

Error Types and Ethics

Imagine you are designing a voice assistant device to power on when it hears the designated wake word. The voice assistant is intended to be used in a person's home. When the device recognizes the wake word, it will record audio for 20 seconds and send this data to the cloud. The direct stakeholder would be the user of this device, while the indirect stakeholders would be the other members of the household.

Your task is to decide whether this voice assistant device should be optimized for high precision or high recall. To be reminded, you will want to consider what the consequences of type 1 errors and type 2 errors will be for both direct and indirect stakeholders. If you think type 1 errors are most harmful, you will want to optimize for high precision. If you think type 2 errors are most harmful, you will want to optimize for high recall.

- Should you optimize this device for high precision or high recall? Please provide an explanation for your answer (i.e. which type of error you consider to be most harmful and which stakeholder(s) would be affected)
- Do you agree or disagree with what others have said in their posts?