

Py plugins

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outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS (like QuickMapServices)

qgis2web: dynamic vis like goog map [skip/do at home]

Data Plotly: scatterplots, (histograms, etc)

More Plugins

workflow/saving and customizing

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get the plugins

- Plugins-Manage and Install Plugins
- >500—scroll down—many names are self-explanatory
- and also use search box, say 'google'
- experiment at home! many great tools there
- find sth awesome and present in class: extCre!

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MMQGIS

- arguably the most useful of all
- use it a lot, esp:
 - -Combine-Attributes Join from CSV layer
 - -Combine-Geocode CSV with Google / OpenStreetMap
 - -Modify-Text to Float

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bringing basemap

- esp if you map at low level (neighb, city, county)
- you want some background (roads, parks etc)
(as in goog maps)
- could do it step-by-step: roads layer, parks layer, etc
- but lots of work!
- can just bring all of that with a basemap

QuickMapServices plugin; OSM Standard

- Plugins-Manage And Install Plugins
 - and search for “QuickMapServices” and install it
- Web-QuickMapServices-OSM-OSM Standard
 - and it appears on the left under layers
 - move it as the last layer so that it does not cover your map
- NJ counties: munis (same as always)
<https://docs.google.com/uc?id=1xJDhcRCkgv7k4tNCa720og5bohV6dTB2&export=download>
- and nj_munis-Layers-Properties: Fill, Simple Fill: Fill style: “No brush” so that the polygons have no fill
- again especially useful at low level: neighb, street, etc

Stamen

- QuickMapServices-Settings-More Services-Get contributed pack
- and really really nice are Stamen maps, say:
 - Terrain
 - Toner
- Stamen Toner Lite is probably best!

OSM:OpenTopoMap

- as per satellite-like basemap layer which shows land use, i'd recommend OSM:OpenTopoMap
- it helps say when you want to figure out what is going on in specific area

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HCMGIS

- give it a try
- but didnt work on my PC: qgis3.10/linux

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cleanup data first

- layer-attr table
- toggle editing-pen at top right
- del cols with del field tool
- (ctrl and left-click for multiple sel, or rectangle-select)
- just keep relevant info:
- county name and say pop90 and pop00
- make layer transparent say 50%
- Have Stamen Toner underneath :)

qgis2web

- install it; will appear under web, like openlayers
- Layers and Groups: check 'inline' for pop90,pop00
- Appearance:Add layers list: Expanded
- Export: Export folder change to where you can write
- opens automatically or open index.html with webbrowser
- can click feature to pop up attr table info :)

○ https://www.qgistutorials.com/en/docs/web_mapping_with_qgis2web.html

○ <https://www.xyht.com/spatial-itgis/creating-a-web-map-using-qgis2web/>

○ <https://www.sigterritoires.fr/index.php/en/>

`how-to-export-your-qgis-project-to-an-html-page-in-two-clicks-the-qgis2web-plugin`

- howto share this?
 - zip and email to people and ask them to unzip and open index.html with webbrowser
- the big use of that is that it's a webpage! :)
 - but need a webserver :(
 - see references from last slide—you can webhost that :)
 - also your org, county office, police, etc will have IT dept
 - send to IT folks and ask to put online

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Data Plotly

- install plugin
- and it appears as an icon with x/y axes and lines
- load usual counties
<https://drive.google.com/open?id=1xJDhcRCkgv7k4tNCa720og5bohV6dTB2>
- plot type: scatterplot
- sq miles against pop2010
- and under settings (3 cogs) Additional Hoover label:
county lab
- and can easily export, icon at bottom right
- ref <https://giscrack.com/generating-graphics-with-data-plotly-in-qgis-3/>

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check out these

- <http://www.digital-geography.com/top-5-qgis-plugins>
- <https://plugins.qgis.org/plugins/popular>

● [https:](https://docs.qgis.org/2.18/en/docs/training_manual/qgis_plugins/plugin_examples.html)

[//docs.qgis.org/2.18/en/docs/training_manual/qgis_plugins/plugin_examples.html](https://docs.qgis.org/2.18/en/docs/training_manual/qgis_plugins/plugin_examples.html)

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workflow

- save the whole project (with many layers) and next time just open it
- (again, don't ren, mv shapefiles—it'd break things)
- can move layer up/down in layer window
- and can turn it on and off
- can have many layers with say different symbology of the same shapefile
- example—let's load nj_counties and produce few different symbologies and save whole project...and open it

customizing

- one way to customize is to instal py plugins
- but you can also customize the presence and placement of the core tools
- you'll use qgis a lot—make it comfortable
- can customize what is displayed—right click at the top (below MENU)
- and select the stuff you want to have displayed
- can grab a toolbar (left side) and move around

misbehaving software

- most of the software sometimes misbehaves...
- it does silly things, refuses to do something, crashes, etc
- troubleshooting:
 - email me
 - do what you are doing in a different way-e.g try different dataset; different var; different approach etc (usually can do same thing in many ways)
 - shut it down and fire it up again
 - reinstall