ps4: using gis tools

[version: Saturday 11th November, 2023 08:24]

due: nov30

- use at least 3 different tools from advQ.pdf (say geocode, count points in poly, dissolve, SQL, and centroids) or some tool we did not cover (goog maps also qualifies as a tool). By tools I mean tools found under menus: Vector, Raster, Processing. (From MMQGIS: Spatial Join and Geocode qualify as well). Also some Plugins would qualify as a "tool" (Basemap like OSM map won't qualify). Ask if in doubt. The idea is that you use some <u>gis processing</u>, that is, you'll transform data in some way or produce some new data.
- 2. note: can use google maps (covered in 2 weeks), even qualify as 2 tools if fancy/complex
- 3. prove (typically with maps) that you have used the tool-say show a map with original and dissolved polygons; a map showing counties that satisfy some sql query and original map; or say produce a csv of places that lie within a mile from a hwy, etc
- 4. fixup/beef up/polish existing stuff based on our comments and your ideas

general notes (always the same):

broad idea:

- it will be cumulative: ps will snowball/accumulate into the final project
- it will be also collaborative: you will see what others are doing

submission guidelines:

- (i'll comment on your ps under discussion/talk tab on the wiki page)
- submit in your wikipage at https://maps-dppa.camden.rutgers.edu usr: gis, psswd: ilovegis, if off-campus vpn first https://vpn.rutgers.edu you will just have **one** website under **substantive** title eg "income inequality across NJ counties", put your names at the top, and then keep on adding to it: don't delete what you have already submitted—for each subsequent ps, just add a new section with section titled ps1, ps2, etc; each ps must be submitted this way for indexing/record keeping, but you may link to content elsewhere, eg you can make your own google site https://sites.google.com/new that's accessible outside of RU firewall; eg https://sites.google.com/davidsouthgate.com/poncegis
- if you work in a group of 2 or 3 people make it 2x or 3x better, eg If ps asks for joining 2 datasets, and there are 3 of you, then just join 6, etc, just do 3x more or better.
- each ps section will have at least one map (make it big with nice resolution, but not too big, say each map should be at least half-page if not much detail, or full page if detailed and each map <1mb) and brief description of a map, say few sentences or a pargraph or max few; also list any problems you've encountered and can ask questions!
- exact links to all of the source data (so that i could create the map myself); note: exact links, eg do not say census.gov, but give full url to the data-i
 must be able o find it; sometimes there is no generic URL-then give steps: what I need to click to get the data!; or upload data say to your dropbox
 or google drive and provide link to there; so there must be all raw gis data (e.g. .shp .dbf and .shx and others if any), and any other data (e.g., .csv,
 .xls) that you used to produce a map; in rare circumstances if you use confidential/private data that cannot be shared, please contact me (and still do
 provide links to all the other data you're using)
- in addition to submission, you will usually (be ready every class! depending on how we do on time) present the map in class-can just show map(s) (max 5-8min (depending on class size): i will cut you off!
- can change the topic and group (easier to stick with one, but often a good idea to change)

to reiterate, for each ps the following must be always added as new section to the wikipage with all previous ps:

- the maps(s) with short description (and problems and questions if any)
- very specific links to all data
- and prepare for presentation

as soon as possible (and definitely once we cover pretty.pdf, final_project.pdf) :

- the map needs to be "pretty" (syllabus: pretty.pdf): must have legend, title, cut decimal points, make fonts small, etc)
- the map must be "interesting" (syllabus: pretty.pdf, final_project.pdf): ask yourself the "so what?" question; essentially, you need to tell as story with your map

for wikipedia only

wiki formatting: side by side

```
<gallery>

File:Example.jpg|Item 1

File:Example.jpg|a link to [[Help:Contents]]

File:Example.jpg

File:Example.jpg|alt=An example image. It has flowers

File:Example.jpg|''italic caption''

Example.jpg|on page "{{PAGENAME}}"

File:Using Firefox.pdf|page=72

</gallery>
```

OR:

```
{{multiple image
| footer
          = The mule links to ''[[Mule]]'', the donkey does not link anywhere,
and the trout links to its image description page as usual.
            = left
| align
| image1
            = Frecklesmule.jpg
 width1
            = 143
 alt1
            = A mule
 caption1 = <center>A mule<br />sdad</center>
| link1
            = Mule
 image2
            = Donkey 1 arp 750px.jpg
Т
            = 150
 width2
  alt2
            = A donkey
 caption2 = <center>A donkey<br />sdas</center>
| link2
            =
| image3
            = Rainbow_trout.png
 width3
            = 91
 alt3
            = A trout
| caption3 = <center>A fish<br />
{{sdsadas}}, ''asdasd''</center>
```

}}