QUICKSCAN - CANVAS

Air Quality for events

NAME: Air Quality for events DATE: July 1, 2025 2:43 AM **DESCRIPTION OF TECHNOLOGY** Prediction dashboard on air quality data for events.



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HUMAN VALUES

This technology does not affect the users identity, since the user is the government. However, the user could use the technology to monitor or impose restrictions on certain events. This would then affect the event and the attendees.

meaning that all the predictions will be based on those 3

Therefore, our application won't be as accurate on the other

Furthermore, there is a correlation between air pollution and

meteorology, we know that we can't predict meteorological data meaning that our predictions could be changing quite

months of the year, since there is no data for these months.

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TRANSPARENCY



Yes, it is explained how the technology works for each step that was taken. The data source is also known.

IMPACT ON SOCIETY

Air quality is a huge factor in today's society take for example the nitrogen crisis. While this is one example, bad air quality can have a significant impact on humans as well. Each year around 7 million people die prematurely due to bad air quality. We can confidently say that bad air quality is a worldwide problem. The focus on preventing bad air quality in The Netherlands is focused on inhabited places, while our project has focused on different types of events. The air quality at an event affects not only the surrounding environment but also ...

HATEFUL AND CRIMINAL ACTORS

The system itself does not break any laws nor invade anyone's privacy since the dataset used is anonymised. However, the output of the system may be used to predict

whether an event could break laws regarding air pollution.

It would also be possible to change the data from the measuring stations to make the air pollution seem lower than it actually is.

PRIVACY

The project uses 3 different datasets, one dataset contains meteorological data from different measuring stations, one dataset contains air pollution data from the same measuring stations as the meteorological data and the last dataset uses GPS data. This GPS data is anonymised and per postal code, and not in real-time, meaning that 1, we don't get any personal data and 2. it's impossible to determine who is in a certain postal code at a certain time.

STAKEHOLDERS

- Government
- Fontvs
- TNO
- Zicht op Data



SUSTAINABILITY



The service would be run in the Cloud which means that the Cloud Service Provider would use energy to keep the cloud system up and running.

The measuring stations are powered by solar panels, which do not have an impact on the energy footprint of the project. However, these still have to be made which does cost energy.

DATA

months.



FUTURE

The technology could be used as a guideline in the future for the government to create a baseline for air pollution at events. It would also be possible to expand the user base to include event organisers, which could help them give insight into the air quality at their event,

INCLUSIVITY

severely depending on the weather.

No. it does not.



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QUICKSCAN - CANVAS - HELPSIDE

data. If the technology collects special personal data (like...

Air Quality for events

BY NC SA

University of Applied Sciences

AME: Air Quality for events DATE: July 1, 2025 2:43 AM DESCRIPTION OF TECHNOLOGY Prediction dashboard on air quality data for events.	HUMAN VALUES How is the identity of the (intended) users affected by the technology? To help you answer this question think about sub questions like: - If two friends use your product, how could it enhance or detract from their relationship? - Does your product create new ways for people to interact?	TRANSPARENCY Is it explained to the users/stakeholders how the technology works and how the business model works? - Is it easy for users to find out how the technology works? - Can a user understand or find out why your technology behaves in a certain way? - Are the goals explained? - Is the idea of the technology explained? - Is the technology company transparent about the way their
MPACT ON SOCIETY What is exactly the problem? Is it really a problem? Are you sure? Can you exactly define what the challenge is? What problem what 'pain') does this technology want to solve? Can you nake a clear definition of the problem? What 'pain' does this echnology want to ease? Whose pain? Is it really a problem? For who? Will solving the problem make the world better? Are you sure? The problem definition will help you to determine	STAKEHOLDERS Who are the main users/targetgroups/stakeholders for this technology? Think about the intended context by When thinking about the stakeholders, the most obvious one are of course the intended users, so start there. Next, list the stakeholders that are directly affected. Listing the users and directly affected stakeholders also gives an impression of the intended context of the technology	SUSTAINABILITY In what way is the direct and indirect energy use of this technology taken into account? One of the most prominent impacts on sustainability is energy efficiency. Consider what service you want this technology to provide and how this could be achieved with a minimal use of energy. Are improvements possible?
HATEFUL AND CRIMINAL ACTORS n which way can the technology be used to break the aw or avoid the consequences of breaking the law? Can you imagine ways that the technology can or will be used o break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/ dentity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using rackers to evade speed radars or using bitcoins to launder	DATA Are you familiar with the fundamental shortcomings and pitfalls of data and do you take this sufficiently into There are fundamental issues with data. For example: - Data is always subjective; - Data collections are never complete; - Correlation and causation are tricky concepts; - Data collections are often biased;	FUTURE What could possibly happen with this technology in the future? Discuss this quickly and note your first thoughts here. Think about what happens when 100 million people use your product. How could communities, habits and norms change?
PRIVACY	INCLUSIVITY Does this technology have a built-in bias? Do a brainstorm. Can you find a built-in bias in this technology? Maybe because of the way the data was collected, either by personal bias, historical bias, political bias or a lack of diversity in the people responsible for the design of the technology? How do you know this is not the page? By artical Bo aware of your own bigger	FIND US ON WWW.TICT.IO THIS CANVAS IS PART OF THE TECHNOLOGY IMPACT CYCLE TOOL. THIS CANVAS IS THE RESULT OF A QUICKSCAN. YOU CAN FILL OUT THE FULL TICT ON WWW.TICT.IO Fontys

case? Be critical. Be aware of your own biases....