Libosmium Capabilities

Wednesday, October 16, 2019 10:07 PM

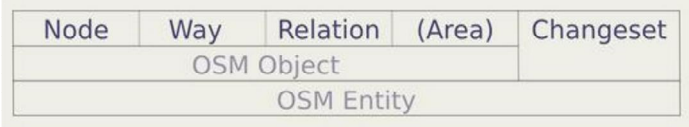
1. Map displaying for UI

Unfortunately the Library itself doesn't support GUI as I concluded from skimming the Manual ! , but maybe we can use supporting libraries such as Libsmscout to show the Map on GUI, unless if there is built in functions inside Qt to show the Map (To be confirmed with Yohan).

Furthermore I have seen interesting similar project about Temporal Labeling :
https://i11www.iti.kit.edu/temporallabeling/
Maybe we can cite some useful Ideas from it !

2. How they manage the data of the map:

It's generally explained by this diagram, and there is General Concept explanation for the Data Manipulation and Main Data types on the attached website.
Everything about this objects, Entities, and classes well explained in detail in the manual and API of the Library.
Further more, there is kind of relations and linking between the Objects !
No need to Data base, the OSM object is the database itself !
Every Object contains a set of Data that you can access it and handle it separately.



https://osmcode.org/osmium-concepts/

4. Interaction of the map, for example zoom in, zoom out

A- Zoom in & Zoom out Functions are supported with this library , a good example of this is in this link:
https://github.com/osmcode/libosmium/blob/master/examples/osmium_tiles.cpp

B- specify location for starting and destiny location: it's available by the means of Nodes and way.
The sets of data used in this Library supports Handling of the Map.

C-Using text input and then search a location: This is Available by means of ID
(Every Node Has it's unique ID)

D-Using pin-point to specify a location : This point is linked to The GUI Interface, because this library provides the Node, and attaching a pin for the Library is like selecting a Node !