Amazon Web Services

Introduction

In order to fetch product listing / information from Amazon databases we have to do HTTP API calls as documented in “https://docs.aws.amazon.com/AWSECommerceService/latest/DG/Welcome.html”. We also have to create an AWS account and register as an Associate by signing up in affiliate program. The various steps are outlined in the next section.

Procedure

● Getting AWS Access Key and Secret Key:
  ○ Go to https://aws.amazon.com/ and signup for a new account (fig 1)
  ○ Complete the above signup to get access to amazon APIs
    ○ Now Sign in to your account created above
    ○ Click on “My Security Credentials” which is present in the list when you click your name
- If a warning box appears then click on “Continue to Security Credentials”
- Click on Access Keys tab and create a new access key
- Save the newly created AccessKey and SecretKey
  - Become an Affiliate and get associate id:
    - Go to [https://affiliate-program.amazon.in/](https://affiliate-program.amazon.in/)
○ Click on “Join Now for Free”

○ Complete the registration process to get an “Associate ID”
○ Now Click on “Tools” and select “Product Advertising API”

○ Once your Affiliate Program registration is verified you can click “Join Now” to be eligible for using “Product API”
Demonstration Application:

Introduction
This is a webapp that allows for interactive graph data generation. It has a map view of world (using Google Maps) and allows us to go to any location using the search bar at numerous zoom levels. It also allows us to do markings on the map using various shapes like poly-line, circle, rectangle, polygon etc. in various colors. It also allows us to pin locations using pin balloon. Further, the search functionality is both a fuzzy text search as well as Lat, Lon input for reverse geocoding.

Usage


● To change language, click the flag icon in the top right corner

● For searching for a location:
  ○ Either click "All" button and directly search for the establishment name
  ○ Or click "All" and go to a approximate region (like state) and then click “Establishments” button and search for the required landmark.
  ○ Or select “Geocodes” button and in its right input box write in the (lat,lng) of the required place and click "geocoding reverse"

● After we have reached to our required location we can zoom in/out using the “+”/"-" button in the bottom right corner of the page

● Tools:
  ○ Hand tool:
    ■ This is a hand shaped tool present in top left corner
    ■ Using this you can manually pan around the visible section of the map
    ■ Just select this tool and click+drag in any region of the visible map
  ○ Pin Balloon:
    ■ This is a pin shaped icon in the top left corner.
    ■ This is used to mark locations of interest on the map.
    ■ The information regarding the selected location is displayed on the right sidebar of the page (incl. Name, lat, lng etc.)
  ○ Line:
    ■ This is a line shaped tool in the top left corner.
    ■ This can be used to draw poly line shapes in the map
    ■ Select the tool and click on any point in the map.
    ■ Keep on selecting points to form a line.
    ■ Click on last selected point again to end creation of line.
  ○ Rectangle:
    ■ This is a rectangle shaped tool in top left corner
This can be used to draw colored rectangles on the map
Select the tool and then click+drag on any region to create a colored rectangle
Necessary information about the created rectangle is visible in right sidebar of the page

Circle:
- This is a circle shaped tool in top left corner
- This can be used to draw colored circles on the map
- Select the tool and then click+drag on any region to create a colored circle
- Necessary information about the created circle is visible in right sidebar of the page

Polygon:
- This is a polygon shaped tool in top left corner
- This can be used to draw colored polygons on the map
- Select the tool and then click on any point in the map
- Keep on selecting points in the map to select more vertices of the polygon
- Click on an already created point to close the polygon.

● All of the shapes made by these tools are colored which can be chosen from the color palette present in top right region of the page.
● Clicking on “reset” will remove all the markers/shapes from the page
● Clicking on “Delete Selected Shape” after selecting a marker/shape will remove that from the map.

Bugs/Missing Features

● The site did not render properly in firefox and the view alignment was incorrect
● Going to “http://wako3.u-aizu.ac.jp:8080/geodraw/” opened a directory listing instead of opening the html page.
● The icon to change language was not very prominent, thus warranting for a UX overhaul.
● There was no way to export/import the marked regions on the map.