Project Scope and Goals

The project, accomplished by a group of Geoinformatics students in Politecnico di Milano, is aimed at creating a web application, serving as a platform to display not only the geographical contents in a map-based view but the attributes of each entry, equipped with the interactive function for users to extract the data arbitrarily, comment and contribute to the dataset (the user-uploading function is strictly supervised following a predetermined regulation).

In this project, we have chosen the dataset “SAN SILVESTRE GEOGRAPHY IA 2020” from the website [Epicollect5](https://five.epicollect.net/project/san-silvestre-geography-ia-2020). With 451 entries uploaded in the year of 2020, this dataset collects both the environmental and artificial geographical data in the city San Silvestre, such as temperature, humidity, wind direction noise level and traffic count. Via processing and exposing the above data, it is conducive to choose an optimal location for residential, commercial, official areas as well as public service facilities.

Domain Analysis

This web application is designed for city planners in zoning layout and building location.

Our software will not interact with other software of hardware the whole manipulations will be done online by the users.

This web application can be used for surveying, monitoring and information exchanging. To preserve the relevance of the website, log-in is required in order to access all the functions. As web managers, we have the privilege to remove any comment or user-uploaded data.

The representation of raw data in the web application will be performed by python scripts, and the libraries needed are as following: shapely, pandas/geopandas for the representation of data; psycopg2 which is the python SQL version; flask for web implementation.