

AIR WATCH

Team Member: Showbik Showmma, Matteo Disegno



OVERVIEW

- **App Name:** Air Watch
- **App Description:** Introducing Air-Watch: Unveiling the Invisible Threat of Air Pollution. With a dedicated research section and educational content, we foster environmental studies, making it a holistic tool for a greener, healthier future!
- **Track:** Adult Team
- **Category:** Education & research



THEME

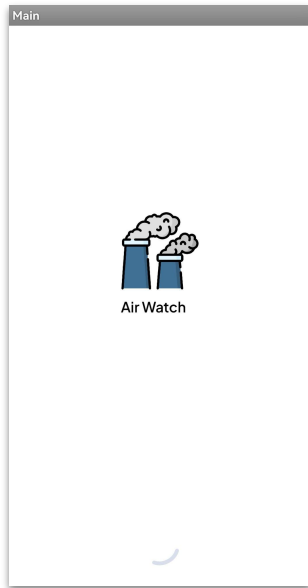
In 100 words or less, describe the problem that you chose to address, and why you were interested in solving it. Please note that this portion of your submission will be published if you are selected as a finalist or winner.

Air pollution, a silent but formidable foe, imperils our well-being and economies. As fine particles infiltrate our bodies and coarse pollutants damage our lungs, its impact often goes unnoticed until it becomes undeniable. At Air-Watch, we're impassioned to make a difference by addressing this pressing issue. Our mission is to empower everyone with real-time, easily understandable air pollutant data. We believe awareness is the key to a cleaner future.

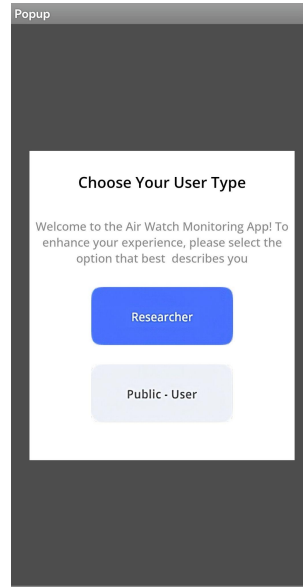
From captivating visuals for the public to in-depth analyses for researchers, Air-Watch offers a window to cleaner air. With the power of knowledge, individuals can safeguard their health, while researchers gain insights to drive environmental research. Together, we can breathe life into a greener, healthier planet!



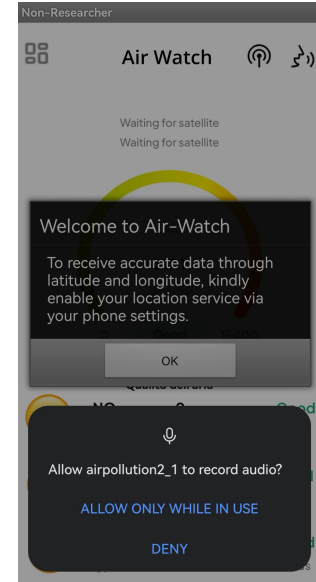
INSTRUCTIONS



Step 1: open the app



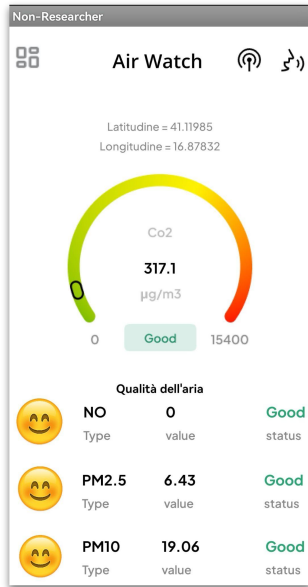
Step 2: choose your expertise level



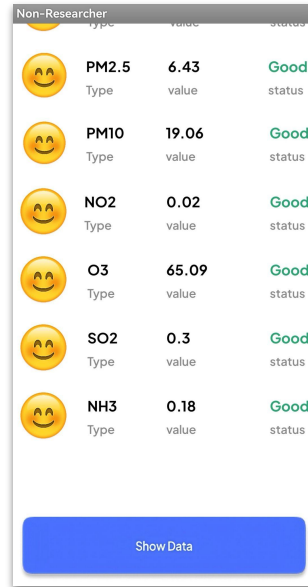
Step 3: allow user permissions



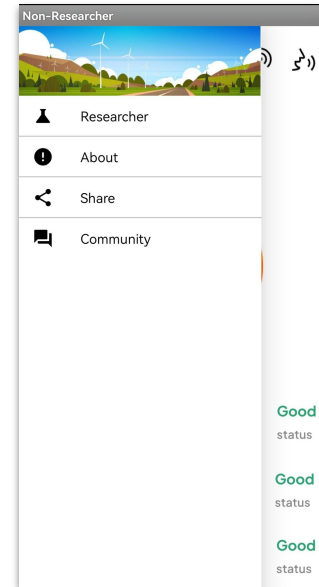
INSTRUCTIONS



Step 4: go to non-researcher screen



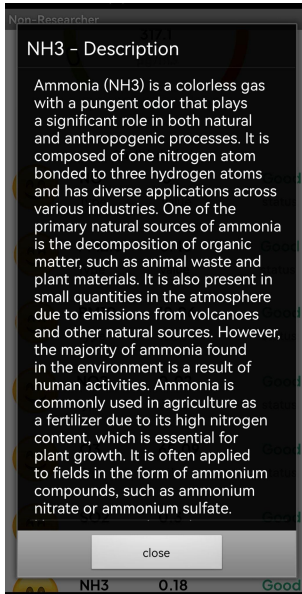
Step 5: press the button at the bottom to get data about your surroundings



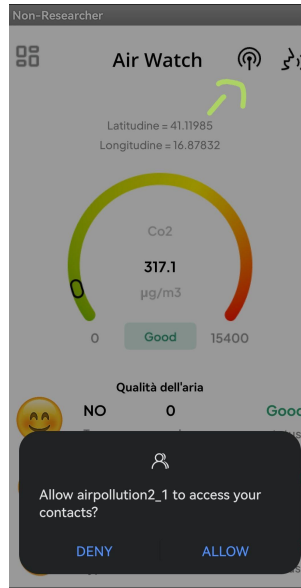
Step 6: click the icon on the top left to open the slide menu



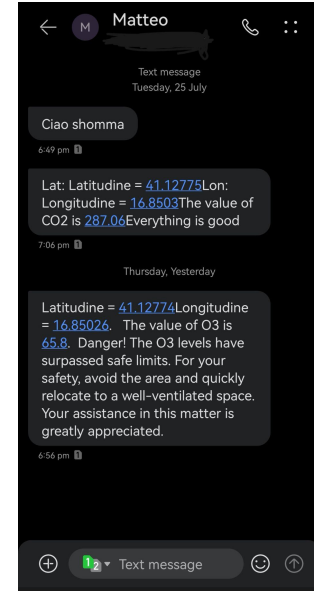
INSTRUCTIONS



Step 7: click on the emojis, gather information about the pollutant



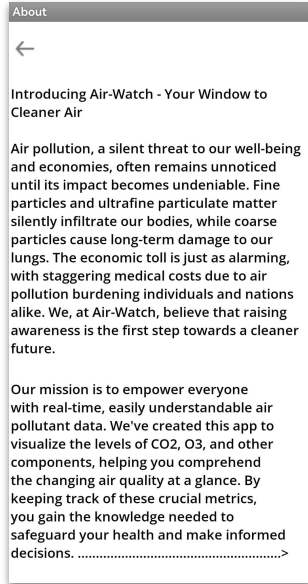
Step 8: click on the antenna icon to send messages



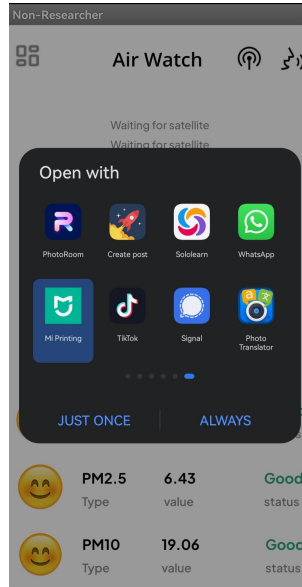
Step 9: an SMS will be read to be sent



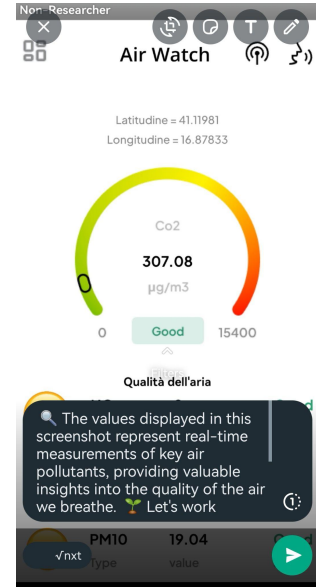
INSTRUCTIONS



Step 10: the about-section is available at the slide menu



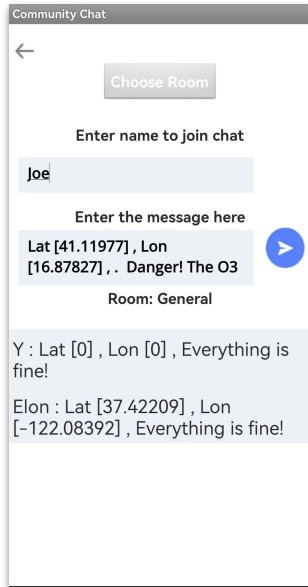
Step 11: by picking the share button on the slide menu, you can send screenshots



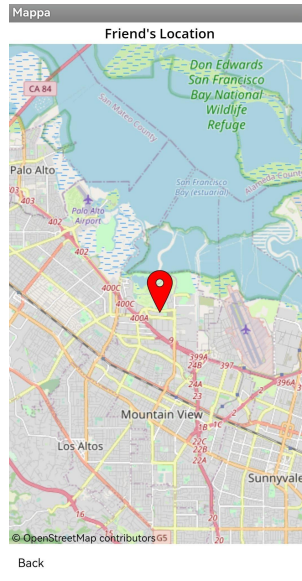
Step 12: example of screenshot



INSTRUCTIONS



Step 13: the community button allows you to access the community supports and share information about the overall quality of the air in your area



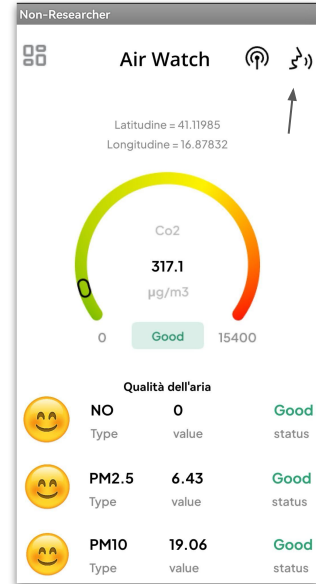
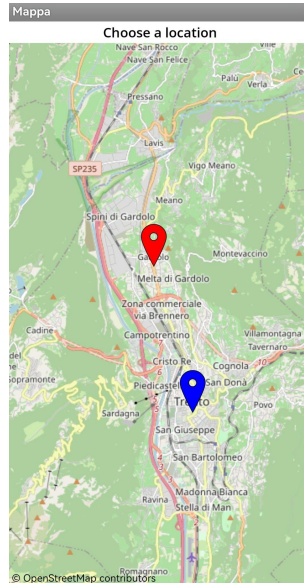
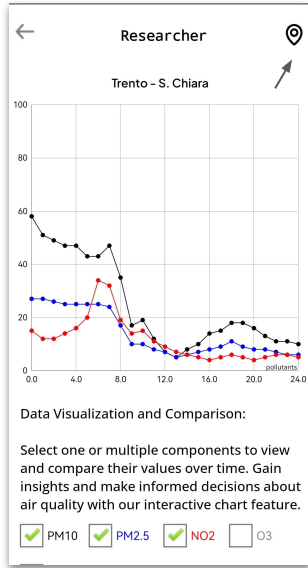
Step 14: clicking on a message with a pair of coordinates will show its position on the map



Step 15: you may choose between 2 chat rooms



INSTRUCTIONS



Step 16: the researcher section is used to analyse and study data in depth with the aid of graphs

Step 17: you may choose historical data between 2 stations (Trento-IT)

Step 18: the voice button allows you to ask questions to AI related to air pollution



LIMITATIONS

In 100 words or less, describe the limitations of your app and what people should carefully consider when using it.

Air-Watch, does come with a few considerations. While the real-time data empowers users, we rely on external APIs, so connectivity is key. For researchers, historical data from Trento—Italy air monitoring stations is invaluable, but it may lack real-time accuracy. Additionally, user-generated community chat may not always guarantee scientific precision. We encourage users to cherish the educational content but remain vigilant about its informational scope.

Our educational content aims to inform, but always seek specialized advice for critical decisions. With mindfulness and vigilance, Air-Watch drives us toward a greener, healthier future!



ACKNOWLEDGEMENTS

Please list the names of anyone who helped you with developing your app, and describe what type of help they provided.

We extend our heartfelt gratitude to **Professor Pierangelo Indolfi**, our esteemed **systems and networks and Computer Science instructor**, for his invaluable guidance and unwavering support throughout the development of our app. Professor Indolfi introduced us to the MIT App Inventor platform, providing in-depth insights into JSON data, API calls, callbacks, MIT App Inventor extensions creation, and HTTP requests. His expertise and mentorship empowered us to harness the full potential of this platform, enabling us to create a dynamic and impactful app. We are truly grateful for his dedication and knowledge, which played a pivotal role in shaping our journey and fostering our passion for innovation.



APPENDIX

Trento (IT) Station data: <https://bollettino.appa.tn.it/aria/scarica>

Open weather API: <https://openweathermap.org/api/air-pollution>

Slide bar menu extension: <https://ullisroboterseite.de/android-AI2-SideBar-en.html>

Notification push Extension:

<https://community.appinventor.mit.edu/t/free-notification-style-extension-with-various-types-of-notification/12115>

Screenshot Extension: <https://puravidaapps.com/screenshot.php>

Speech Recogniser Extension:

<https://community.kodular.io/t/free-voice-recognition-extension-without-google-dialogue/82347>

OpenAI API : <https://openai.com/>