

## Assignment E Project Scope

1. **What:** Visualization of air pollution data on a world map. Data may be current/historical and/or forecasts. We may also include other relevant data on the map e.g. life expectancy. We would like to display detailed data for different locations. It'd be an interesting feature to compare different locations.

**How:** We will use the Google Maps Platform and the Google Maps Air Pollution API. We will develop the product for the web.

Platform and API:

<https://developers.google.com/maps>

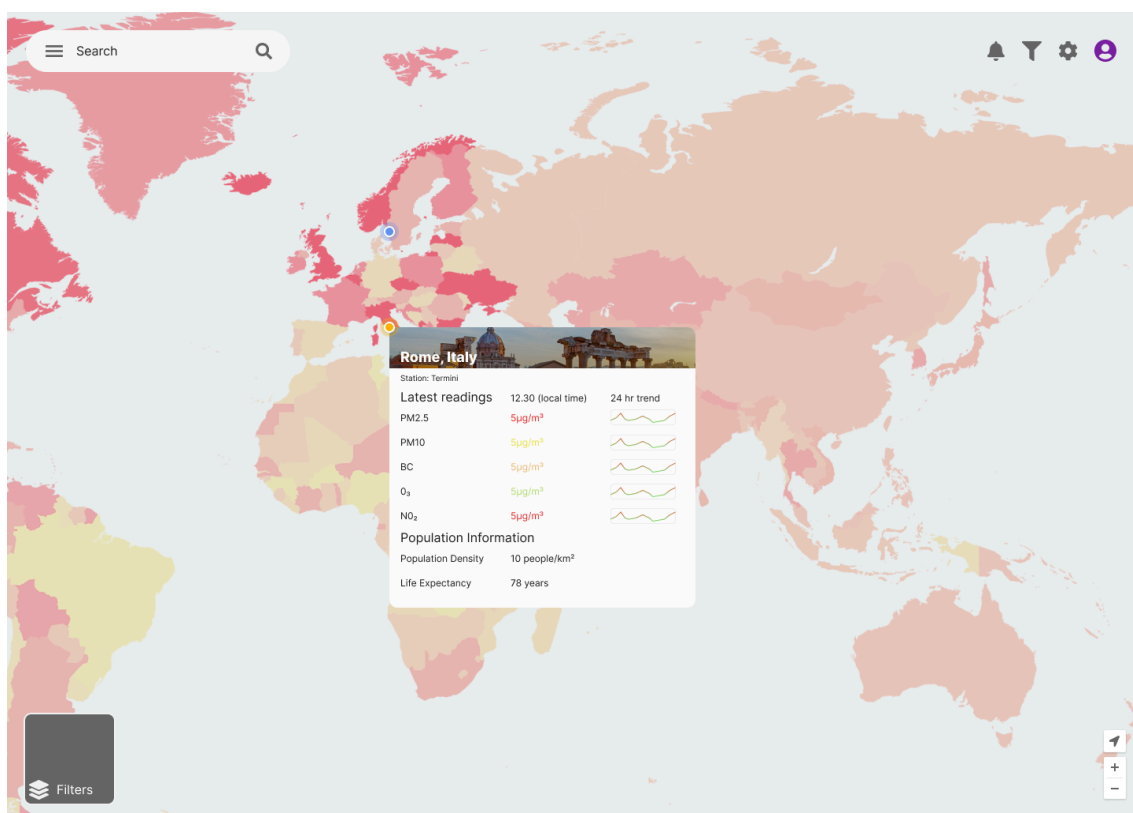
<https://developers.google.com/maps/documentation/air-quality/overview>

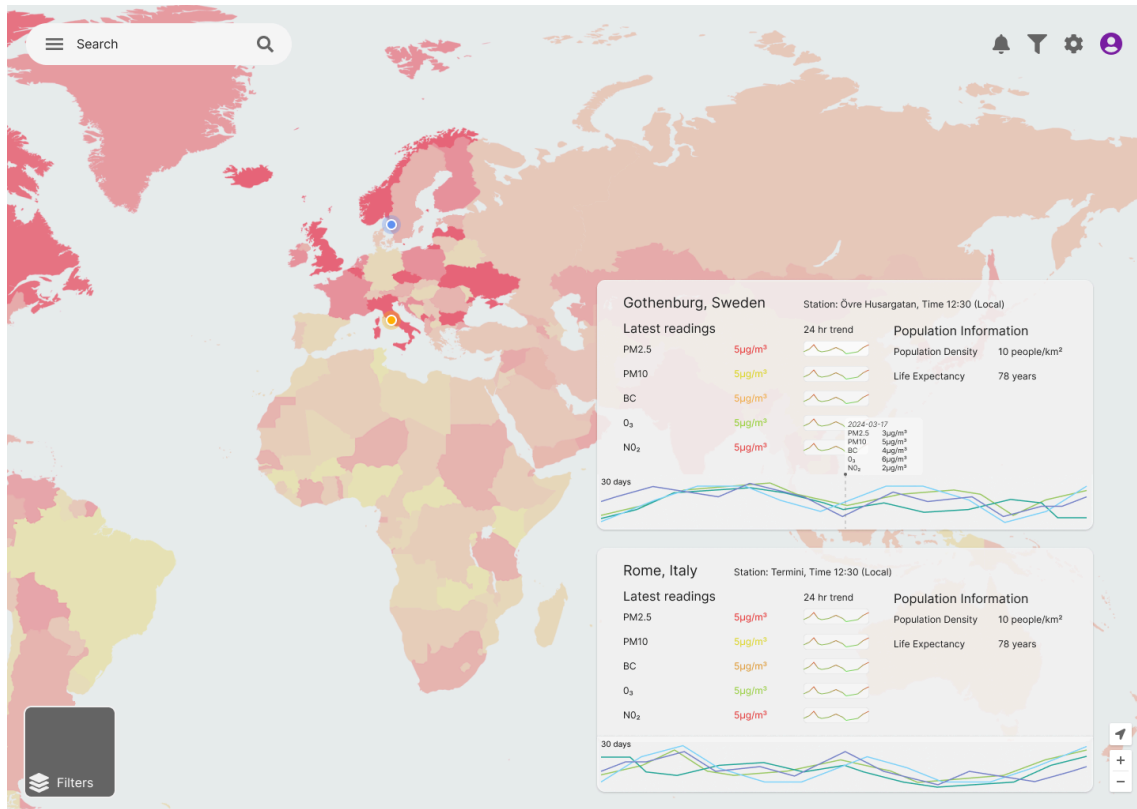
Possible additional APIs:

<https://openweathermap.org/api/air-pollution#history>

<https://openaq.org/developers/platform-overview/>

Below we include some pictures that display the mockup, which shows how the application may look and function.





2. Our project aligns to the following UN Sustainability Goals and subtargets:

**Goal 11 (Make cities and human settlements inclusive, safe, resilient and sustainable)**

**11.3:** By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

**11.6:** By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

**Goal 3 (Ensure healthy lives and promote well-being for all at all ages)**

**3.D:** Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.

**3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

The project aligns to the sustainability goals through the topic of air pollution and air quality, which has effects on human health and is especially relevant to people living in cities and towns. According to research, only seven countries in the world met safe air pollution levels in 2023 [1]. We believe that visualizing the state of air pollution in the world may serve as a wake-up call to improve air quality. We also believe that by correlating air quality data with other data such as health and life expectancy, it may humanize the issue, and further emphasize the need for action in reducing levels of air pollution world wide. Additionally, such a system may be useful for individuals who live in places that experience poor air quality.

3. The most difficult aspect of our project for now is to get started with the project and finding a structure on how we want to work as a team to get forward with the project. At this point there are a lot of unknown unknowns. We believe that it will feel easier to structure when we get started and have something to proceed from when planning what to do next.

[1]

<https://www.euronews.com/green/2024/03/20/only-seven-countries-in-the-world-breathe-safe-air-three-of-them-are-in-europe>