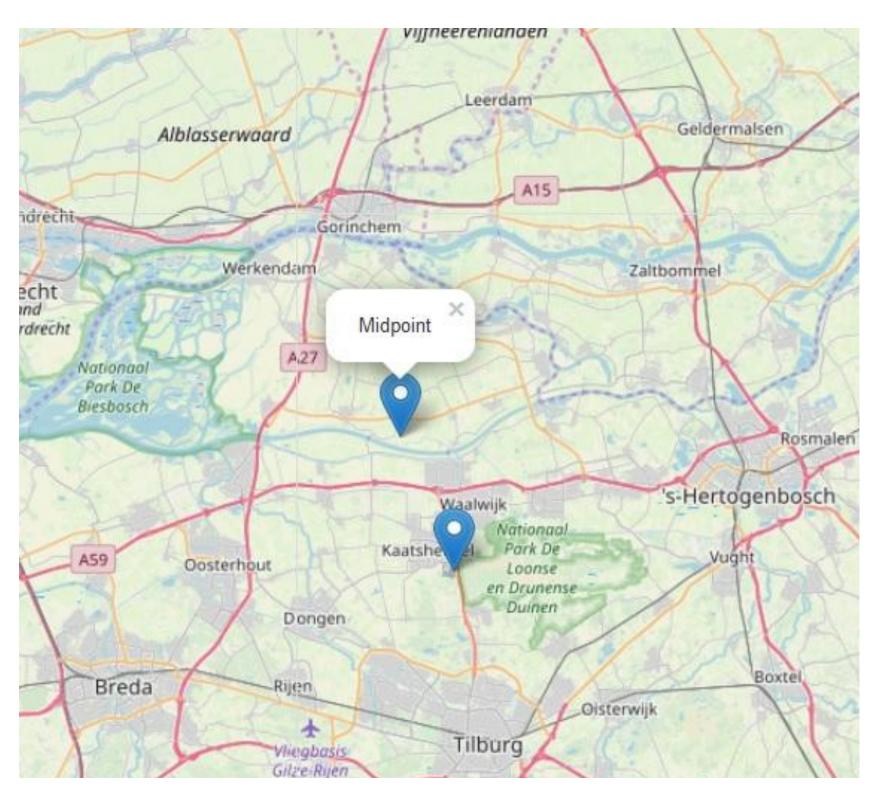


The chosen 2 AZC's are happen to be at northwest and southeast of the country.

It makes sense to find a middle point to meet in the vicinity.

After finding the middle point, we look for a train station for ease of transportation.

Methodology



We asked the fs server and found a train station nearby.

This will be our center (middle) point, because both sides will have ease of access.

Now we need to find appropriate places around this station.

Where Do We Meet?

Methodology

Theme Park Ride / Attraction - D'Oude Tuffer : Theme Park Ride / Attraction - Halve Maen 12: Train Station - Station De Oost 13: Theme Park Ride / Attraction - Vogel Rok 25 : History Museum - Efteling Museum 26 : Sandwich Place - Carrousel Paleis 27 : Food Truck - De Eigenheymer 30 : Café - Wachtruimte 1e Klas 33 : Salad Place - De Verse Oogst 34: Theme Park Ride / Attraction - Droomvlucht 35 : Candy Store - De Verleiding 41 : Snack Place - De Witte Walvis 42: Theme Park Ride / Attraction - Doornroosje 43 : Playground - IJspaleis 44 : Pizza Place - 't Melkhuysje

These are a sample of the places around.

There are various appropriate places for our focus group.

We make a route starting from the station (no.12) which includes places for kids, food and entertainment, and ends up in the station again.

48 : Theater - Raveleijn

49: Theme Park Ride / Attraction - De Trollenkoning

Results

We also need to know approximate walking distances.

So here's the route with walking distances:

Train Station - Café - Playground - Pizza Place - History Museum - Food Truck - Train Station

```
(365 m.) (518 m.) (239 m.) (368 m.) (169 m.) (485 m.)
```

Which looks ok.



Discussion

Although we had a nice working example, the analysis and the tool can be used in various ways. For instance :

- It can be used by one individual with a child, the 'midpoint' can be the new school and the filter word can be 'playground' instead of 'station'.
- Another use case can be three people, that agree on the meeting city but cannot agree on the
 exact place can end up this discussion with agreeing on the random 'sports bar'
 recommandation of the program.
- Also, on the business side, the audience expects to see a 'trending place' or 'in sequence'
 place which is the place visited after a certain point, in the vicinity of their supermarket chain.

Conclusion

The problem about shortening the search time to find the appropriate city and places to meet for AZC guests in Netherland has a relative solution with this tool.

It indeed **shortens the search time**.

Further improvements on the user interface (or an integration to COA app) would generalize the usability of the tool.



Thank you!