Finding venues open at given time

Capstone project

Cities never sleep ...

There is more demand for services at odd hours. Why?

- Globalization. Working across timezones.
- Travel. It's 3 am here but it's dinner time at home.
- Beating commute.
- Gig economy. Working on your own schedule.
- ... many more

We need data!

What is open in this area at this time?

These data would help:

- People to plan their activities around the venues
- Entrepreneurs to identify available opportunities

How can we get a report?

Application logic:

- Input: Address, Day, Time, Radius
- Process: Convert address to coordinates, get a list of venues, identify what is open, clean along the way
- Report: Show the output as a map

How does it work? Input

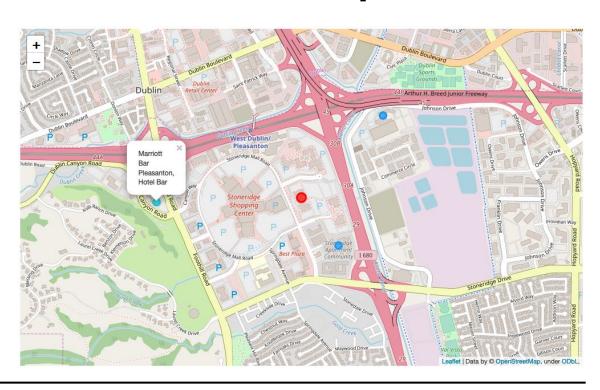
Midweek, 22:30, 1000 meter radius

Input data

Target location. Enter a US address. Target day. Day of the week 1-7 Target time. "0000"-"2359" Target radius. In meters

```
target={}
target['address']="6200 Stoneridge Mall Rd, Pleasanton, CA"
target['name']="0ffice in Pleasanton"
target['day']=3
target['time']="2230"
# These values are optional
target['radius']=1000 # Keep it walkable, about 1 mile
target['latitude']=None # We'll find out later based on the address
target['longtitude']=None # We'll find out later based on the address
```

How does it work? Output



How does it work? Input

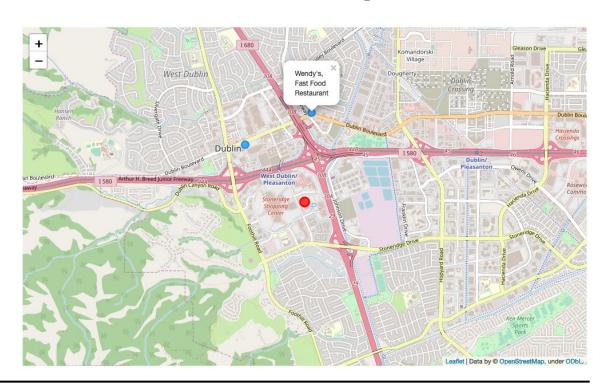
Midweek, 00:30, radius had to be increased to 1500 m

Input data

Target location. Enter a US address. Target day. Day of the week 1-7 Target time. "0000"-"2359" Target radius. In meters

```
: target={}
target['address']="6200 Stoneridge Mall Rd, Pleasanton, CA"
target['name']="Office in Pleasanton"
target['day']=3
target['time']="0030"
# These values are optional
target['radius']=1500 # Keep it walkable, about 1 mile
target['latitude']=None # We'll find out later based on the address
target['longtitude']=None # We'll find out later based on the address
```

How does it work? Output



Conclusions

Overall, it worked as expected.

Some ideas:

- Premium calls a precious, caching might help.
- Data quality. The more venues the better!
- Data extremes. Cities never sleep vs Sleepy towns.