Test Plan Document of Google Geocoding API service,

For Atlantbh,

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1. **Introduction**

Geocoding is the process of converting addresses (like "1600 Amphitheatre Parkway, Mountain View, CA") into geographic coordinates (like latitude 37.423021 and longitude -122.083739), which you can use to place markers on a map, or position the map.

Reverse geocoding is the process of converting geographic coordinates into a human-readable address. The Google Maps Geocoding API's reverse geocoding service also lets you find the address for a given place ID.

The Google Maps Geocoding API provides a direct way to access these services via an HTTP request.

1. **Tasks**
2. Write test cases for geocoding and reverese geodcoding service
3. Identify test case that represents a Smoke test.
4. Identify positive and negative tests for both forward and reverse geocoding.
5. Push solution to github
6. **Scope**

Only API service will be tested

1. **Test cases**

Test cases are located in separete spreadsheet named „**Test cases for Geocoding.xlsx**“

1. **Conclusion**
   1. *Smoke test*

In my oppinion test number 1. named „Test valid input“ is smoke test for forward Geocoding and test number 3. named „Test reverse Geocoding“ is smoke test for reverse Geocoding. Reason for that is the fact that those two tests check two basic and most important functionalites. If we can't get results for basic city or address request for forward, and results for precise lng and lat for reverse Geocoding then we should not test more advanced api requests.

* 1. *Positive and negative tests*

For forward Geocoding one example of positive test is „Query is missing“ beacause no matter what if we don't send any query we can't get any results. Negative example could be if we are doing „Test wrong address“ and we test for address that might be added in the future and then aour tests would fail even if they passed now.

For reveverse Geocoding one example of nagative test is comparing exact address name beacouse addresses can change. Positive example would be „Test Reverse Geocoding Restricted by Type without api key“ beacouse our request should always be denied if we don't have api key.