QUICKSCAN - CANVAS

Parking and Meeting System Technology

NAME: Parking and Meeting System Technology
DATE: May 3, 2025 12:01 AM

DESCRIPTION OF TECHNOLOGY
For the group project, the team is working on the Parking and Meeting Systems. The Parking System is utilizing C++ for Arduino purposes and Python for back-end part which also connects with the Meeting System. This system is using C# and Python, the former as a front-end application in WPF and the latter for connection with the database which stores data.

HUMAN VALUES

The meeting system technology is intended to arrange meetings bringing businesses closer, helping the receptionist to arrange meetings. The parking system technology is serving visitors who want to park a vehicle by detecting and reading their licence plate number.

TRANSPARENCY

The group has been frequently in contact with the product owner and they are of aware of the basic functionalities. However, a visitor without prior usage, might not be aware of application's existance after interacting with it.

IMPACT ON SOCIETY

The main goal of the project is to help the receptionist schedule meetings and give directions to the different parking lots.

STAKEHOLDERS

- Elviro Pereira Junior - product owner
- Sabina Pencheva - teacher
- The development team
- Sioux client - visitor
- Sioux employee
- Sean - Sioux receptionist

SUSTAINABILITY

In the Parking system, the group is using a camera to read license plates when entering the parking lot. There are 10 sensors which are registering whether or not the vehicle is parked at each each parking space. The camera and sensors all consume energy.

HATEFUL AND CRIMINAL ACTORS

The receptionist has access to the data. Therefore, the team included password security for the receptionist for security reasons.

DATA

Visitors will be limited to only using one specific vehicle when commuting to the company's office.

FUTURE

The system itself is intended only to be used in the scenario described by the client. There are some limitations because the parking lot can not be expanded too much. However, with the current system, the parking lot can be expanded to a certain degree because the current system is not intended for multiple entrances and exits, though it should not be a huge issue to extend the applicaiton.

PRIVACY

The technology is reading visitor's licence plates and visitors name and surname when scheduling the meeting. Visitors' emails and phone numbers is stored in the database for the purpose of sending notifications.

INCLUSIVITY

The technology might have some bias when the camera reads licence plates because it's not always going to work properly.

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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/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

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.…

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