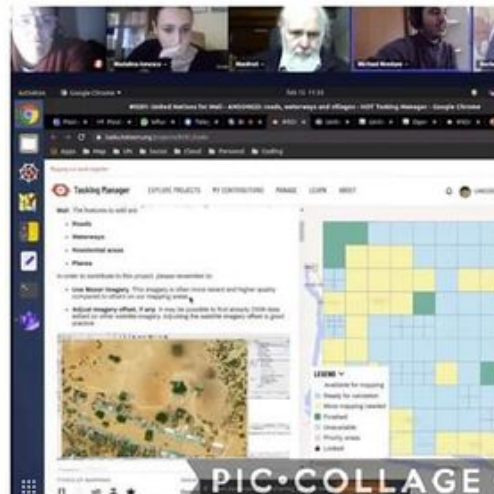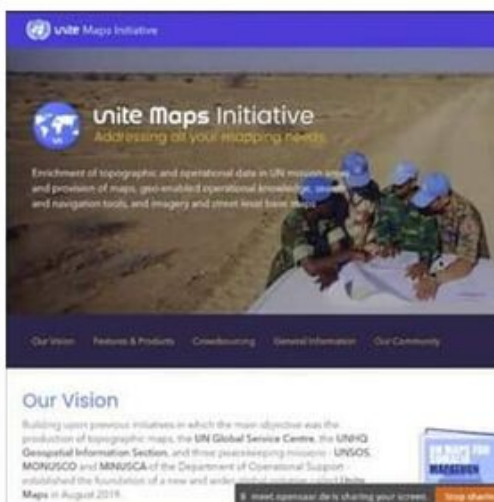# Erasmus+ "virtual mobility/activity" with UN - Mapper - Romania
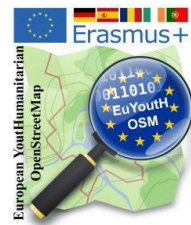Host 2021-02-22 until 2021-02-24

Global peace needs global contribution. The contribution of everybody is important for peace. Therefore, we decided to conduct two virtual mobilities with UN Mappers. [1]
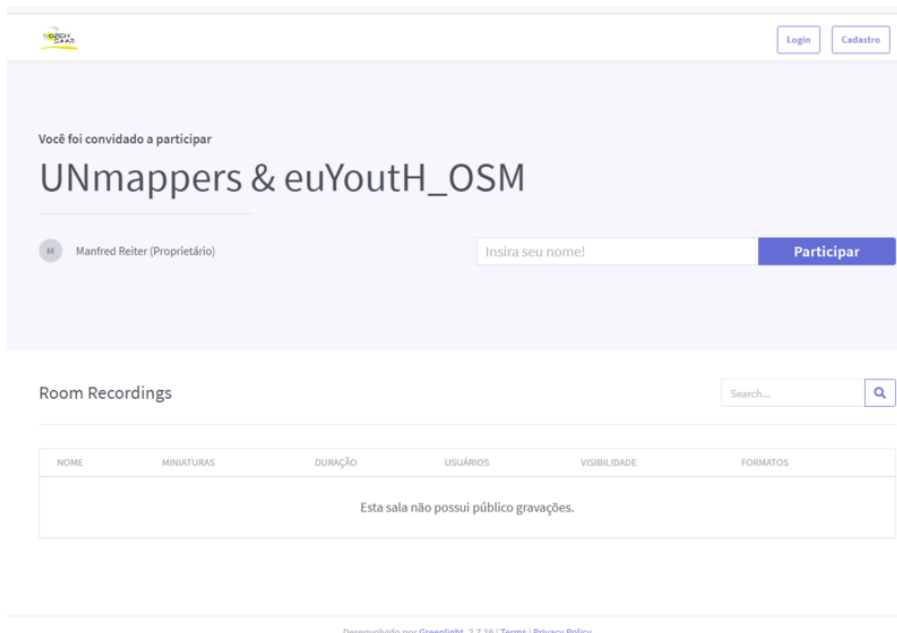
United Nations helps countries torn by conflict create conditions for lasting peace. Peacekeeping, peacebuilding and conflict prevention activities are the main objectives of our mapping activities. There is enormous potential for new technologies to improve the effectiveness of UN peacekeeping missions, as they respond to an ever-growing list of tasks in increasingly complex field environments.

On 15th February we met with two italian UN Mappers (Michael Montani and Rachele Amerini) to prepare the next Erasmus "virtual "activity, which should happen 22nd until 24th February. We decided that we'll be mapping an area in Central African Republic to help humanitarian teams in the field.

Watch [2] a 10 minute video of the UN Mappers explaining their work to the steering committee of our project.
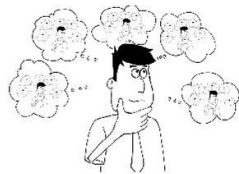

The whole event took place at our BigBlueButton video conference channel, offered by OpenSaar e.V.

All the students we had worked with so far were no longer students of the respective schools. Therefore, new students had to be introduced to humanitarian mapping with new training materials. In doing so, we tried to take local conditions into account.

- The students first had to familiarise themselves with the term "mapathon" and the important tools JOSM and Tasking Manager. They had to record their findings, which they worked out with the help of the OpenStreetMap Wiki, in a worksheet.

To map we use **JOSM**. We start JOSM via the **Tasking manager**

Wiki is our friend.
OpenStreetMap has its own Wiki.
https://wiki.openstreetmap.org/wiki/Main_Page
10/15 minutes - **break out rooms**

The empty worksheet [3] you can find in our wiki and in the appendix.

Questions: **What is JOSM? -** Powerful or not? Where is its homepage?

JOSM (Java OpenStreetMap Editor) is a desktop application for editing OpenStreetMap.
It is the most powerful out of available editors.
Its homepage is located at josm.openstreetmap.de.

Questions: **What is a Tasking manager?** Why volunteers use it? What's the purpose of this tool?

The Tasking Manager is the tool for coordination of volunteers and organization of groups to map on OpenStreetMap.
The purpose of the tool is to divide up a mapping job into smaller tasks that can be completed rapidly.
This approach facilitates the distribution of tasks to the various mappers.

Questions: **What is a mapathon?**

A Mapathon is a coordinated mapping event.

- The next step for the students was to sharpen their eye for the m symbols in OpenStreetMap. They had to discover eight different markings on the map (as they are not directly visible in the OSM legend) and name them.

What we see on the map?
How objects are saved in the OSM database?

mapathon Erasmus+ euYoutH_OSM and UN mappers

Map of Assié Koumassi - Cote d'Ivoire
https://www.openstreetmap.org/#map=13/6.7602/-4.2740

1. Road outside the village
2. Road inside the village
3. Buildings
4. Village border
5. Cemetery
6. Hospital
7. School
8. Place name

1. For each symbol in the table (below), find the **point** in the map at the top left and enter the corresponding **number** in the map on the right. Use the link above to get more details from the map if necessary.
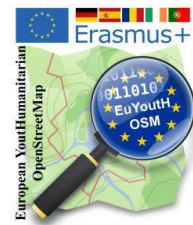
2. Write what you see on the map		3. We discover with **JOSM** how it is represented in OSM
Numb er	Map	Write here what you see on the map. 👇👇👇👇👇👇👇👇	How it is in the database? We check it with JOSM. We call it a "tag". [1]
1		Road outside the village	highway=teritary
2		Road inside the village	highway=residential

[1] https://wiki.openstreetmap.org/wiki/Tags

1/2

- In a second step, the students could then use JOSM to discover the "tags" that cause the corresponding marking on the map.

The complete template and solution can be found in the appendix of this brochure and on our wiki page.

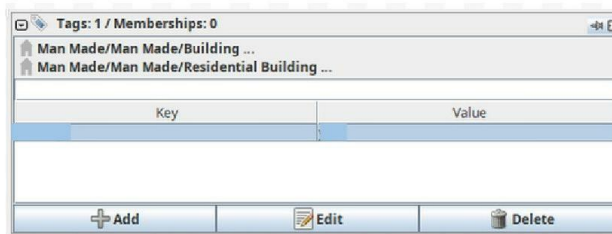This **cheat sheet** was filled by the students before the mapathon.

The complete template and solution can be found in the appendix of this brochure and on our wiki page as usual.

Tags: 1 / Memberships: 0

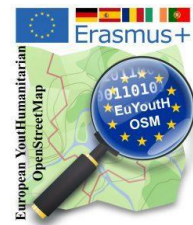Man Made/Man Made/Building ...
Man Made/Man Made/Residential Building ...

Key	Value

➕ Add   📝 Edit   🗑 Delete

EXAMPLES
we found in "our JOSM-Task" in Santa Barbara, Terceira

OSM-Wiki is your friend
https://wiki.openstreetmap.org/

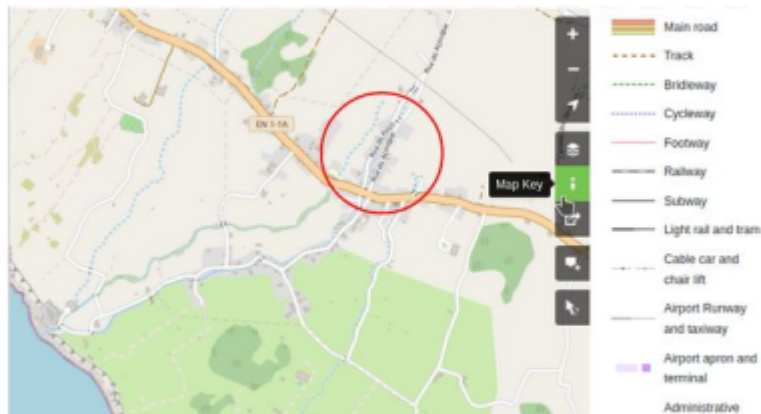| Object	Key	Value	Link to our OSM Wiki
Place of residence	landuse	residential	https://wiki.openstreetmap.org/wiki/Tag:landuse%3Dresidential
	place	village	https://wiki.openstreetmap.org/wiki/Key:place#Populated_settlements.2C_urban_and_rural
building	building	yes	https://wiki.openstreetmap.org/wiki/Key:building#Values
waterway	waterway	stream	https://wiki.openstreetmap.org/wiki/Key:waterway
road	highway	residential	https://wiki.openstreetmap.org/wiki/Highways#Classification
~~powerline~~	power	line	https://wiki.openstreetmap.org/wiki/Power_lines#keys_and_values

We check the region where we have in mind to map

We will map our first building in Santa Barbara, Terceira
1. we open the following link:
   https://www.openstreetmap.org/#map=16/38.6949/-27.3336

Main road	
Track	
Bridleway	
Cycleway	
Footway	
Railway	
Subway	
Light rail and tram	
Cable car and chair lift	
Airport Runway and taxiway	
Airport apron and terminal	
Administrative	

The map shows a lot more as we saw until now.
Therefore - as every map - OSM offers a "legend". For end uses they call it "Map key".

You find the "legend", clicking on the "i". When you click on it it changes the colour to green.

You know meanwhile, - OSM-wiki is our friend -
therefore some links to map features.

all features	https://wiki.openstreetmap.org/wiki/Map_features
landuse	https://wiki.openstreetmap.org/wiki/Map_features#Landuse
rural - agricultural landuse	https://wiki.openstreetmap.org/wiki/Map_features#Common_Landuse_Key_Values_-_Rural_and_agricultural_land

We "draw" our first building.

Step by step:

We look at the region

We open the region via Tasking Manager in JOSM

We check what is done in the region

We check new tags, which are useful for our mapping with UN mappers.

and then ... we draw with the Building_tool a building.

The material and the links ;-)	Region to map opened in JOSM via Tasking Manager
Teaching material: • 📄 - Mapping, JOSM and Tasking Manager . Collection of tags for our mapathon: • 📄 Useful tags for our mapathon, discovered in Santa Barbara . . **The Link in OpenStreetMap:** • OSM - Portugal - Terceira - Santa Barbara 🔗	

All explanatory materials - forms and completed solutions were offered to the students on our wiki page.

Very helpful were also the direct links to the tasks to be performed in the Tasking Manager, so that the students were guided to the mapping tasks by a simple click.
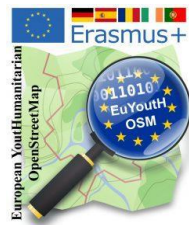
This helps to avoid error-prone communication.

In any case, difficulties are always to be expected with beginners if
1. already mapped objects in JOSM are not congruent with the satellite images and
2. the very first upload to JOSM requires the autenthication with OAuht.

For this reason, we have uploaded two step-by-step solutions as worksheets in the wiki, which can be used by students in case they have never dealt with the topic before.

	Adjust_imagery_offset	First_upload

These files are also in the appendix and on the wiki page.

Links:

[1] https://wiki.openstreetmap.org/wiki/Unite_Maps_Initiative/UN_Mappers
[2] https://youtu.be/0z1tsdtMzSM
[3] https://wiki.openstreetmap.org/wiki/EuYoutH_OSM#Tools_to_know._Using_the_OSM-Wiki

Appendix

- Tools to know for mapping OSM - JOSM - Tasking Manager
- Solution Tools_to_know_for_mapping_OSM - JOSM - Tasking Manager
- What we see on the map? - How objects are saved in the OSM Database?
- Solution What we see on the map? - How objects are saved in the OSM Database?
- Useful tags for our mapathon
- Useful tags for our mapathon - Solution
- Mapping - JOSM/Tasking Manager - we map in Terceira
- Adjust imagery offset
- JOSM - First Upload Authentification