## Machine Learning Problem Formulation

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## A Customer Problem

- A customer is asking your help for Automated Video Feedback App for Gym Workouts
  - Business motivation:
  - Failure to perform workouts correctly can lead to poor results, wasting time, and an increased risk of injuries
  - Personal trainers offer expert advice but come at a high cost and may not always be available when needed



## **Problem Description**

- Our goal is to develop a computer vision application that allows users to upload videos of their gym workouts and receive feedback on their performance. Potential feedback examples:
  - Identifying incorrect exercise form
  - Provide a detailed text feedback on specific workout changes to improve
  - Suggesting different exercises for targeted muscle groups
  - Estimating calorie burn based on the observed workout

## Your Turn

- Help your team to scope the problem
- Propose some machine learning learnable problems!

"Acquire knowledge and impart it to the people."

"Seek knowledge from the Cradle to the Grave."