

## Helping AI Learn from Mistakes

Artificial Intelligence (AI) isn't always right. Sometimes it makes surprising mistakes because it hasn't learned enough yet, or because it confuses things that look or sound alike.

When we see an AI mistake, we can do two things:

1. **Analyze the error** – Why might the AI have made this mistake?
2. **Suggest feedback** – What correction would help it improve for the future?

You will be the **AI trainer** today. Read the scenarios below, spot the errors, and write your analysis and feedback.

### Guided Example

**Scenario:** An AI translation app was asked to translate the sentence: "The cat is on the mat." It responded with: "The dog is on the rug."

**Why might the AI have made this mistake?** → It confused "cat" with "dog," and "mat" with "rug," since they appear in similar contexts in training data.

**What feedback would help it improve?** → Correct the AI by teaching it that *cat* = *cat*, *dog* = *perro*, and *mat* = *tapete* in Spanish, and provide more examples with cats and mats.

**Scenario A:** A student types: "What is  $9 \times 7$ ?" The AI replies: "63,000."

1. Why might the AI have made this mistake?

2. What feedback would help it improve?



**Scenario B:** A person uploads a picture of a golden retriever. The AI labels it: "Lion."

3. Why might the AI have made this mistake?

4. What feedback would help it improve?