

RIPHAH INTERNATIONAL UNIVERSITY, LAHORE CAMPUS.



RIPHAH SCHOOL OF COMPUTING & INNOVATION (RSCI)

PROFESSIONAL PRACTICES

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ASSIGNMENT 01

SUBMITTED BY:

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SUBMITTED TO:

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1. Ethical concerns related to using an algorithm to curate content for users based on their browsing history and preferences:

Bias is one of the main ethical issues with employing algorithms to filter material. A feedback loop that reinforces pre-existing prejudices and preferences may be created by algorithms that rely on user data like browsing history, likes, and shares. This can result in the exclusion of alternative viewpoints and the promotion of dangerous content. This might result in a limited perspective on the world, the reinforcement of stereotypes, and a lack of exposure to other points of view for users.

The potential harm that might be brought about by algorithmically selected information is another issue. Algorithms have the potential to amplify harmful content, such as hate speech, false information, and extreme beliefs, having detrimental effects on both people and society at large. The promotion of harmful content can also lead to the spread of misinformation, which can have significant consequences such as influencing public opinion and even elections.

2. Potential risks and benefits of using such an algorithm:

Enhancing user engagement and happiness by delivering tailored content that matches their interests and preferences is one of the possible advantages of utilising an algorithm to curate content. Moreover, algorithms can assist users in finding fresh content that they might not have otherwise accessed, resulting in a wider variety of viewpoints and knowledge.

Yet, as previously said, utilising algorithms to curate material carries the danger of bias and the promotion of undesirable information. Moreover, algorithms may create a "filter bubble," where users are only exposed to information that supports their own views and ideas. This can exacerbate polarisation and reinforce prejudices that already exist.

3. Applying the ethical principles of beneficence, non-maleficence, justice, and autonomy to this scenario:

- **Beneficence:** Our main responsibility as software developers is to advance the welfare of our users. For this reason, any algorithm used to curate material must be created to prioritise the user's interests and offer information that is instructive, entertaining, and instructional.
- **Non-maleficence:** We have a duty to protect our users from harm. Because of this, any algorithm used to curate information must be created to reduce the chance of promoting harmful or biased content and to stop the amplifying of undesirable behaviours and attitudes.
- **Justice:** We owe it to all users to treat them equally and fairly. In order to prevent exclusion or marginalisation, any algorithm used to curate information must be built to guarantee that all users have equal access to a variety of viewpoints and content.
- **Autonomy:** We have a responsibility to respect each person's rights and choices. Because of this, any algorithm used to curate material must be created such that consumers have the choice to select the information they want to view and may manage the amount of personalisation.

4. Communicating concerns to the team and proposing alternative solutions:

I would begin by pointing out the possible dangers of employing algorithms to curate material, especially the danger of prejudice and the promotion of dangerous information, in order to express my concerns to the team. I would also stress the value of creating algorithms that are in line with the ethical concepts of beneficence, non-maleficence, fairness, and autonomy.

I'd advocate looking into alternate content curation techniques that prioritise user interests and reduce the likelihood of bias and harmful information as an alternative to the current approaches. This may involve using user feedback methods, human moderators, and machine learning algorithms that have been created particularly to reduce the likelihood of prejudice and harmful material.

In the end, it's crucial to put our users' welfare first and make sure that our algorithms are created to support the ideals of beneficence, non-maleficence, fairness, and autonomy. By doing this, we can develop a social media network that benefits our users while lowering any possible hazards.