



清华大学
Tsinghua University

FPTU AI CLUB ML CLASS

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Agenda

01

What is ML

02

Why ML

03

Types of ML

04

Challenge,
Testing

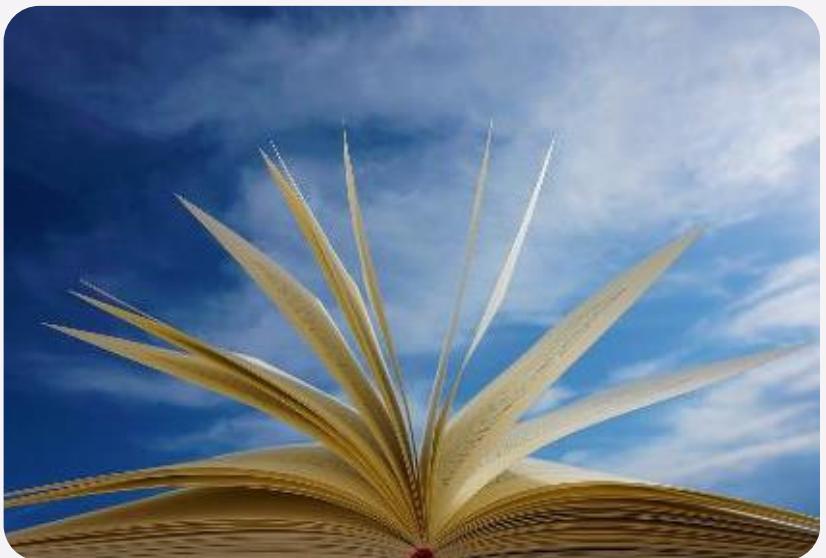
05

End2End ML
PRJ

01.What is ML?



Machine Learning



Machine learning is the science (and art) of programming computers so they can learn from data.

Training set: The examples that the system uses to learn

Model: the part of ML system that learns and makes predictions

Performance: Accuracy (ratio of correctly)



Quiz



How would you define ML?

2. Why ML

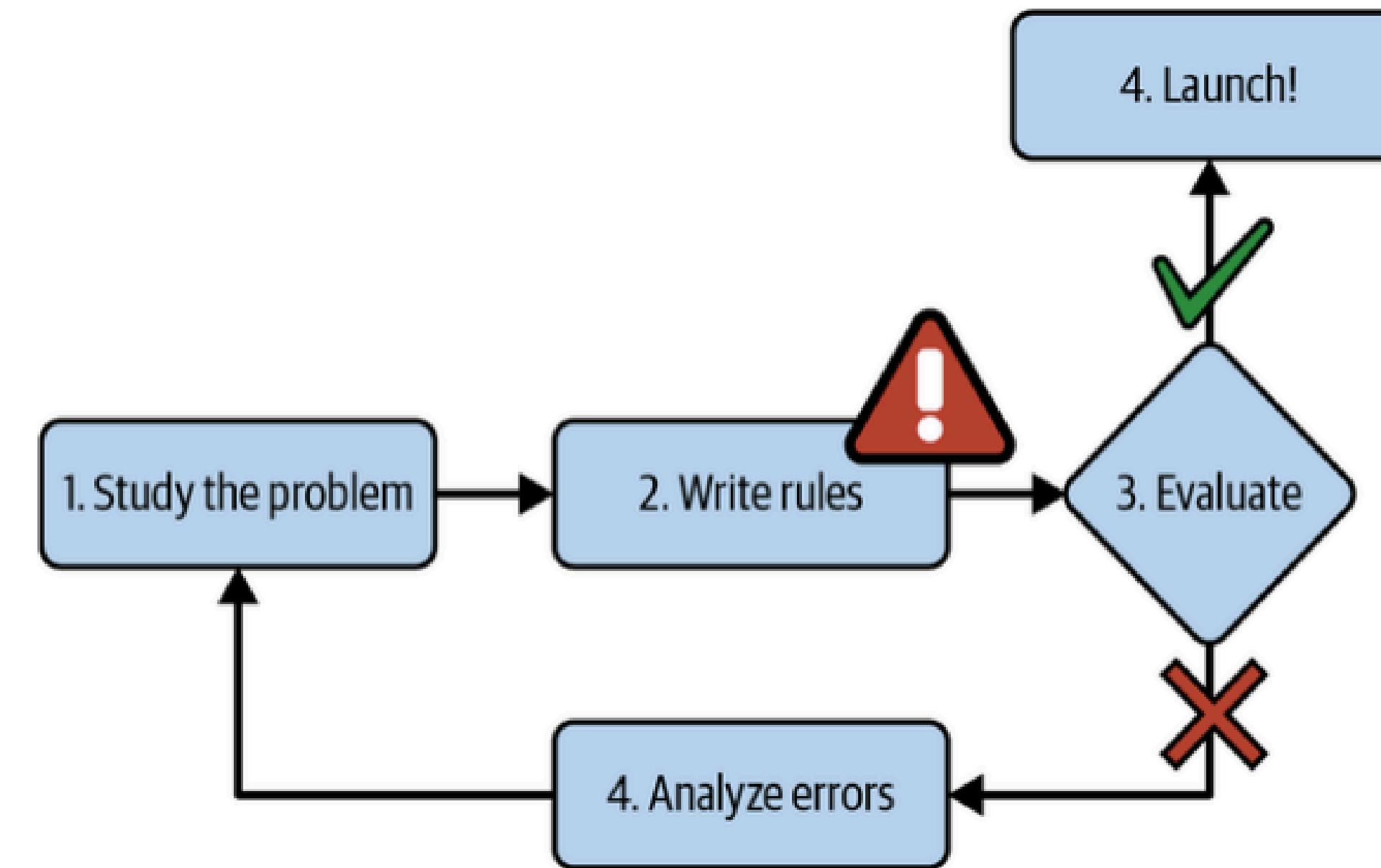


Some cases

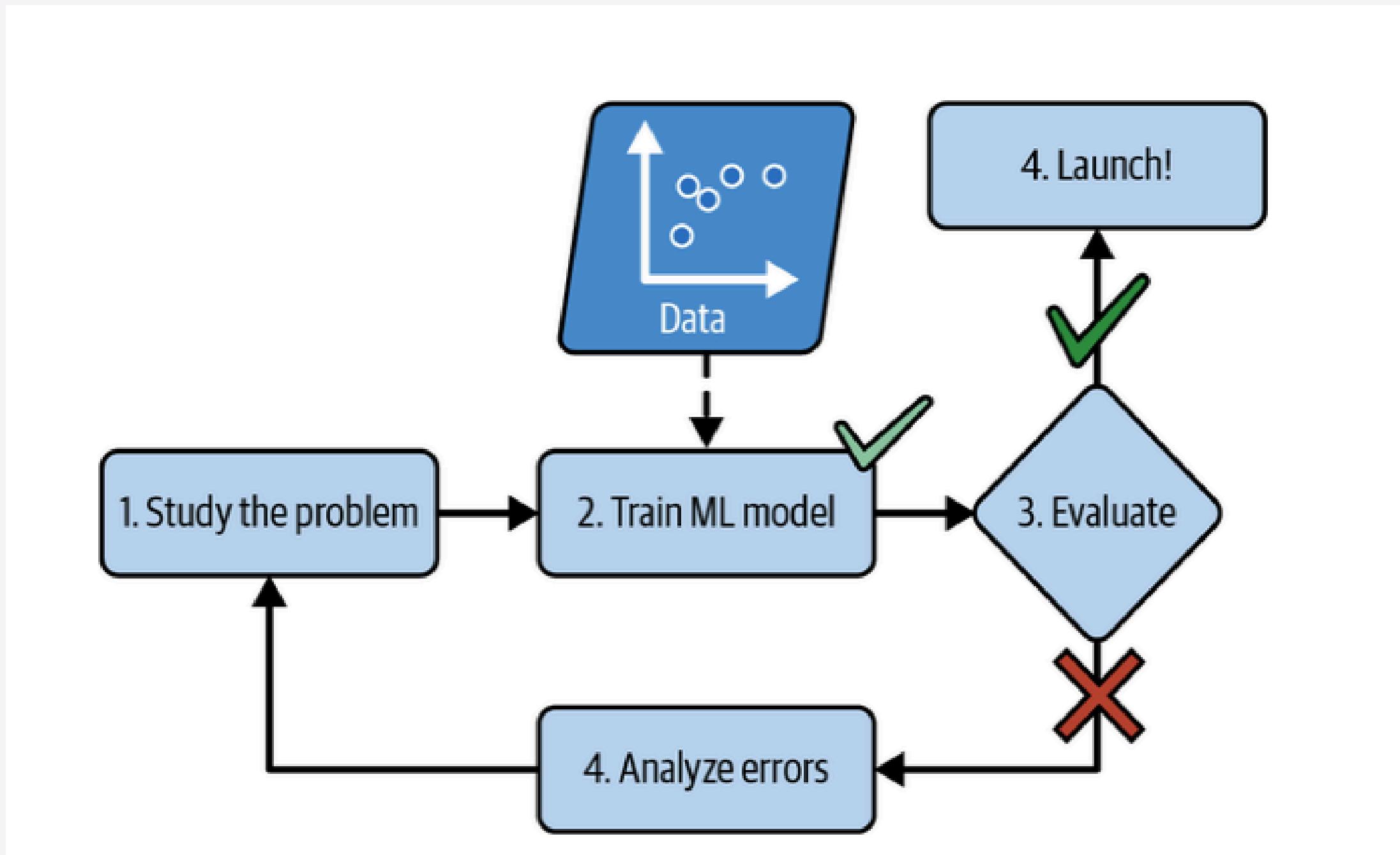
- Spam Filter



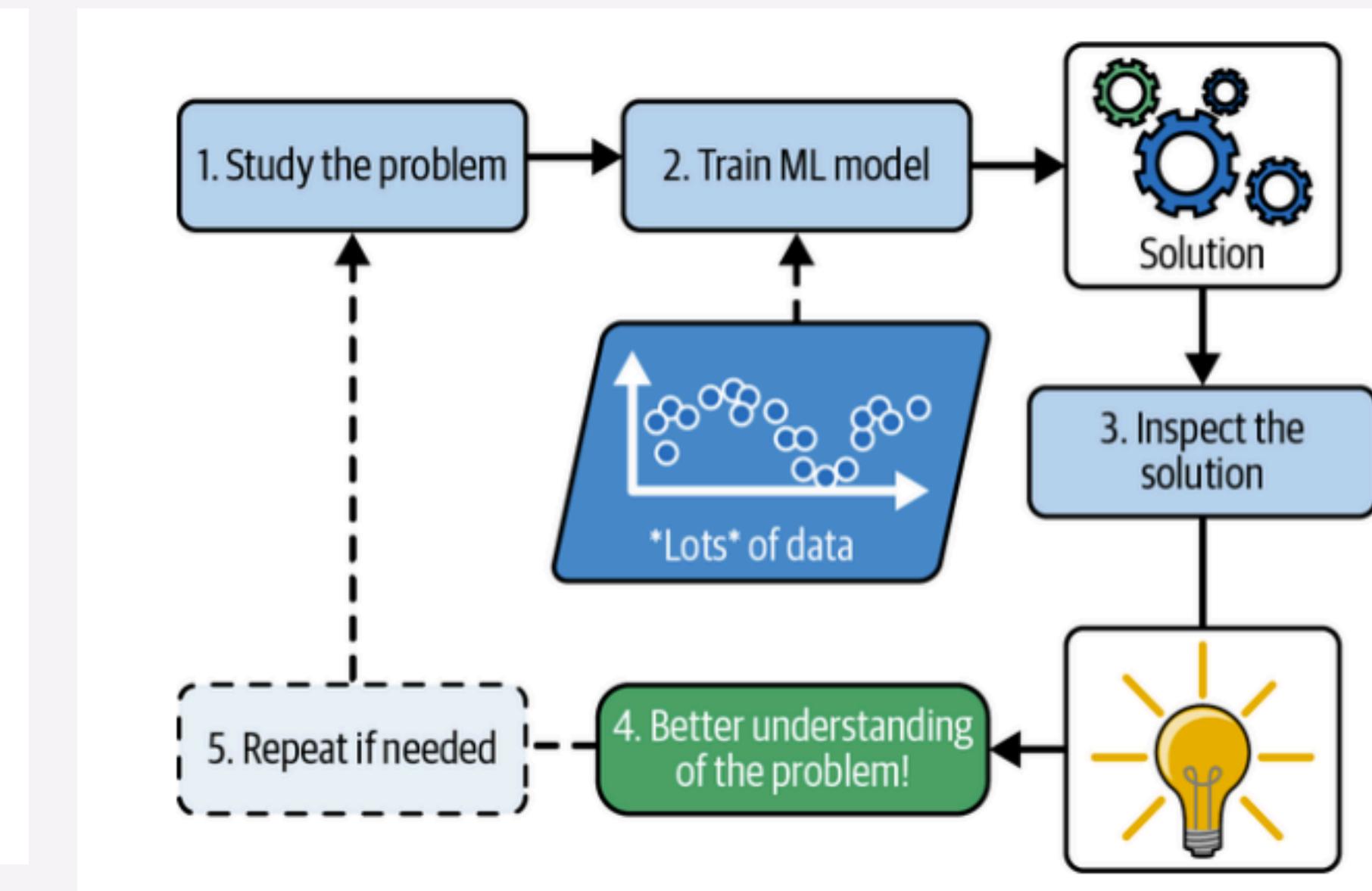
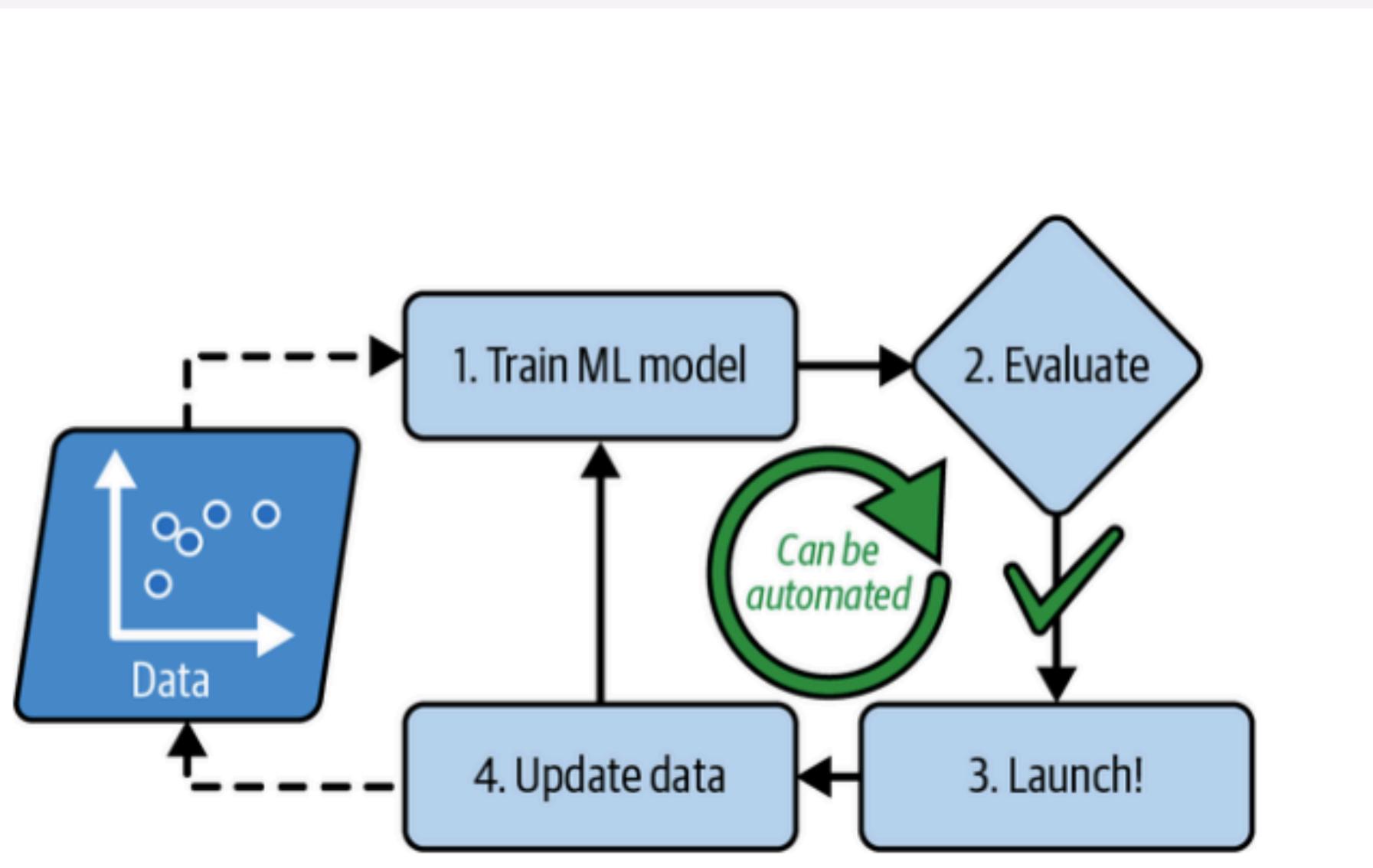
Traditional Approach



Machine Learning Approach



Automatically and Data Mining



03.Types of ML



4 Types



Supervised Learning

Unsupervised Learning

Self-Supervised Learning

Reinforcement Learning

Batch Learning

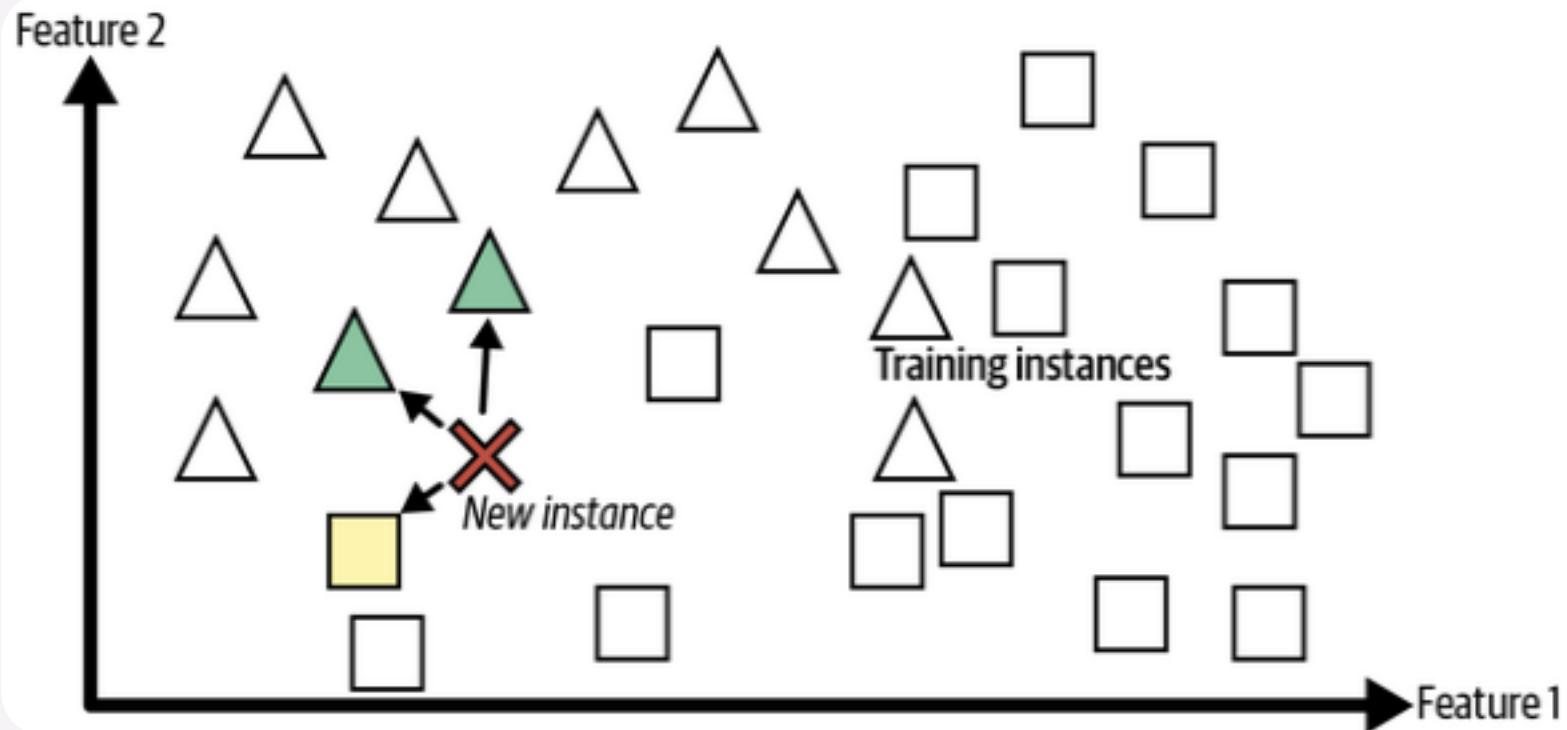
1 time learning

Online Learning

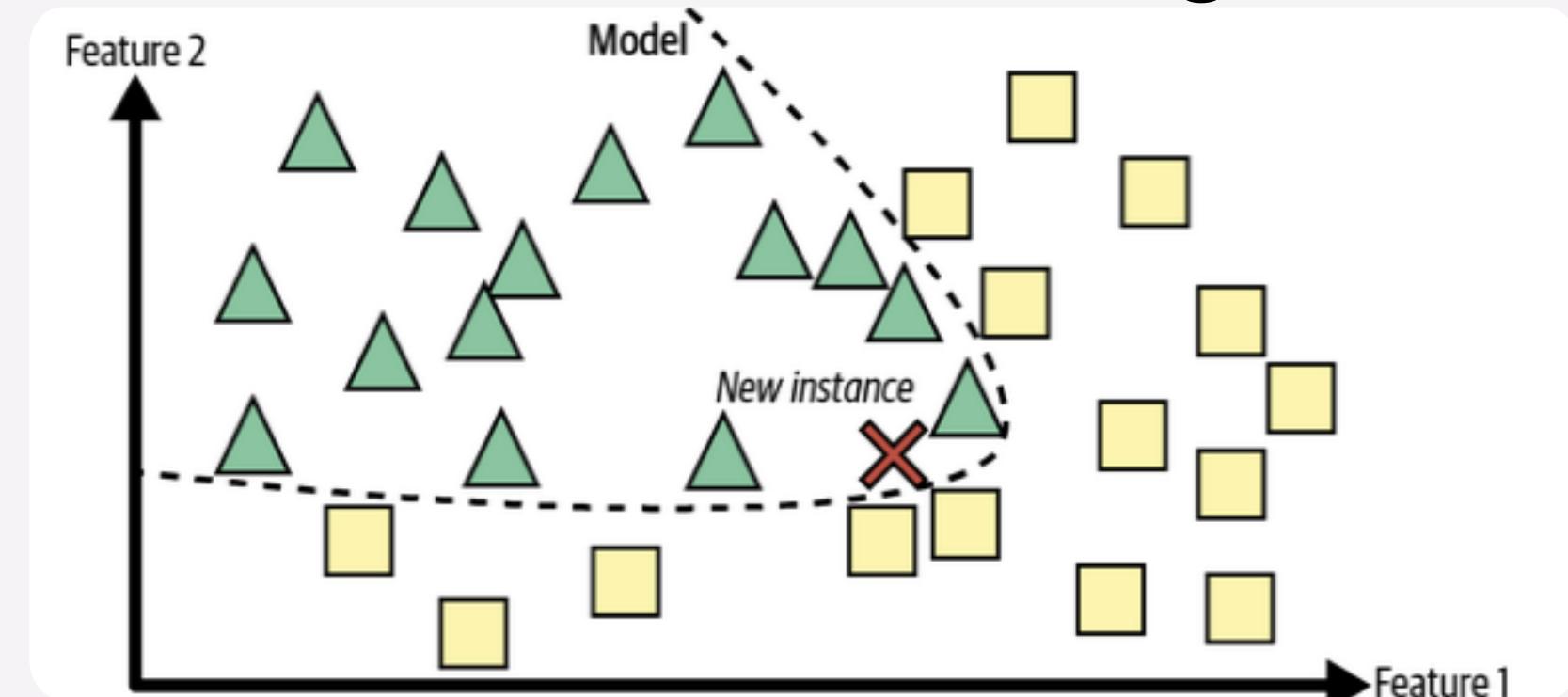


n-times learning

Instance-based Learning vs Model-based Learning



01. Instance-based Learning



02. Model-based Learning

04.Challenge



05. End2End





Thank You