

Gazetteer Creation

Kiki Nur Putra



Introduction







Components



Python 3





Libraries :

-  **GeoPandas** : manage spatial data
-  **pandas** : manage attribute table
- FPDF** : creating and setting pdf file
- datetime** : calculate dates
- os** : manage file directory
- math** : number calculations



Libraries :

-  **GeoPandas** **datetime**
-  **pandas** **os**
- FPDF** **math**



The Differences

QGIS

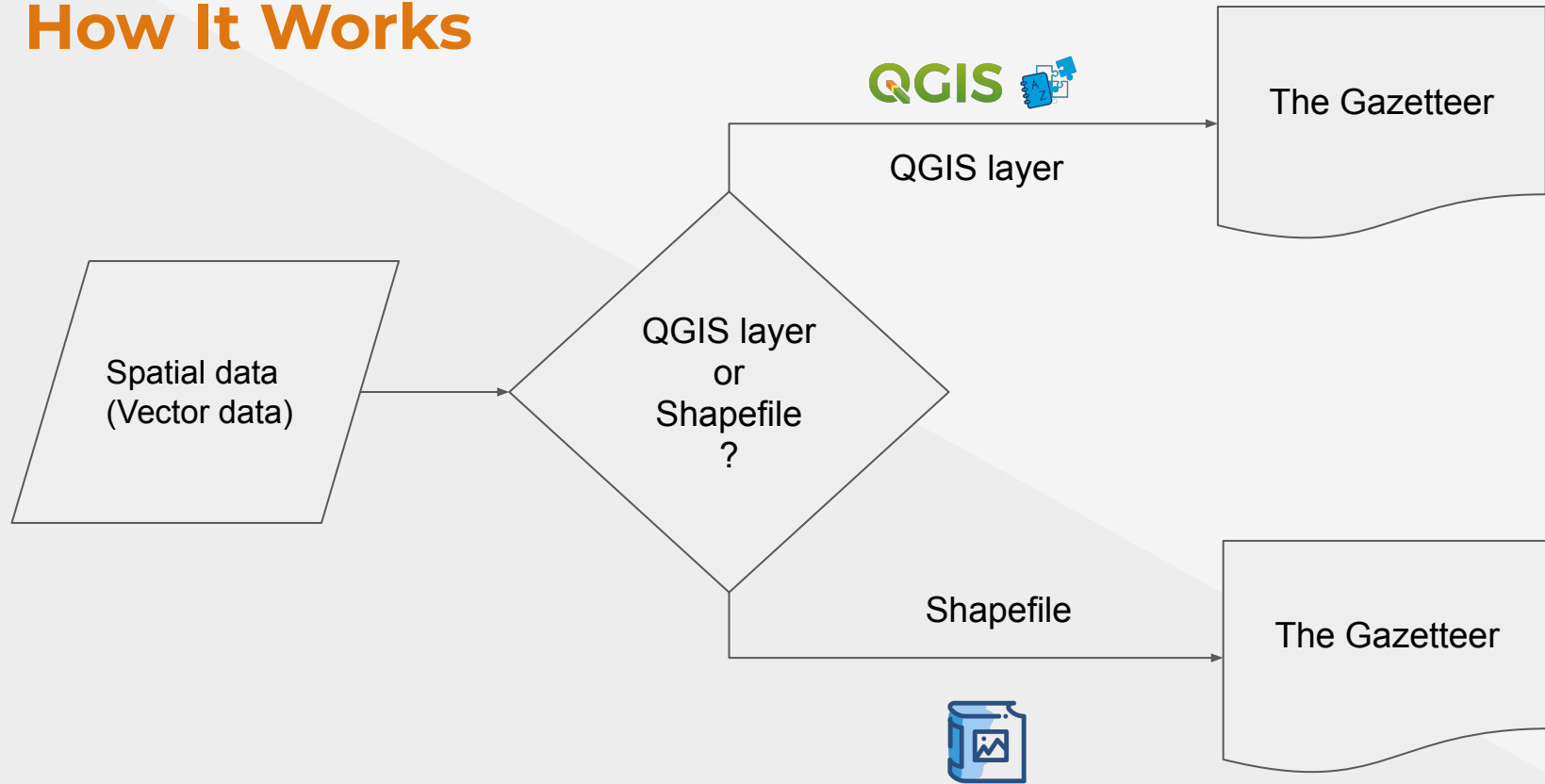


Gazetteer_Creator.exe

Compatibility: Part of QGIS	Only for Windows OS
Input data from QGIS layer (shapefile, geojson)	Input only from shapefile
One input per geometry type	No limitation of input data
Fixed columns setting	Customizable columns setting
Personally: it's harder to develop	Personally: it's easier to develop



How It Works

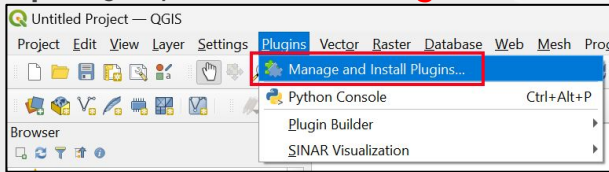




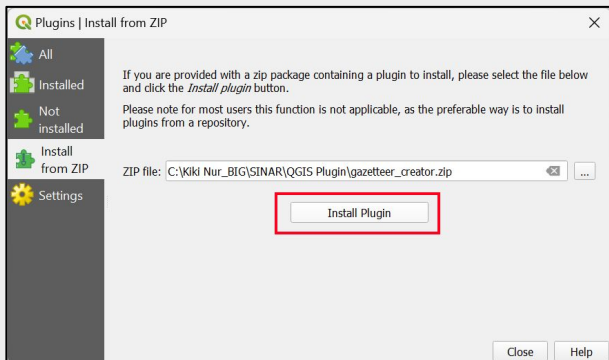
Installation QGIS



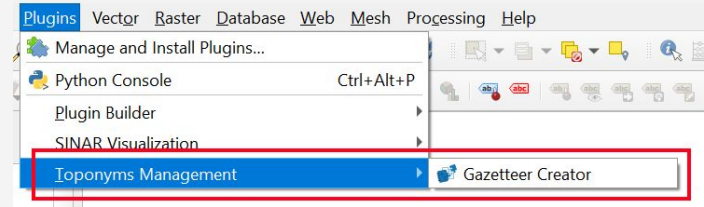
1. Download from toponim.id/2023/modules
2. Open QGIS, then select **Manage and Install Plugins**



3. Select **Install from ZIP**, then browse the zip file, select **Install Plugin**. ***make sure you have internet connection for the first time.**



Result:





Installation



Gazetteer_Creator.exe

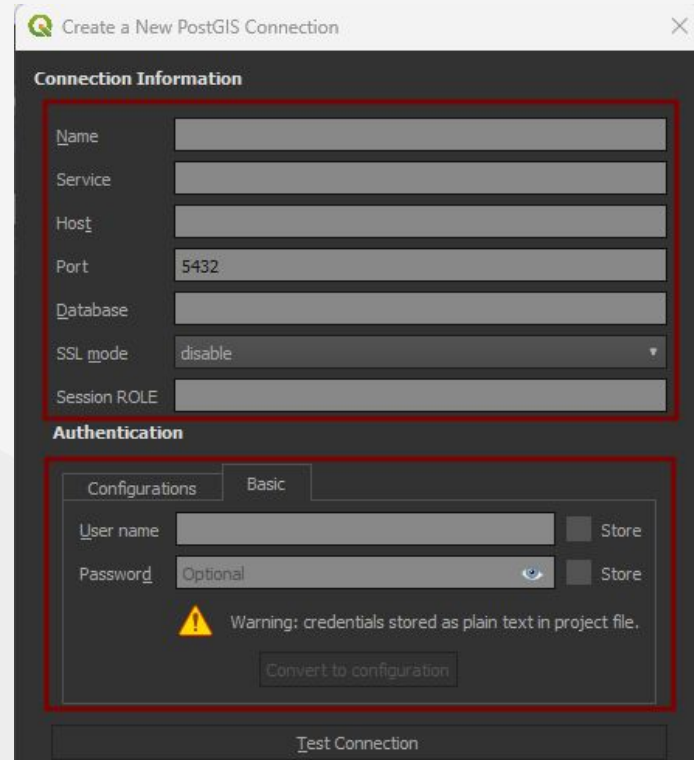
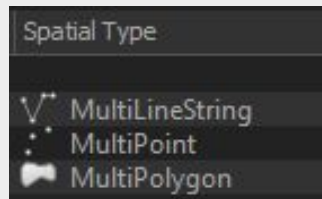
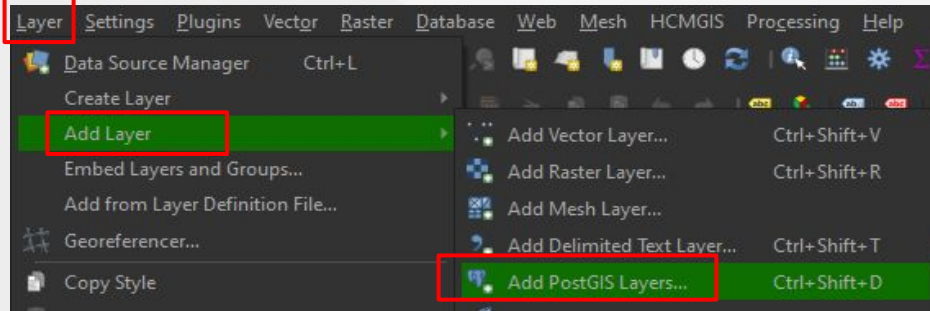
1. Download from toponim.id/2023/modules
2. No installation process is required, it can be directly run on the computer (windows OS).
***recommended Windows 10 or later**



Gazetteer Creation QGIS

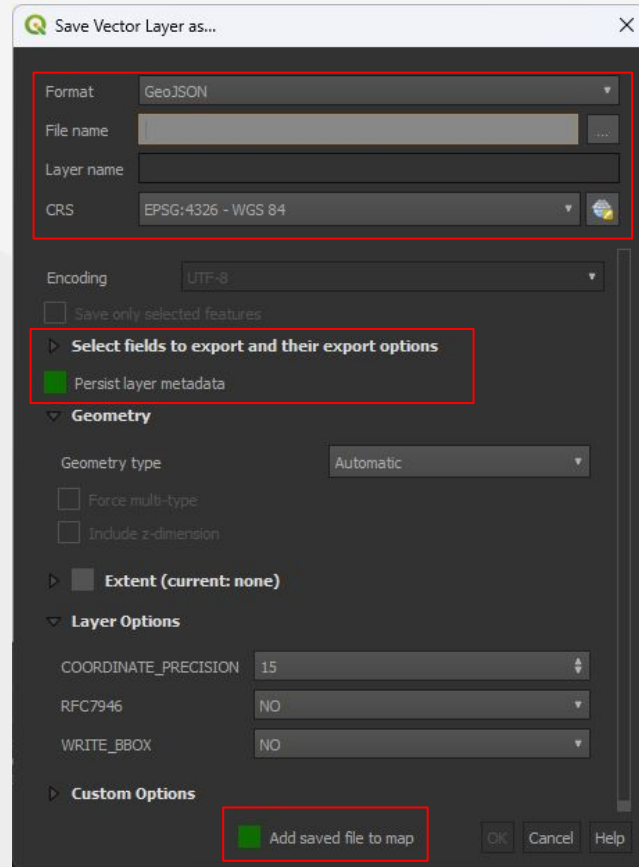


1. Add the data from PostGIS



Gazetteer Creation QGIS

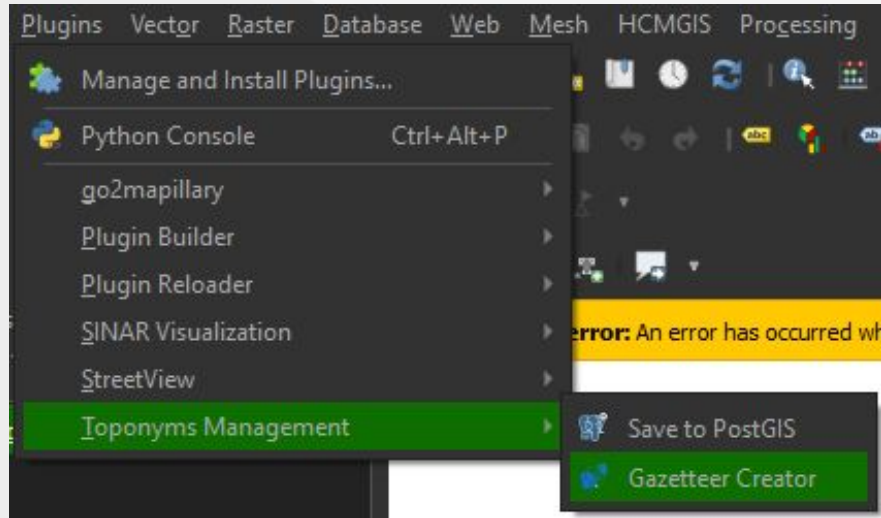
2. Export it locally as vector data to avoid disturbing the data in the database



Gazetteer Creation QGIS



3. Open the Gazetteer Creator plugin



Gazetteer Creation QGIS



4. Fill the form in the Gazetteer Creator plugin dialog

Gazetteer Creator

Title: Gazetteer

Gazetteer Version: Version 1.0

Logo: C:/Users/PPRT/Downloads/UNEGGN_unlogo2.jpg

Save PDF File Path: C:/Users/PPRT/Downloads/Gazetteer.pdf

Point Line Area

Point Data: toponyms_pt_gaz

Line Data: toponyms_ln_gaz

Area Data: toponyms_ar_gaz

Save Close

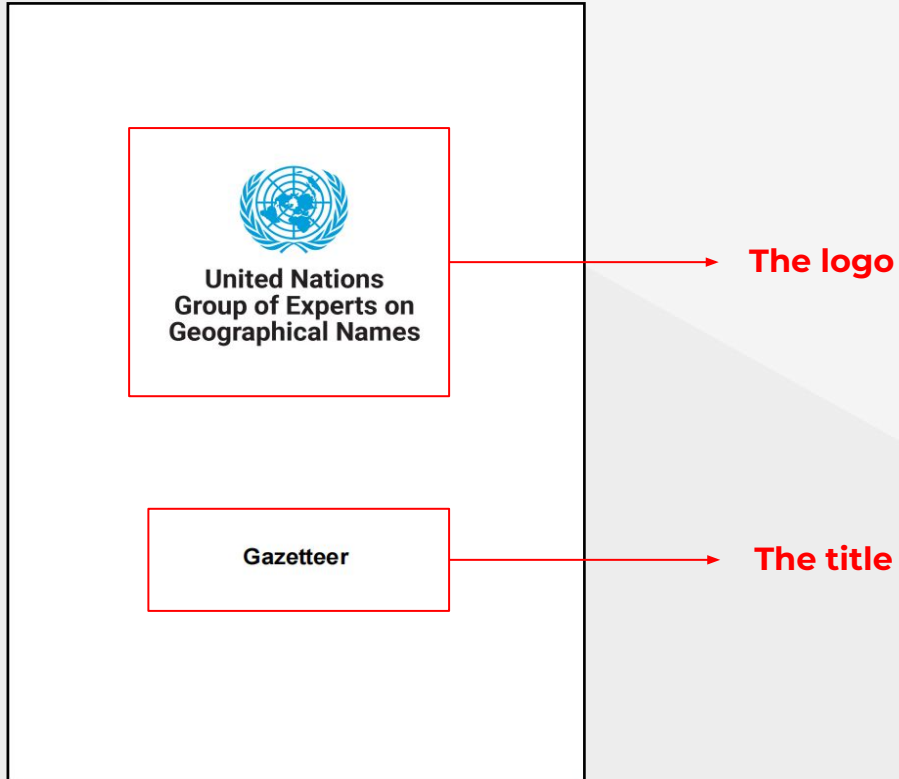




Gazetteer Creation QGIS



Result :



Gazetteer Creation QGIS



Result :

The content

Feature Type	Name	Latitude	Longitude
Road	Jalan Raya Bogor	-6.48729	106.84352
Building(s)	Kantor BIG	-6.49023	106.84948
Building(s)	Kantor Badan Informasi Geospasial	-6.48938	106.84998

2023-06-16

Version 1.0

Page 1 of 1

*)The coordinates for the line feature represent the starting point.

2023-06-16

*)The coordinates for the line feature represent the starting point.

Version 1.0

Page 1 of 1

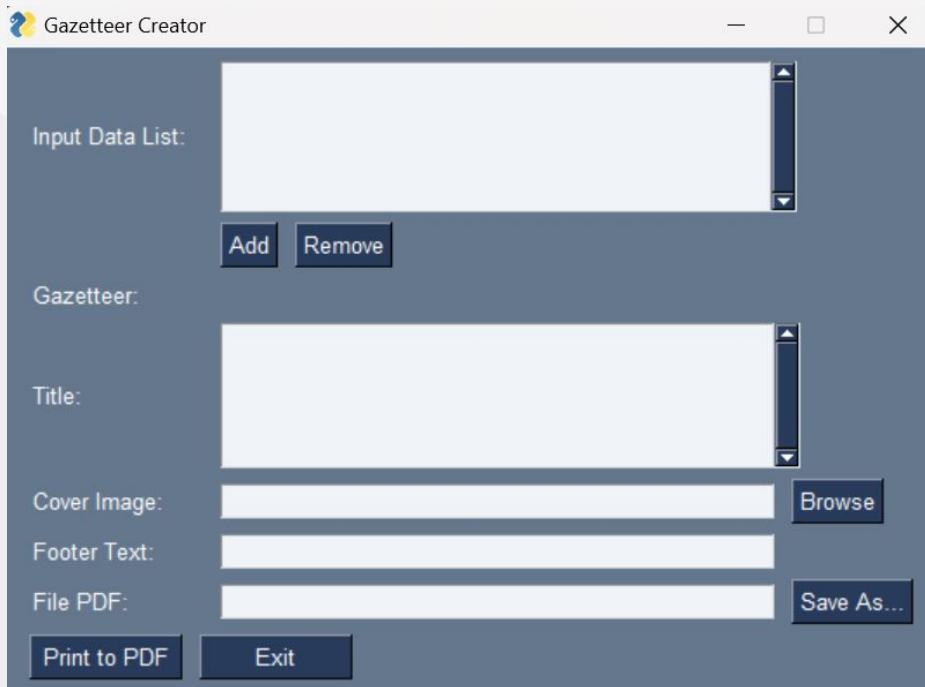
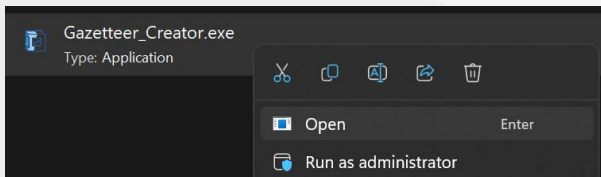


Gazetteer Creation



Gazetteer_Creator.exe

1. Open the program

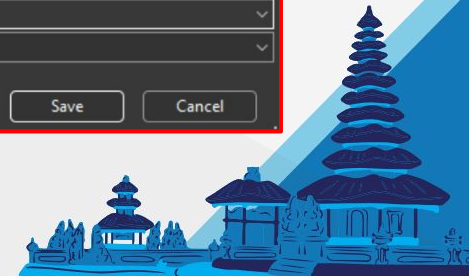
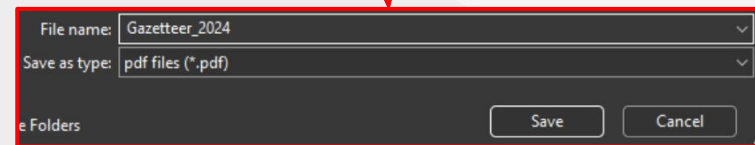
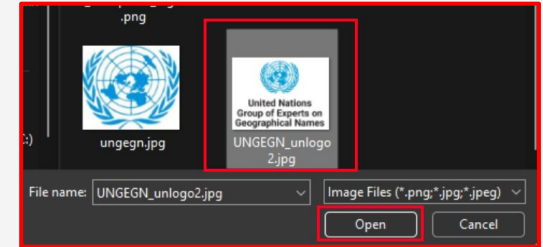
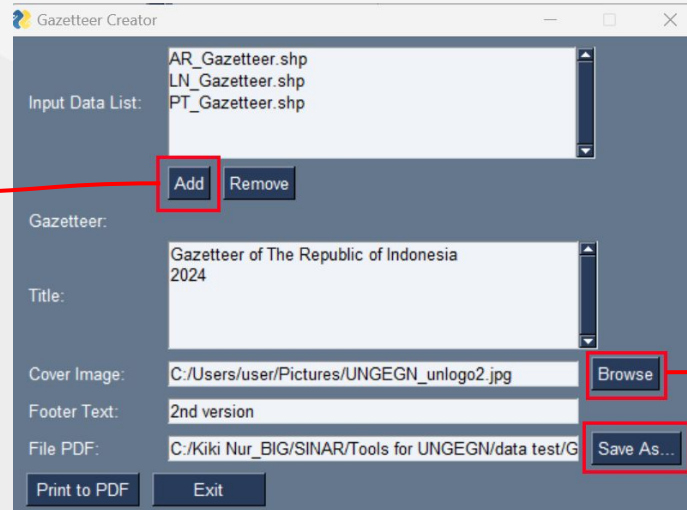
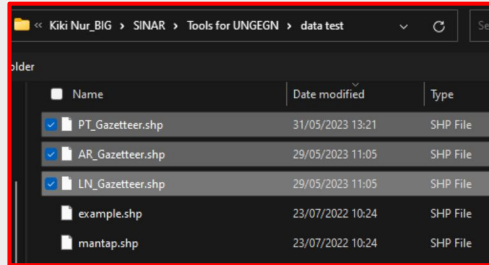


Gazetteer Creation



Gazetteer_Creator.exe

2. Fill the form

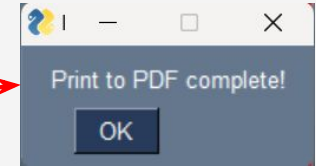
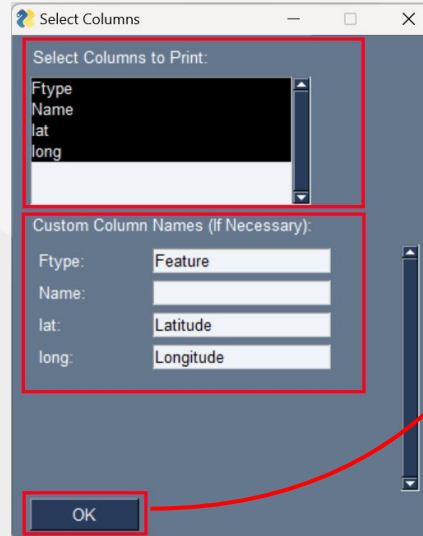
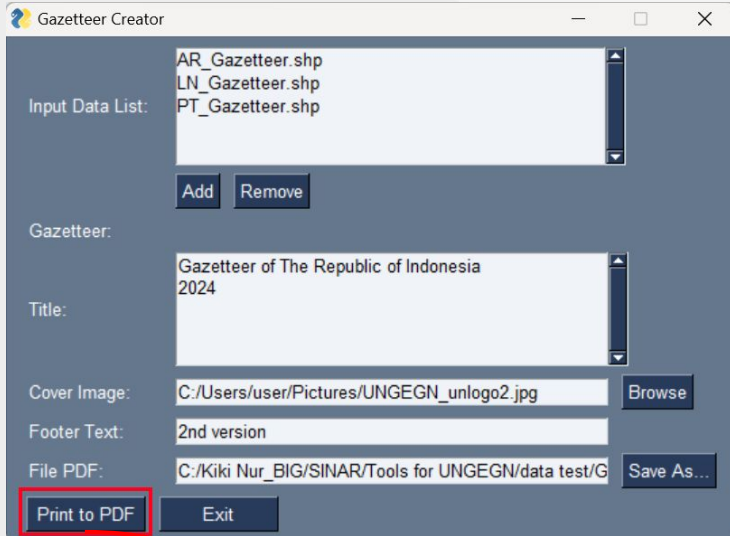


Gazetteer Creation



Gazetteer_Creator.exe

3. Print the Gazetteer



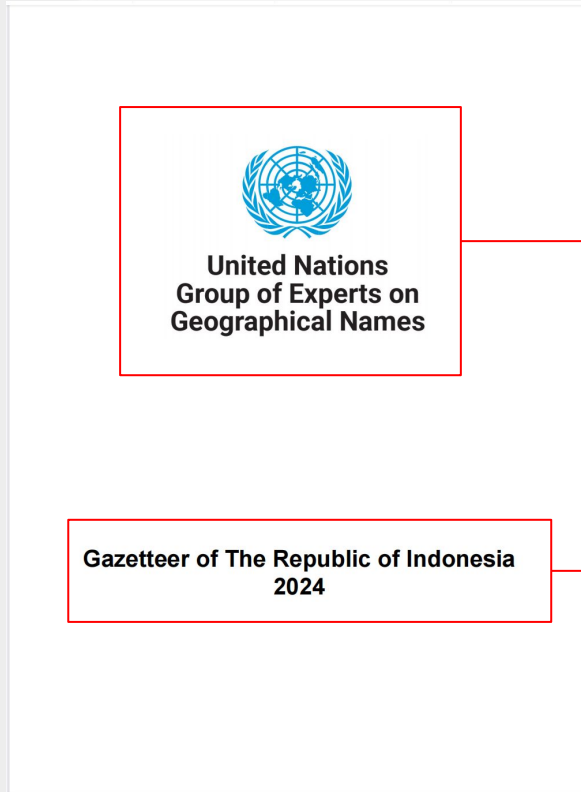


Gazetteer Creation



Gazetteer_Creator.exe

Result :



The logo

Gazetteer of The Republic of Indonesia
2024

The title





Gazetteer Creation

Result :

The content

Feature	Name	Latitude	Longitude
Building	Ai-Rahman Mosque	-6.49071	106.84768
Building	Ai-Rahman Mosque	-6.49023	106.84845
Building	Ai-Rahman Mosque	-6.48966	106.84719
Building	Ai-Rahman Mosque	-6.49036	106.84839
Building	Ai-Rahman Mosque	-6.48919	106.84819
Building	Ai-Rahman Mosque	-6.48953	106.84787
Building	Ai-Rahman Mosque	-6.49084	106.84833
Building	Ai-Rahman Mosque	-6.49039	106.84707
Building	Ai-Rahman Mosque	-6.49071	106.84905
Building	Ai-Rahman Mosque	-6.48966	106.84781
Building	Ai-Rahman Mosque	-6.48989	106.84995
Building	Ai-Rahman Mosque	-6.48996	106.85002
Building	Ai-Rahman Mosque	-6.49071	106.84839
Building	Ai-Rahman Mosque	-6.48939	106.84713
Building	Ai-Rahman Mosque	-6.49007	106.84772
Building	Ai-Rahman Mosque	-6.49026	106.84713
Building	Ai-Rahman Mosque	-6.49019	106.84786
Building	Ai-Rahman Mosque	-6.48932	106.84813
Building	Ai-Rahman Mosque	-6.48946	106.84923
Building	Ai-Rahman Mosque	-6.49037	106.84963
Building	Ai-Rahman Mosque	-6.49058	106.84775
Building	Ai-Rahman Mosque	-6.49058	106.84912
Building	Ai-Rahman Mosque	-6.4905	106.84957
Building	Ai-Rahman Mosque	-6.48933	106.84929
Building	Cibirong Village Office	-6.48986	106.84932
Building	Cibirong Village Office	-6.49007	106.84879
Building	Cibirong Village Office	-6.48947	106.84839
Building	Cibirong Village Office	-6.49039	106.84859
Building	Cibirong Village Office	-6.49084	106.84815
Building	Cibirong Village Office	-6.49032	106.84813
Building	Cibirong Village Office	-6.49035	106.84792
Building	Cibirong Village Office	-6.49005	106.84983
Building	Cibirong Village Office	-6.49063	106.85003
Building	Cibirong Village Office	-6.48994	106.84739
Building	Cibirong Village Office	-6.49084	106.84952

2023-06-15

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2nd version

Page 1 of 3

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Page 1 of 3



The Differences

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Tips & Tricks !

1. Column names in spatial data (input) have been adjusted to what you want in the gazetteer.
2. Column for coordinates (lat, long) automatically calculated.
3. For the “.exe” version, select just 4 to 5 columns, because of limitation of paper width.





What's Next?

**We can develop the program to be more complex and better,
for example:**

1. Page setup (paper size, orientation, margins)
2. Width setting for each column
3. Table style improvements



