Showing Geolocations on Maps

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Geolocations in Twitter

User has location in profile

User has "geo-enabled" True
- Location appears in tweet
- Given as longitude and latitude location
- Could be called "coordinates"

Twitter: given in order [longitude, latitude]

Other apps: given in order [latitude, longitude]

Reverse Geocoding

May want to summarize locations

Getting address information back
- Google Maps API
- Foursquare package
- Python package geopy
  - Geopy – https://geopy.readthedocs.io/en/1.10.0/
  - To install: pip install geopy
  - Geocoding and reverse geocoding

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Reverse Geocoding - Example

Given Latitude and Longitude for Syracuse University Hinds Hall

- Latitude: 43.038658 Longitude: -76.133498

- Use this to retrieve the location from the google api
- Parse the data to retrieve city and state from the 'short_name'

- Use the address to get the latitude and longitude
- Do the reverse (use latitude and longitude) to get address

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Creating Maps

KML maps (Keyhole Markup Language)
- Used by Google Maps and Google Earth
- Used user location and how many tweets
- Put PlaceMarks on the map

KML maps (grouping data)
- User locations reverse geocoded
- Saved by city names and frequencies
- Key shows city names and frequencies

Google Chart API
- Region chart for states in the United States
- Can use satellite imagery
- Shows state locations with frequencies of tweets

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