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IGME 382

2/13/2023

WEEK 4 Lab

**Task 1: Querying and Joining Data in ArcGIS Pro**

Question 1: What is the difference between the Landbase Feature Dataset and the Parcels

Feature Class?

* The landbase Feature Dataset is the overarching folder in which many things including the Parcels Feature class are stored within.

Question 2: When you select RoadNames, what do you see in the Geography preview?

* I see a map of Montgomery with all of the names of the roads listed like in google maps.

Question 3: How many cities were selected using the select tool?

* 15 cities were selected.

Question 4: How many cities were selected using the Select by Attributes tool?

* Again 15 cities were selected.

Question 5: Which cities were selected using the Select by Attributes tool?

* Melbourne, Sydney, and Brisbane were selected.

Question 6: Which cities were selected?

* The cities of Rochester, buffalo, and New York were selected.

Question 7: What happened when you switched the feature classes? What was now selected?

* The same 3 cities of Rochester, buffalo and Ney York were selected.

Question 8: Which fields do you think match from either table?

* Not really sure none of the numbers seem to match in a convincing way. But perhaps the Code and LUcode matches.

Question 9: Is this join going to be a one-to-one or a one-to-many?

* Only a one-to-one join can be done because a unique object Id does not exist.

Question 10: How many records were matched?

* one join has matched 9417 records.

Question 11: What attribute has been added to the table?

* A description has been added to the landuse\_utm83 table.

Question 12: Open the Symbology window using methods from previous labs. Can you symbolize the data using this new attribute (HINT: Unique Values)? Do you find it easier to use this attribute as opposed to the coded values prior to the join? Attach a screenshot of your symbolized data underneath this question.

* Graphical user interface, application

  Description automatically generated
* Yes this seems much more readable for the average person as you can see what areas are being used or not.

**Task 2: Create a GeoJSON:**

Question 1: How many features are loaded into the map? What are the feature type(s)?

* Two pinged locations are marked on the map: Baush and Lomb Center and the Center for Imaging Sciences.

Question 2: How many features are loaded into the map now? What are the feature type(s)?

* Three things are on the map Baush and Lomb Center and the Center for Imaging Sciences and a line connecting the two showing the route between them.

Question 3: What is different between the CSV and GeoJSON? Why do you think there is a difference between the two?

* In this example there is not much difference besides the route marker but in general there is more data shown by GeoJSON due to it showing more structural data and attributes over csv more simple tabular data storage.

Question 4: Write a short response (~50 words) to the following statement/questions: The GeoJSON is a basic file type and is quite easy to create; the file is especially popular among web applications for its ease to render in web maps and edit using JavaScript and other modern languages. The GeoJSON, though, does not natively load in ArcPro and requires some light-touch geoprocessing to convert to an acceptable format. What are your observations of the GeoJSON file format, what applications do you think it would be best suited for, and when do you think you would use it?

* GeoJSON is by far the easiest and more intuitive platform to use so far and it would make sense that it comes with some downsides due to its overly simple design. I could however see its usages in basic maps of areas that people already are familiar with as its draw point feature is a quick and easy way to determine distances and visually aid those who might be looking for some simple mark up of their maps.

A screenshot of a map

Description automatically generated with medium confidence