online mapping with google maps

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outline

google.com/mymaps (almost like qgis!)

[*] mapbox

more about mmqgis

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examples

- a map of "NJ Firearm Force Incidents":
  https://www.google.com/maps/d/viewer?mid=
  1DZWn5q_9UnPZI1m0ONcF2OAmphSgC5pL
- and maybe skim thru others

why online maps?

- very easy to share
- ○ higher quality than printout or even pdf
- zoom in/out, pop up features
- ○ (like identify feature tool in qgis but less clunky)
- especially good for low-level (hi-res) mapping
- ○ because have a super neat basemap with all the details
- use for collaboration-just enable editing for anyone!
- ○ can also enable editing for a select group of folks

basic things in regular google maps

- (may not work sometimes: guess browser or OS)
- https://maps.google.com/maps
- search for 'rutgers camden'
- but can do polygons, too: '08102', 'university city, pa', etc
- can do lat/long: '38.8977 N, 77.0366 W' or '38.8977 , -77.0366'
- https://s3.us-east-2.amazonaws.com/journeynorth.org/ images/graphics/mclass/Lat_Long.gif
- can get lat and long by left or right clicking on the map
- we'll be loading kml, which is just a bunch of coordinates

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google.com/mymaps

-
- interface almost like qgis
- ○ rudimentary tools at the top
- ○ layers on the left
- ○ even data table is accessible
- not only display imported kml; can create kml with:
- ○ markers, driving, cycling, etc (like goog maps)
- ○ also can draw any lines, polygons
- ○ and can export as kml

http://google.com/mymaps **will generate your own data**

- zoom in on Camden NJ–can just search it search box
- select placemark from the top and put onto R and mark 'R'
- and put placemark on patco station and call 'patco'
- from line segment select 'Add walking route'
- and make a line to patco station (double click to end it), name it 'path' (and pop up distance)
- from left menu let's 'Add layer' (cant have shapes and routes on one)
- from line segment menu select 'Add line or shape'
- put a polygon on parking lot (just draw line around it)
- call it 'park'; click it to pop up acres; save it as kml

kml

- just another vector format like shp
- and just one file as opposed to shp
- can just use qgis to turn shp into kml
- but kml is a popular format and can often get data in kml
  - eg http://www.census.gov/geo/maps-data/data/tiger-kml.html

loading kml from goog maps to qgis

- click main menu (three vertical lines at the top-left):
- ○ 'Export to KML/KMZ' and check KML!! (qgis may dislike KMZ)
- load it to qgis as any vector layer
- ○ make sure you click 'Select All' !
- and viola! we have it in qgis
- ○ add openlayers basemap to put it in context

can get creative

- mark points where you think it is unsafe
- mark your travel destinations (in addition to that map on your wall with pins)
- mark your jogging route (or use one of those apps to record it and then download to qgis)
- get creative!

timeline

- as you imagine, google records your location
- the good thing is that you can download it :)
- http://google.com/maps
- click menu (3 horizontal lines on the left)
- click 'Your timeline'
- can browse it by date
- at the bottom right click cog icon and
- 'Download a copy of all your data'
- select kml instead of json

how about just displaying kml from qgis?

- can do that, too; though little less handy than in qgis
- can just export kml from qgis
- in fact can put the thematic map straight from qgis onto google maps!
- but first, simplify polygons

simplify polygons

- make it smaller so that it loads faster
- load our fav nj counties
- `https://docs.google.com/uc?id=`
  `1xJDhcRCkgv7k4tNCa72Oog5bohV6dTB2&export=download`
- Vector-Geometry Tools-Simplify Geometries
- and simplify polygons with tolerance of 1,000
- if you do something like 25k, you'll mutate nj too much!)
- really, as a rule, simplify all data before online display

make thematic map and export to kml

- say pop2010 3 classes (tertiles)
- can also make it transparent if you want to
- MMQGIS-Import/Export-Google Maps KML
- ◦ (just keep the defaults and play with them at home)

uploading to google maps

- http://google.com/mymaps
- from left menu: 'Add layer' and then Import

make it pretty!

- bottom of left menu: adjust basemap
- ○ i like similar non-contrasting colors
- ○ either lightish or darkish
- can also play with "Individual styles"

ideas

- these ramps colors are quite lame
- may actually want to click and edit and pick some opposing colors
- like green and red
- especially if there are few classes, like 3
- then do say red, yellow, green

other things

○ Under 'Individual styles' can also 'Set labels':
  'COUNTY_LAB'
● make it light so it doesn't obscure colors!
● finally, at top-left click 'share,' make it public and send me
  a link

and can geocode!

- load philadelphia apartments as excel
  - TODO link here

add colleges

- load our favorite colleges into qgis
- https://sites.google.com/site/adamokuliczkozaryn/gis_int/hsip_colleges.zip?attredirects=0&d=1
- MMQGIS-Import/Export-Google Maps KML Export
- and load into google maps
- can change style of placemarkers to something fancy
- first change 'Individual styles' to 'Uniform style'
- and on the right click a 'bucket icon' and 'More icons'

that's it...

- please play with google maps
- it should be pretty straightforward and user-friendly

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mapbox and open map

- mapbox and open map seems like a good alternative to google
- https://www.mapbox.com/about/maps/

looks promising! give it a try

- https://blog.mapbox.com/
  introducing-data-explorer-a-new-way-to-quickly-

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animation

- walmart store animation

  https://www.youtube.com/watch?v=adm3RB4ieXU
- http://michaelminn.com/linux/mmqgis/
- https://medium.com/@tjukanov/
  geogiffery-in-a-nutshell-introduction-to-qgis-time-manag
- there is much more
- just explore menu

combining layers

- there was a question about how to combine layers
- mmqgis-combine-merge layers
- just make sure all are same type (polygon, line, point)
- more info on combining layers: http://gis.stackexchange.com/
  questions/25061/how-to-merge-multiple-layers-to-one-layer-using-qgis
- http://www.statsilk.com/maps/
  merge-multiple-map-layers-single-shapefile-using-quantum-gis

- http://www.igismap.com/merge-two-shapefile-qgis/

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