

# AIR QUALITY AND HEALTH IMPACT

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## 1. Function and Objectives.

The air quality and health impact web application enables users to understand how the air quality of a city can affect the health of its residents. This is achieved by providing an Exploratory Data Analysis of our primary data source and offering a classification model.

In the home section, there will be an introduction of the project, a Descriptive Data Analysis and a brief presentation of the authors. In the exploration section, users can explore interactive plots of the data about air quality and health impact to see the relationship between those two. And, in the classification section, users can interact with the app to classify their current health impact status based on the air quality conditions in their city.

## 2. Benefits.

The benefits and utilities of this type of application are many and varied. Some of them could be as follows:

- **More information:** It could be used as an educational tool simply to be more informed about the topic.
- **Raising awareness:** It could be a great tool to raise more awareness about the fact that air quality can have a significant effect on the health of the population.
- **Just for fun:** Its interactive nature makes it quite an entertaining app to use, especially the feature of classifying yourself based on your city's situation.
- **Decision making:** Knowing how harmful a city's air quality could be for your health might help you make a decision about moving there or not.
- **Future research:** It can become the first step and support for larger and more complex future research on the relationship between health and pollution.
- **Encouraging improvement:** Being able to see the effects of air quality and pollution on oneself in an entertaining way can encourage the user to take better care of their health.