DMIT2503 – Advanced Web Concepts

Lab 5: Google Maps API

Overview: Based on the lessons in Google Maps API, please show the following:

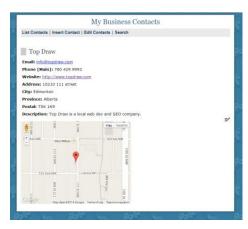
10 marks: Worth 10% of final mark.

1. **[7 marks] Google Maps Javascript API Basics:** One page with one map holder that shows 2 different maps of any locations except Edmonton.

This map holder should be embedded within a web design with additional text content and styled accordingly.

Please show the following in any of the two maps:

- 1. Have a styled link that loads each map. One should load automatically when page loads.
- 2. One map should have all controls removed.
- 3. Please have one roadmap and one of a different map type of your choice.
- 4. Any 2 different shapes: circle, rectangle, polygon.
- 5. At least 2 markers: Each should have an infowindow.
 - i. One should have a well designed infowindow that shows by default when the map loads.
 - ii. One marker should have a custom icon.
- 6. One map (your roadmap) should have a custom style. If you don't have an API key, the instructor can glance at your code to see that this is in place.
- 2. Do either one of the following for 3 marks:



1. GeoCode Challenge – API Key

Required: As per the instructor's demo, show a use of addresses stored in a database being used to dynamically plot a location(s) on a Google Map. The Contacts Database is a perfect project to do this, but you may use another if you wish.

- Search the Google developer documentation for geocode example.
- Since you can now receive the lat and Ing of an address, create a Google Map using the Javascript API centered

on the address.

- Also, place a marker on that address location.
- Title the marker with the company's name.
- You may plot each address on a single map in Company Profile (as per the demo), or you can instead plot ALL companies on a single map in a listing page.

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2. Overlay Click - No API Key Required (Developer Mode):

- Show a well styled page integrating a Google map with several (3 or more) overlays including at least one marker with a custom icon and at least one shape (polygon, circle, or rectangle).
- Each overlay will have an event listener added to it that can change the content of another <div> in your page.
 - document.getElementById("locationdescription").innerHTML ="";
- Please aim for real content (no lorem ipsum) that described the locations marked by your overlays.
- Marks for the following:
 - Map is well designed and integrated into an existing web layout.
 - Overlays are well designed and show actual functional regions or locations on the map.
 - The content being changed is well designed, descriptive of the regions/locations, and includes well formatted headings, paragraphs and images.