The COVID modelling is one of the issues in the forefront of life science in 2020. As a part of the overall strategy we (Quantori) made a solution for visualization of the COVID geospatial modelling results.

Your task is to make your own solution for the same problem, your solution will not be implemented as a part of our visualization tools and will be used solely for the interviewing process.

Description of the input data format

The csv file contains time-series data for simulations of the patients statuses, aggregated by geographical proximity.

Each section of the file is headlined with status row

Each row in the section excluding the header row starts with the date stamp and contains data triplets (latitude, longitude, number of people).

Example:

Status=1

Mar-13	42.242	-73.527	1	42.38	-73.384	1	42.426	-73.343	1
Mar-14	42.38	-73.384	2	42.364	-73.384	1	42.61	-73.301	1
Mar-15	42.38	-73.384	2	42.364	-73.384	1	42.61	-73.301	1

Expected solution

1. The dashboard map using Tableau/PowerBI or an alternative tool. It is up to you how do you highlight the important data (number of people, time and status) and design the UI. The use case is to demonstrate the visualization of the modelling and evolution of the system in time(dates) and space(coordinates).
2. The abstract schema of the ETL process (how do we transform the data, where do we store and in which format etc) including description of steps and alternatives, with corresponding pros and cons of each element.
3. All files/solutions should follow the FirstnameSecondName-BI/DWH task naming schema(or similar if latter is not possible due to the technical limitations of the system).