

# **Toolsheet on Ethical Al** Game Design

https://www.videogames4good.eu

This project has been funded with support from the European Commission under the Erasmus+ Programme. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project number: 2023-2-CZ1-KA220-Y0U-000183158













**Author:** Amit Gupta (co-founder of Sudowrite)

### When to use it / Targeted skills:

Use this tool during or after a learner creates a machine learning model using Google's Teachable Machine. It supports learning in:

- Machine learning basics
- Bias detection and analysis
- User testing and iteration
- Ethical Al awareness

#### What You'll do:

You will create and test a simple machine learning model using Teachable Machine (e.g., an image recognizer), then use a guided worksheet to reflect on its ethical strengths and weaknesses.

#### What You'll Need:

- Internet-connected device with a webcam
- Access to: https://teachablemachine.withgoogle.com/
- Ethics Explorer Worksheet (see Annex)
- Pen/pencil or digital notes tool



#### How to use it:

- 1. Create Your Model
  - Go to Teachable Machine and choose "Image Project."
  - Train your model with 2-3 classes (e.g., "Happy Face", "Frown", "Raised Hand").
  - Add real-time examples using your webcam.
- 2. Test for Accuracy
  - Try different lighting, backgrounds, and people.
  - Record when the model works well and when it doesn't.
- 3. Use the Ethics Explorer Worksheet (see Annex 1):
  - Section 1 Accuracy: When did it fail? Who did it work best for?
  - Section 2 Bias: Did it misclassify certain people or situations?
  - Section 3 Data Awareness: What kind of data was used? Could someone feel uncomfortable with it?
  - Section 4 Improvements: How could you fix the problems? More diverse examples? Better labels?
- 4. Group Reflection (Optional)
  - Compare your worksheet with a partner's results.
  - Discuss: What surprised you? What would you change next time?

#### **About this template:**

This activity is designed to help learners build a model, test it, and reflect critically — key steps in responsible AI development. The worksheet breaks down technical testing into ethical reflection, adapted from real engineering checklists like IEEE's "Ethics in Action."



## **Tips for Reuse / Continuation:**

- 1. Use this template every time you train a new model.
- 2. Keep results in a project portfolio for future comparison.
- 3. Challenge learners to design their own ethics criteria next time.

# Languages:

Available in English, French, Czech, Latvian and Italian



## **Annex:**

Teachable Machine Ethics Explorer Worksheet (includes structured reflection prompts and data tracking table)

1. Accuracy
Did the model amake many mistakes? When was it accurate?
Did the model work differently on different people? Whom did it work best for?
Did the model seem unfair to anyone or any group? When?
——————————————————————————————————————
3. Data Awareness
What kind of data did the model use?
Could the data reveal private or sensitive information? Yes □ No □
How would you feel if a company was using this data on you?
4. Improvements What could you do to make the model better or less biased?