


NAME: Voice-to-SQL application


DATE: July 1, 2025 1:53 PM

DESCRIPTION OF TECHNOLOGY

This AI-powered tool translates natural language queries into SQL statements, enabling users both technical and non-technical to interact with databases without needing SQL expertise.




HUMAN VALUES




The identity of the user is only affected in that they can choose to do less work in return for the same end goal: accessing, adding, removing or editing information from a database. The application does not work with any personal info, nor should it.

TRANSPARENCY




The application will feed a user's voice into a voice-to-text program (powered by OpenAI), which will then be fed further into a prompt (together with a list of the SQL database's variables) to generate an SQL prompt. The people who will benefit most from an application like this would likely not benefit from a more lengthy explanation of the process.

IMPACT ON SOCIETY




Many people in charge of managing a database usually don't want to spend a lot of time writing queries, or - in a worst case scenario - don't know how to. The Voice-to-SQL application seeks to remedy this by granting a natural, simple means of accessing data in an SQL database.

STAKEHOLDERS




- Technologically inexperienced managers, logisticians etc.
- Office persons, bookkeepers and other jobs that involve record-keeping

SUSTAINABILITY




The prompts that this application will generate, along with the extrapolation of meaning from a voice command, will likely be an energy-consuming process. However, with the use of local resources on the client's computer, this burden could be lessened.

HATEFUL AND CRIMINAL ACTORS




If an unauthorized person were to get their hands on this application, they could very well be privy to company secrets that they're not supposed to see. In that same vein, any malefactor could potentially also give the order to wipe the entire SQL database with minimal clearance, presenting a responsibility in using this app for access to your database.

DATA




This application (hopefully) doesn't process any of the data used in the SQL database, so there's not a lot of risk involved with handling data, save for the usual limit of syntax and correct query-writing.

FUTURE




The Voice-to-SQL Application could - potentially- act as a small, handy tool for the average person to retrieve or edit information on their databases in a timely, simple and unobtrusive manner.

PRIVACY



The application only registers and translate your voice. It does not take in any personal data, as the app will not keep records of this voice or attach an identity to it: the application will likely use a separate, admin-access account for the purposes of accessing (and editing) the SQL database.

INCLUSIVITY



Seeing as how this app only works in accessing and modifying existing SQL databases without reading into them, there is some assurance in that this application cannot be biased.

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](http://www.tict.io)




NAME: Voice-to-SQL application


DATE: July 1, 2025 1:53 PM

DESCRIPTION OF TECHNOLOGY

This AI-powered tool translates natural language queries into SQL statements, enabling users both technical and non-technical to interact with databases without needing SQL expertise.



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...


IMPACT 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 make a clear definition of the problem? What 'pain' does this technology 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/target groups/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



In which way can the technology be used to break the law or avoid the consequences of breaking the law?

Can you imagine ways that the technology can or will be used to break the law? Think about invading someone's privacy. Spying. Hurting people. Harassment. Steal things. Fraud/identity theft and so on. Or will people use the technology to avoid facing the consequences of breaking the law (using trackers 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



Does the technology register personal data? If yes, what personal data?

If this technology registers personal data you have to be aware of privacy legislation and the concept of privacy. Think hard about this question. Remember: personal data can be interpreted in a broad way. Maybe this technology does not collect personal data, but can be used to assemble personal data. If the technology collects special personal data (like...

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

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

