Working on Assignment

Google Maps API

Continue Later | Finish | Instructions

Google Maps API (worth 5 points)

(worth 5 points)

Objectives: Modify "Geography Quiz"

Include a Google map on your geography quiz

~~~~~~

It would help the geography student if she could see a map of the randomly generated country while she is attempting to answer the question about the country. For this assignment, modify your program from Part II of Assignment 4 "Geography Quiz" to display a Google map of the randomly generated country when it displays the question for the geography student.

Key

You can only access the Google Maps API if you have a key. You only need one key per webserver, so I have already signed up http://ctislab.fhda.edu/ for us. The key is:

ABQIAAAAKfSIpqvYvv06ct-cn8YFARQd22Grf9IKmPGUd3sckVmPHWTBWxTzscbD3Epe9l1_9t0HqDRPqFNTpw

and you must include it in a script tag in your html file. For more information, see:

http://code.google.com/apis/maps/documentation/index.html

Geocodes

The Google Maps API will display a map on your web page if you give it the geocode for the center of the map. The geocode consists of geographical coordinates expressed as latitude, longitude. Fortunately, the Google maps API also provides a class GClientGeocoder class that will take the name of a country (or a specific postal address) and return the geocode for that country (or address).

You can get the geocode for most countries by calling the getLatLng() method of the GClientGeocoder class. Because this method involves an asynchronous call to Google's server, you must supply a callback function with your request. Your callback function will be executed when the information is available.

Zoom level

The Google Maps API also needs to know the zoom level appropriate for a given country's map. If you use the same zoom level to display both small and large countries, the large countries will not fit on the web page and the smaller countries will appear with many other countries on the same map. Your program must display the map using the appropriate zoom level for a country. You can do this by looking in world.Country (or worldCountry.txt) for the the SurfaceArea of that country and determine the zoom level from the SurfaceArea. You could also just try different zoom levels (trial and error) for the 30 countries in your quiz and see what is best for each country's map.

Challenge

It would be great if the user could switch the map between normal, physical, satellite and hybrid. Include a control on your map that allows the user to do this. For more information:

http://code.google.com/apis/maps/documentation/javascript/v2/controls.html
~~~~~~

Answer

Font family | Font size

Continue Later | Finish | Instructions