**Google Map API Geocoding**

Test Cases

| Test Case | Verify longitude and latitude positions using location address | Smoke |
| --- | --- | --- |
| Ref # | Test steps | Expected Results |
|  | **Navigate to:** <https://developers.google.com/maps/documentation/geocoding/intro#Geocoding> | **Address typed** |
|  | **Verify:** Google Maps API is successfully opened | **Google Maps API is successfully opened** |
|  | **Insert addresss in search field : exp**  "1600 Amphitheatre Parkway, Mountain View, CA“ | **Address inserted** |
|  | **Click**: Geocode button | **Button clicked** |
|  | **Verify**: geocode returns status : **„OK** | **Geocode returns status “OK”** |
|  | **User should verify that:** Geocode returns Country, Postal Code, Street Address, Route, Latitude and Longitude, Postal code exp:  **Address**: 1600 Amphitheatre Parkway, Mountain View, CA,  **Location longitude and latitude**: latitude 37.423021 and longitude -122.083739,  T**ype:** street\_address | **Geocode returns Country, Postal Code, Street Address, Route, Latitude and Longitude, Postal code** |

| Test Case | Verify that geocode returns location address based on inserted longitude and latitude- Reverse Geocoding | Smoke |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Insert longitude and latitude in search field : exp  latitude 37.423021 and longitude -122.083739 | Longitude and Latitude inserted |
|  | Click: Geocode button | Button clicked |
|  | Verify: geocode returns status : „OK“ | Geocode returns status “OK” |
|  | **User should verify that:** Geocode returns Country, Postal Code, Street Address, Route, Latitude and Longitude, Postal code exp:  **Address**: 1600 Amphitheatre Parkway, Mountain View, CA,  **Location longitude and latitude**: latitude 37.423021 and longitude -122.083739,  **Type**: street\_address | **Geocode returns Country, Postal Code, Street Address, Route, Latitude and Longitude, Postal code** |

| Test Case | Verify generated JSON file content | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: <https://developers.google.com/maps/documentation/geocoding/intro#Geocoding> | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Insert address in search field : exp  1600 Amphitheatre Parkway, Mountain View, CA | Address inserted |
|  | Click: Geocode button | Button clicked |
|  | Verify: geocode returns status : „OK“ | Geocode returns status “OK” |
|  | Click on JSON link generated and open file | JSON content displayed |
|  | Verify JSON file contains **address\_components node with long\_name, short\_name and type inside it** | JSON file contains address\_components node with long\_name, short\_name and type inside it |
|  | Verify inside brackets below are placed **long\_name** and **short\_name** (exp with **Amphitheatre Parkway value) with route type** | Route type is displayed in JSON file |
|  | Verify that below (**Amphitheatre Parkway) are placed long\_name and short\_name** with value **(Mountain\_View) and** types **[„locality“,“political“]** | Locality and political values are displayed in JSON file |
|  | **Verify that postal (94043) code** is displayed in JSON file | Postal code (94043) exists in JSON file |
|  | **Verify** that **country name** is displayed in JSON file | Country Name is displayed in file |
|  | **Verify same longitude and latitute** dimensions are displayed in **JSON file as** on generated PopUP window on site | Dimensions of longitude and latitude on generated PopUp window on google maps and in JSON file are matching |
|  | **Verify** on the bottom **of JSON file pace\_id and status code** are displayed | Place\_id and status\_code are displayed on the bottom of JSON file |

| Test Case | Verify content of generated XML file | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: <https://developers.google.com/maps/documentation/geocoding/intro#Geocoding> | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Insert address in search field : exp  1600 Amphitheatre Parkway, Mountain View, CA | Address inserted |
|  | Click: Geocode button | Button clicked |
|  | Verify: geocode returns status : „OK“ | Geocode returns status “OK” |
|  | Click on generated XML link and open file | XML content displayed |
|  | Verify XML file contains **formatted\_address** with full address, **address\_components nodes with long\_name, short\_name and type inside it** | XML file contains formatted\_address,address\_components nodes with long\_name, short\_name and type inside it |
|  | Verify address\_component contains **long\_name** and **short\_name** (exp **Amphitheatre Parkway ) with route type** | Route Type is presented in XML file |
|  | Verify that below (**Amphitheatre Parkway) are placed long\_name and short\_name** with value( **Mountain\_View) and** types **[„locality“,“political“]** | Locality and Political exit in XML file |
|  | **Verify that postal (94043) code** is displayed in XML file | Postal code(94043) exists in XML file |
|  | **Verify** that **country name** is displayed in XML file | Country Name is displayed in file |
|  | **Verify same longitude and latitute** dimensions are displayed in **XML file as** on generated PopUP window on site | Dimensions of longitude and latitude on generated PopUp window on google maps and in XML file are matching |
|  | **Verify that place\_**id is displayedon the bottom **of XML file** and on the top of XML file is displayed **status code** | Place\_id is displayed on the bottom of XML file and on the top of XML file is displayed status code |

| Test Case | Compare JSON and XML files content | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Insert address in search field : exp  1600 Amphitheatre Parkway, Mountain View, CA | Address inserted |
|  | Click: Geocode button | Button clicked |
|  | Verify: geocode returns status : „OK“ | Geocode returns status “OK” |
|  | Click on generated JSON and XML links and open files | JSON and XML contents are displayed |
|  | Verify that JSON and XML files contain same **formatted\_address** with full address, **address\_components nodes with long\_name, short\_name and types inside it** | JSON and XML files contain same formatted\_address,address\_components nodes with long\_name, short\_name and types inside it |
|  | Verify that both JSON and XML files contain same address\_component : **long\_name** and **short\_name** with (**Amphitheatre Parkway) value of route type** | Both XML and JSON files contain route type |
|  | Verify that both files contain **long\_name and short\_name** with value **(Mountain\_View) for** types **[„locality“,“political“]** | Locality and Political value types are displayed in both files |
|  | **Verify that same postal (94043) code** is displayed in both files | Postal code (94043) exists in both files |
|  | **Verify** that same **country name** is displayed in XML file and JSON files | Same Country Name is displayed in both files |
|  | **Verify same longitude and latitute** dimensions are displayed in **XML and JSON files as** | Dimensions of longitude and latitude are same in both XML and JSON files |
|  | **Verify** that both files have same **place\_id** and **status\_code** generated | Both XML and JSON files have same place\_id and status\_code generated |

| Test Case | Verify google maps API key | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: <https://developers.google.com/maps/documentation/geocoding/intro#Geocoding> | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Verify: right side on the top of the page :  Get a Key and View Pricing and Plans buttons | Buttons exist |
|  | Click: Get a Key button | Button clicked |
|  | Verify: PopUp window with Select or Create New project is displayed | PopUp window is displayed |
|  | Enter : New Project Title and Click: Create and Enable API button | New Project Created |
|  | Verify: API key is generated and Resources are displayed | API key is generated and resources are displayed |
|  | Click: API Console and Verify: That our project dashboard is displayed and we are ready for developing | API Console navigated and project dashboard is displayed- we are ready for developing |

| Test Case | Verify Developers Guide content | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Verify: that Google Maps API Geocode is below Documentation tab on the website | Google Maps API is below Documentation Tap on the website |
|  | Verify: Home, Documentation, Pricing and Plans tabs on the top of the page and that we can open them | Home, Documentation, Pricing and Plans tabs are placed on the top of the page and we can see their content |
|  | Verify: Before You Begin Topic with introduction and links is displayed on the page | Before you Begin Topic is displayed on the page |
|  | Verify : Geocoding (Latitude/Longitude Lookup) description is displayed on the page | Geocoding (Latitude/Longitude Lookup) description is displayed on the page |
|  | Verify: Geocoding response examples in JSON and XML are displayed on the page | Geocoding responses in JSON and XML are displayed on the page |
|  | Verify: that list with Status Code types is displayed together with error messages on the page | List with Status Code types is displayed together with error messages on the page |
|  | Verify: Results, Address Types, View Port Biasing, Region Biasing, Component Filtering, Required parameters in reverse geocoding, optional parameters in reverse geocoding examples are displayed | Results, Address Types, View Port Biasing, Region Biasing, Component Filtering, Required parameters in reverse geocoding, optional parameters in reverse geocoding examples are displayed |

| Test Case | Verify all guides are presented on webpage | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Verify: Developers Guide and What is Geocoding description are displayed on the page | Developers Guide and What is Geocoding Description are displayed on the page |
|  | Verify: Google Map for Geocoding is displayed on the page | Google Map for geocoding exists on the page |
|  | Verify: on Top Left side of website GUIDES and SUPPORT tabs and that we can access them | Guides and support tabs are placed on the top left side and we can open them |
|  | Verify that you can access sites: on left panel : Get Started, Developer’s Guide, Best Practices, Geocoder Faq, Get a Key, Usage limits, Optimizing Quota Usage, Policies, Terms of Services, Google Maps Web Services, Other APIs | Get Started, Developer’s Guide, Best Practices, Geocoder Faq, Get a Key, Usage limits, Optimizing Quota Usage, Policies, Terms of Services, Google Maps Web Services, Other APIs are placed on the left side of website and we can access all of them |
|  | Verify: Resources, Platforms, Product Info and Google Developers options are placed on the bottom of the page and we can access them | Resources, Platforms, Product Info and Google Developers options are placed on the bottom of the page and we can access them |

| Test Case | Verify Google Maps API Geocode status | Regression |
| --- | --- | --- |
| Ref # | Test steps | Expected Results |
|  | **Navigate to:** <https://developers.google.com/maps/documentation/geocoding/intro#Geocoding> | **Address typed** |
|  | **Verify:** Google Maps API is successfully opened | **Google Maps API is successfully opened** |
|  | **Insert addresss in search field : exp** "Stupska 1a“ | **Address inserted** |
|  | **Click**: Geocode button | **Button clicked** |
|  | **Verify**: geocode returns status : **„OK“ (The request did not ecounter any errors)** | **Geocode returns status “OK” (The request did not encounter any errors)** |
|  | **Verify:** Geocode returns :  **Address**: Stupska 1D, Sarajevo 71000, Bosna i Hercegovina,  **Location longitude and latitude**: latitude 43.841426,longitude 18.325002,  T**ype:** street\_address | **Geocode returns :**  **Address: Stupska 1D, Sarajevo 71000, Bosna i Hercegovina,**  **Location longitude and latitude: latitude 43.841426,longitude 18.325002,**  **Type: street\_address** |
|  | **Verify**: that JSON| XML links exist | **JSON| XML links exist** |
|  | **Click** on **JSON and XML** links and verify that they are not empty | JSON and XML links checked and they are not empty |
|  | **Verify** that your searched location is selected and inside square on the map | **Searched location is selected and inside square on the map** |
|  | **Click** anywhere inside selected square and verify that locations are added with **adresses, longitude, latitude and types in alphabetical order A,B,C,D,E...** | **Adresses, longitude, latitude and types in alphabetical order A,B,C,D,E...** |

| Test Case | Verify that geocode returns zero results if you insert invalid address in search field | Regression |
| --- | --- | --- |
| Ref # | Test steps | Expected Results |
|  | **Navigate to:** https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | **Address typed** |
|  | **Verify:** Google Maps API is successfully opened | **Google Maps API is successfully opened** |
|  | **Insert invalid addresss in search field : exp**  "Latička 1a“ | **Address inserted** |
|  | **Click**: Geocode button | **Button clicked** |
|  | **Verify**: geocode returns status : **„ZERO\_RESULTS“** | **Geocode returns status “ZERO\_RESULTS”** |
|  | **Verify:** that request did not encounter errors but returns zero results | **Request did not encounter errors but return zero results.** |

| Test Case | Verify that geocode returns zero\_results when you insert invalid longitude and latitude- Reverse Geocoding | Regression |
| --- | --- | --- |
| Ref # | Test Steps | Expected results |
|  | Navigate to: https://developers.google.com/maps/documentation/geocoding/intro#Geocoding | Address typed |
|  | Verify: Google Maps API is successfully opened | Google Maps API is successfully opened |
|  | Insert invalid longitude and latitude in search field : exp  latitude 37.423021 and longitude -222.083739 | Longitude and Latitude inserted |
|  | Click: Geocode button | Button clicked |
|  | Verify: geocode returns status : „Zero\_Results“ | Geocode returns status “Zero\_Results” |
|  | Verify: that request did not encounter errors but returns zero results | Request did not encounter errors but returns zero\_results |