Google Maps APIs Reverse Geocoding

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Reverse Geocoding

- Reverse geocoding is the process of back (reverse) coding of a point location (latitude, longitude) to a readable address or place name. (Wikipedia)
- Example

https://developers.google.com/maps/documentation/javascript/examples/geocoding-reverse

Reverse geocoding a bunch of locations

- Use case: have the GPS Coordinates data and want to know the Addresses
- get a key: <u>https://developers.google.com/maps/documentation/javascript/get-api-key</u>
- reverse geocoding.html
- Inputs: csv or txt or js file contains var strData = ", csvtoArray.js

```
var strData='39.952222,-75.192769\n39.949921, -75.193562\n39.953786,
-75.198055\n39.953112, -75.201306\n39.953589, -75.195759'
```

- Function: geocoder.geocode
- Outputs are addresses shown on the web page

Get Point of Interests

Use case: have the GPS Coordinates data and want to know the POIs

- GPS Coordinates to POIs.html
- Function: service.nearbySearch
- Outputs: POI name and type
- Result component: <u>https://developers.google.com/maps/documentation/javascript/reference#PlaceResult</u>

Search certain kind of POI

GPS Coordinates to POIs (Type).html

Supported Types:

https://developers.google.com/places/supported_types

 Accounting, airport, amusement_park, aquarium, art_gallery, atm, bakery, bank, bar, beauty_salon, bicycle_store, etc.

Using gaode Map API for Chinese locations

- gaode.html
- Return Address, POI name, and POI type

Documentation

- https://developers.google.com/maps/documentation/javascript/geoc oding
- https://developers.google.com/maps/documentation/javascript/places