Final project proposal

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What place for homeless in Covid-19?
"HOME for HOMEless", a crowdsourcing map for Lomé, Togo (West Africa).

"Stay home!" is currently the strongest catch phrase for confinement to fight the Covid-19 pandemic. But how do you respect it when you're homeless? Our platform helps to solve this equation by starting from the city of Lomé in Togo, by locating, analyzing and visualizing data and by allowing those who can help protect homeless people because they are indeed one of the most vulnerable strata of the population .

"International human rights law recognizes everyone's right to an adequate standard of living, including adequate housing. Despite the central place of this right within the global legal system, well over a billion people are not adequately housed. Millions around the world live in life- or health-threatening conditions ...". (UN Habitat, 2014). Therefore, living in decent and dignified housing is a basic human right recognized worldwide.

For a few months, the whole earth has been in crisis, hit by a pandemic destabilizing all socio-cultural systems or economic and geopolitical forecasts. Measures have been taken to keep the population as far as possible confined to the home, to reduce the rate of spread of the disease. But a fringe of the population, the homeless, despite being among the people most exposed to all calamities, is not given priority or necessarily considered in these control measures. This makes them more fragile, and even potential rapid vectors of the virus. It is this reflection that led us to the question: how to contribute to the protection of the homeless in sensitive times? We chose to start with Lomé, the city that we know best.

Lomé, capital of Togo, is a city of more than 1 million inhabitants, on the West African Atlantic coast. This multi-purpose city and regional economic hub is not immune to the covid-19 pandemic, and we have yet to find a systematic study yet done on the homeless in Lomé. This is how we propose to create a participative web map platform for collecting geolocation data, evolving spatial studies of homeless people conditions in the city, site locations that can serve as reception camps for housing emergencies for homeless, but also publication and reception of any initiatives for them. "Home for Homeless" objective is to help homeless in Lomé reach better living conditions especially in exceptional periods like those which we live.

Technology	How be used
GitHub	To create the repository for the website index html and all the files I will use during the project like jpg, geojson, CSV, pdf, etc.
HTML+CSS+JS	To make the website visible online, well structured, and nice to see
Leafet, plugins	To create my Lomé map with the right location, and elements like layers control, important infrastructures markers, legends and use the plugins to add shapefiles to the map and permit to users to add data to the map.
MapBox	To create a basemap and map tile layers and customize it with the Mapbox Studio Style tool
GeoJSON.io	To draw and create geojson files for Lomé global homelessness areas
geojsonlint	To validate my geojson files I will create
Carto	To create the animated heat map of Lomé population CSV
Beautifyer.io	To clean my final the code
Geolocation	To get the geolocation of the user's device
leaflet-providers	For my basemaps
HTML Form Elements	To create buttons and forms for the user to interact with the map
ArcGIS Pro	To visualize and convert Shp data into CSV (extraction)

Data	Format	Ready for use/Created/Converted?	From what to what/Tools	Source links/documents/myself
Lomé population by district	CSV	To be Converted	From Shp to CSV with ArcGIS Pro	Togo National Direction of Cartography. (2016). PGCIT Project (Got by email from a colleague there).
Lomé districts	Shp	Ready for use	-	Togo National Direction of Cartography. (2016). PGCIT Project. (Got by email from a colleague there).
Lomé important roads	Shp	Ready for use	-	Togo National Direction of Cartography. (2016). PGCIT Project. (Got by email from a colleague there).
Lomé green espaces	Shp	Ready for use	-	Togo National Direction of Cartography. (2016). PGCIT Project. (Got by email from a colleague there).
Global homeless areas	geojson	To be created	-	My analysis
Possible sites for urgent camps for homeless people	geojson	To be created	-	My analysis
Mapbox tile layers	tile layers	Ready for use	-	https://www.mapbox.com/
Esri World Imagery	tile layers	Ready for use	-	https://leaflet-extras.github.io/leaflet-providers/preview/ - Esri_WorldImagery
Carto DB Positron	tile layers	Ready for use	-	https://leaflet-extras.github.io/leaflet-providers/preview/ - openstreetmap.org
Images	jpg	To be taken onsite and on Creative Commons gallery websites	-	https://unsplash.com

The challenges we find in this project are twofold when it comes to exercise. The first is the availability of data, because Africa in general is still building databases that are not as easily accessible as in western countries. Compared to other English-speaking countries and mainly East African, digital geospatial data, even if it exists, is not yet fully open in Togo. We will therefore have to produce them ourselves, from the documents and quick survey information we have.

The second challenge is the code to write to make the platform participatory, so that each citizen can inform new cases of homelessness that they will have located on the territory. Especially at this level I really need help from Instructor Bailey Hanson, for me to get there. Any other suggestions are eagerly welcome to succeed my "crowdmapping" website project.

As an architect and urban planner, I intend to continue this project beyond the academic framework, by offering emergency accommodation to homeless people located in Lomé, in collaboration with the government. This is where a third challenge arises. Though, it is rather for the medium term of the project, which is to extend the platform and promote it.

Links to describe similar objectives and functions of the project:

https://hkgi.mysocialpinpoint.com/johnston-thrive-2040-plan-map#/

https://www.ushahidi.com/

https://elva.org/

http://www.ipaidabribe.com/#gsc.tab=0

https://www.king5.com/article/news/health/coronavirus/seattle-fast-tracks-tiny-house-village-in-response-to-covid-19-outbreak/281-e77f24bf-e747-4459-a794-cf70e16dd978