



NAME: Pharma

DATE: May 8, 2025 1:31 AM


DESCRIPTION OF TECHNOLOGY

AI41 Group A




HUMAN VALUES


One of the improvements on this technology that would be beneficial for the patient users would be increased transparency into the prediction process and factors. The technology needs to be non-stigmatizing and easily approachable. Because health is generally a private and sensitive topic, transparency would guarantee a wider and safer reach to a higher number of people.
Another improvement for this technology would be to employ domain knowledge in future iterations. Not only does it...

TRANSPARENCY


We should make sure that the technology is as transparent as possible on how it reached a conclusion. Also, feedback should be taken into account, this will only improve the product.

IMPACT ON SOCIETY


The addition of a disclaimer aimed at the patients stating that one should enquire with their physician or pharmacist may be enough to ensure that any serious consequences are mitigated. A disclaimer for the pharmacists should perhaps also be included, stating that they should check recommendations from the model for anything that might cause adverse effects.

STAKEHOLDERS


For the patients it is of utmost importance that their health and safety remains top priority. This can only be done with the assistance of the pharmacists, since they should also be aware of possible dangerous or adverse combinations of medication that the model could predict. Patients should be given the option to opt out, barring their data from being used, and in the case they do want to take part then they should be informed on how their data is being used.

SUSTAINABILITY


Material sustainability is not applicable in this case, since this isnt addressed in any of the data. Cloud storage solution may be used as a way to reduce energy consumption, without investing large sums into on-premise sustainable energy generation (i.e. wind mills, solar arrays)

HATEFUL AND CRIMINAL ACTORS


As mentioned before, a disclaimer message should be present saying that recommendations from the model are merely an advice and not to be taken as definitive. It functions as a tool, its users should remain critical and patients physicians should be consulted before changing their medication. As far as hackers and other similar criminal actors are concerned, standard counter measures such as data encryption and firewalls should suffice.

DATA


Currently the only improvement we can make is by expanding the data it has access to. Other than that it should be stated clearly to all parties involved (i.e. pharmacists, patients, etc) that the decisions made by the technology are not definitive and should be considered more as opinions or advice

FUTURE

In a best case scenario, AutoPharma will remain as a utility tool to assist pharmacists and patients in finding better and/or cheaper alternatives to their medication, while control remains with the experts. At a certain point, improvement or alteration need to halt to prevent human positions from being replaced, because this could do more harm than good even if the health and cost benefits are significant.

PRIVACY

A patient should be informed on their data and what it is used for, while also giving them the option to opt out of their data being used for the machine learning model if they so desire.

INCLUSIVITY

At the time of writing, no improvements regarding this technologies inclusivity come up.

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University of Applied Sciences






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HUMAN VALUES

Now that you have thought hard about the impact of your technology on human values, what improvements...

If you think about the impact of this technology on human values and needs. If you think about how this technology affects the identity of the user, the autonomy of the user (can the users make their own decisions?) and the health and well-being of the user. If you think about all that, what improvement would you (want to) make? In the technology?...

TRANSPARENCY

Now that you have thought hard about the transparency of this technology, what improvements would you like t...

If you think about the communication on the way the technology works and the businessmodel. If you think about the explanation on automatic decisions that are made. If you think about complaint procedures and transparency on possible negative effects. If you think about all that, what would you (want to) improve? In the technology? In context?...

IMPACT ON SOCIETY

Now that you have thought hard about the impact of this technology on society (by filling out the questions...

If you think about the real problem this technology is going to solve. If you think about the ability of this technology to solve the real problem. If you think about possible negative effects and whether this technology will contribute to a world you want to live in. If you think about all that, what improvements would you make? In technology? In context? In use?...

STAKEHOLDERS

Now that you have thought hard about all stakeholders, what improvements would you like to make? List them...

If you think about all stakeholders of this technology. If you think about stakeholders that are less obvious. If you think about the way certain stakeholders are affected by this technology and if you want to take them into consideration. If you think about all that, what would you (want to) improve? In the technology? In context? In use?...

SUSTAINABILITY

Now that you have thought hard about the sustainability of this technology, what improvements would you like t...

If you think about the direct and indirect energy use and the materials that are used in the technology. If you think about the lifespan of the technology and the hidden environmental impact of the technology. If you think about all that, what improvements would you (want to) make? In the technology? In context? In use?...

HATEFUL AND CRIMINAL ACTORS

Now that you have thought hard about how bad actors can impact this technology, what improvements would...

If you think about this technology being used to break the law, or avoid the consequences of breaking the law, or to be used against certain groups, or to attack the truth or to pit certain groups against each other. If you think about all of that, what improvements would you (want to) make? In the technology? In context? In use?...

DATA

Now that you have thought hard about the impact of data on this technology, what improvements would you...

If you think about the limitations of data. Things like subjectivity, incomplete datasets and so on. If you think about the way new insights are handled. If you think about the sustainability of the collection of data or the data that is collected from the users. If you think about all that, what would you (want to) improve? In the technology? In context?...

FUTURE

Impact Improvement: Now that you have thought hard about the future impact of the technology, what...

If you think about an utopian and a dystopian scenario. If you think about the way this technology can change the world. If you think about the consequences of a different party buying your technology. If you think about all that, what would you (want to) improve? In the technology? In context? In use? ...

PRIVACY

Now that you have thought hard about privacy and data protection, what improvements would you like to make?...

If you think about this technology invading someone's privacy or collecting personal data and if you think about the way this technology is compliant with prevailing law and mitigates dataprotection risks and concerns. If you think about all that, what improvements would you (want to) make? In the technology? In context? In use?...

INCLUSIVITY

Now that you have thought hard about the inclusivity of the technology, what improvements would you like to...

If you think about accessibility to this technology. If you think about built in biases or automatic decisions that may be biased. If you think about who is benefitting from this technology and the diversity of the team that creates the technology. If you think about all that, what improvements would you (want to) make? In the technology? In context? In use?

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