

Lesson 4: SankofaPOWER – Spatial Networks

Lab Instructions

In this lab we will grow acquainted with OpenStreetMap (OSM) to create a GeoJSON that will be added to the SankofaPOWER map!

Get a base GeoJSON

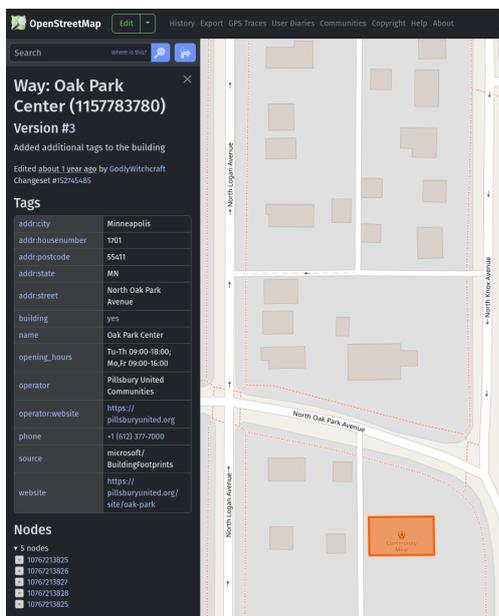
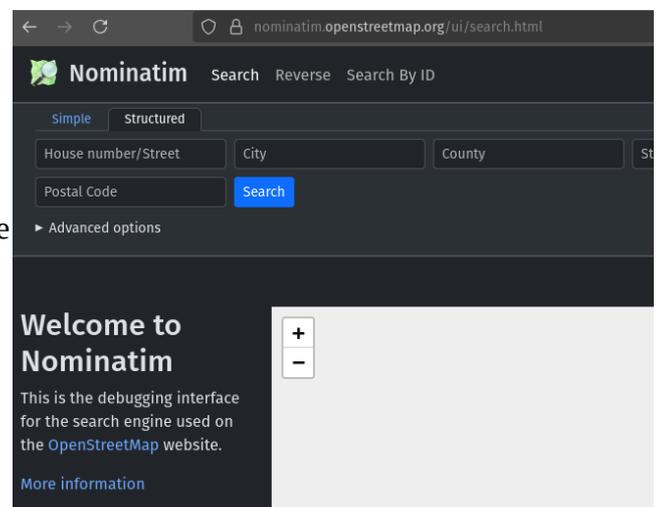
In this section we will get spatial information for our Food System actor from OpenStreetMap (OSM)

1) Go to [OpenStreetMap](https://openstreetmap.org).

a) Look up your actor in the search bar.

i) If nothing comes up, head to <https://nominatim.openstreetmap.org/ui/search.html> and use the structured form to look up the address. Be sure to spell out cardinal directions (eg. South)

b) Navigate to the “[Way](#)” for the building associated with this address. Your screen should look similar to the image below with the header Way: name (#)



c) Take note of OSM’s **name** of this location.

i) If it doesn’t have a name, note **addr:housenumber**, **addr:street**

d) **Verify** attributes with your personal knowledge and/or another map service (eg. Google). If anything is wrong, we will have to correct it later.

i) The fields we want for Sankofa are: **name**, **website**, **phone**, **email**, **opening_hours**

ii) Optional: You can **create an account** to contribute to OSM and correct this information for the benefit of all!

2) Now we will get the GeoJSON - Go to <https://overpass-turbo.eu/>. This is a web-based data filtering tool for OSM

a) In the console at the top of the screen, **delete** the example query and **paste** this:

```
{{geocodeArea:"Minnesota"}}->.State;  
way  
["name"="Put your name here"]  
(area.State);  
out center;
```

If you don't have a name, you can use this query:

```
{{geocodeArea:"Minnesota"}}->.State;  
way  
["addr:postcode"="Enter a Zip Code"]  
["addr:housenumber"="Enter House Number"]  
["addr:street"="Enter a Street"]  
(area.State);  
out center;
```

b) Click **Run**

c) Click **Export | GeoJSON | download**

d) **Rename** this file to **YourName_FoodSystemActor.geojson** and move it to your Data folder for this course

Edit the GeoJSON

In this section, we will edit the GeoJSON so it is ready to go on the SankofaPOWER map!

1) Open your Juneteenth QGIS project.

Note: You can also edit the GeoJSON with a [text editor](#)!

2) Add the GeoJSON to the project

a) Click on the **Layer** tab at the top of the screen. Select **Add Layer | Add Vector Layer**

b) Under **Source**, click on the **...**, navigate to **YourName_FoodSystemActor.geojson**, and select **open**.

c) Click the **Add** button.

d) Close the Data Source Manager window.

3) Now let's edit the file!

a) **Right click** on the new Layer and select **Open Attribute Table**

b) **Click** on the **pencil** in the top left of the window to enable editing.

c) Double Check the attributes again and change any that are . We will want to be sure to have the following: **name, website, phone, email, opening_hours,**

d) If any of these fields are missing, we can add them with the  button.

Formatting is important, so please follow these guidelines when adding a field.

All field names should be lowercase!

i) **name**, type = Text (string), Length = 100

ii) **website**, type = Text (string), Length = 100

iii) **phone**, type = Text (string), Length = 15

For phone, we are using this format: **+1-xxx-xxx-xxxx**

iv) **email**, type = Text (string), Length = 100

v) **opening_hours**, type = Text (string), Length = 256

For opening_hours we are following OSM standards

https://wiki.openstreetmap.org/wiki/Key:opening_hours#Explanation_by_example

e) We will **add** one more **special field** for Sankofa.

i) **activity_tags**, type = Text (string), Length = 256

Please enter any tags associated with this place (separated by commas). Examples could include but are not limited to:

Retail/Grocery, Farm, Community Garden, Food Shelf, Restaurant, Market,
Landscape Supplies, Education, Equipment, Seedlings,
Composting, Labor, Foraging, Advocacy, Food Delivery, Packaging, ...

e) When finished, click the  button to save your edits.

f) Be sure to save your whole project, too!

Send the File

Please email this file to your instructor with the following Subject Line:

SankofaPOWER: YourName GeoJSON Submission

It will be added to the Project map within the coming week.

Thank you for your contribution!