Introduction

AI is no longer a futuristic concept—it is a vital part of our daily lives. In this workshop, students will explore:

- How AI "thinks" and learns.
- Diverse paradigms like Supervised Learning and Computer Vision.
- Real-world applications in sustainability and ecology.

Key Goals

- **Understand:** Core AI learning concepts.
- **Identify:** Real-world AI applications.
- **Differentiate:** Human vs. AI content.
- **Design:** Conceptual AI solutions.

Resources

- Computers/Tablets with Internet
- Projector
- Pre-prepared "AI Cards"
- YouTube (Video examples)
- Padlet / Kahoot / Mentimeter

How AI Learns

& Solves Problems

Target Group: 8-12 y.o.
SmAIle Project

Learning Outcomes

Knowledge:
- Define AI and learning paradigms (RL, Supervised, LLMs).
- Connect AI to sustainability.

Skills:
- Recognize AI impostors (Turing Test).
- Prototype AI concepts.

Work Methods

- Inquiry Learning
- Gamification (Impostor Game)
- Design Prototyping
- Peer Evaluation

1. Research

Explore Paradigms: Students learn about Supervised Learning, LLMs, and Computer Vision through simplified examples and research specific industries.

Game: "Find the Impostor"

A simulation of the Turing Test. "Detectives" ask questions to identify which "Suspects" are real humans and which are teachers using an AI Chatbot.

2. Creative Application

AI Matching Game: Teams match real-world problems (e.g., detecting cancer) to the correct AI solution type (e.g., Computer Vision).

Design Your AI Solution:

Students work in groups to design a solution for a local or ecological problem. They pitch:

- The problem.
- The AI technology used.
- Ethical/Safety considerations.

3. Evaluation

- Self-Assessment Rubric.
- Padlet Reflection: "What was surprising?"