

Py plugins

adam okulicz-kozaryn

`adam.okulicz.kozaryn@gmail.com`

this version: Thursday 14th October, 2021 18:00

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

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!

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

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

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

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
 - and nj_counties-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 porbably 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

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

TODO: basemap+download data +maybe other stuff
outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

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
- Apperance: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

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

Data Plotly

- install plugin
- and it appears under plugins
- load usual counties
<https://drive.google.com/open?id=1xJDhcRCkgv7k4tNCa720og5bohV6dTB2>
- plot type: scatterplot
- sq miles against pop2010
- and under settings (2 cogs) Additional Hoover label:
county lab
- and can easily export, icon at bottom right
- ref <https://gisrack.com/generating-graphics-with-data-plotly-in-qgis-3/>

outline

python plugins

MMQGIS

QuickMapServices: OSM and others

HCMGIS

qgis2web

Data Plotly: scatterplots, (histograms, etc)

workflow/saving and customizing

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