ps4: using gis tools

[version: Wednesday 1st November, 2023 11:10]

due in 3 weeks

- 1. use at least **5 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 gis processing, 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

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.
| align
             = left
  image1
             = Frecklesmule.jpg
  width1
             = 143
  alt1
             = A mule
  caption1 = <center>A mule<br />sdad</center>
| link1
             = Mule
             = Donkey 1 arp 750px.jpg
| image2
  width2
             = 150
             = A donkey
  alt2
  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>
```