

Data Science



By:
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Supervised Learning - I

Supervised Learning - 1

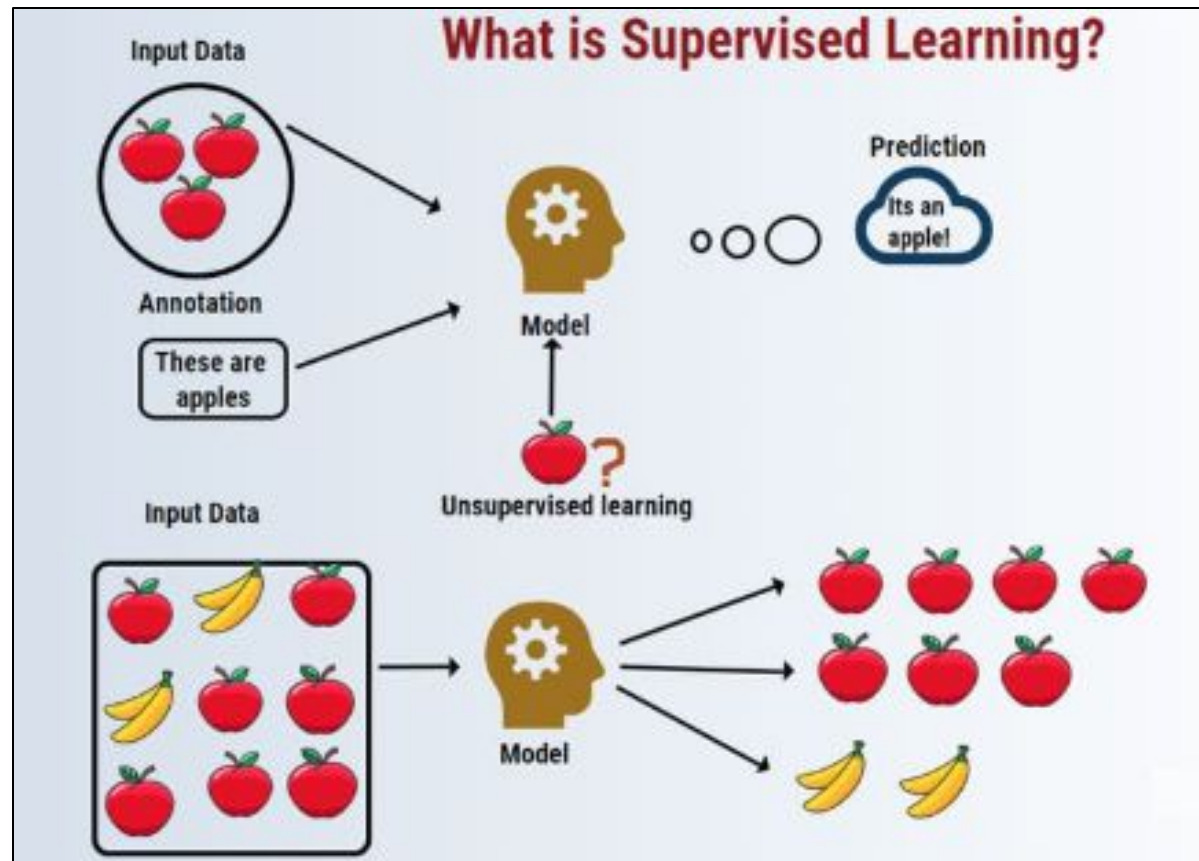
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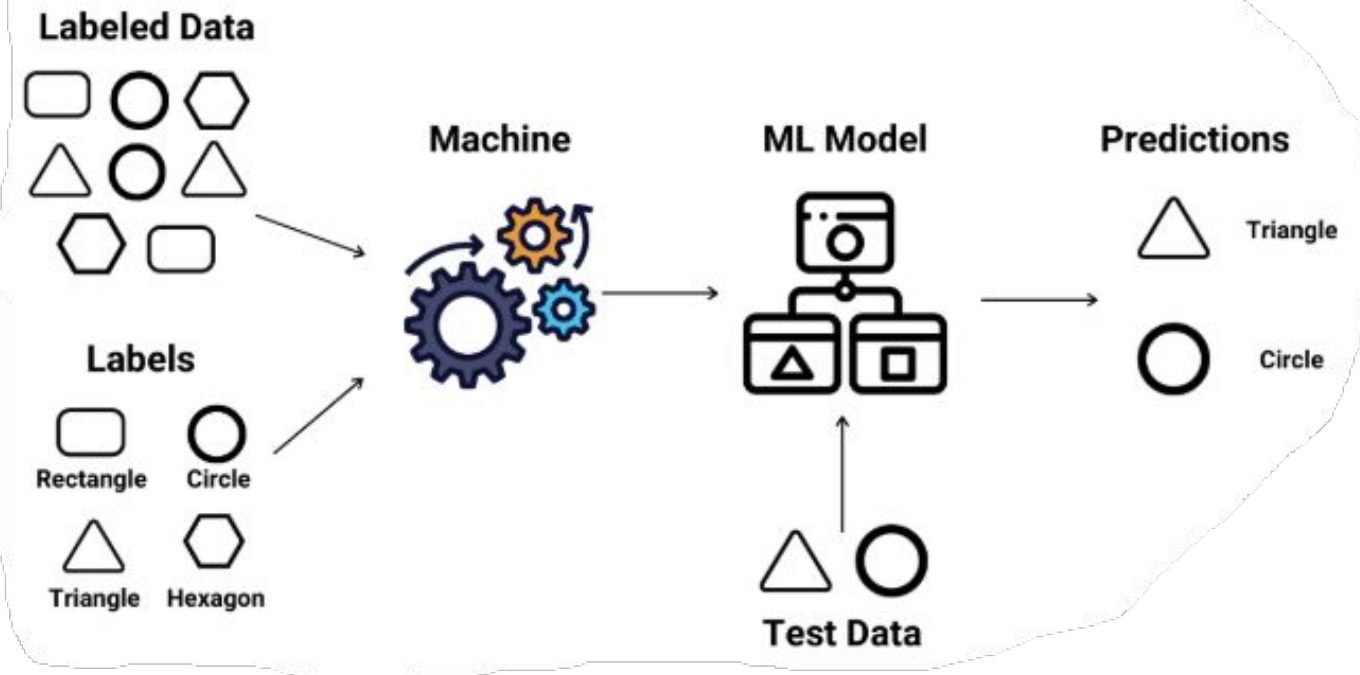
Supervised Learning:

Supervised learning is a machine learning paradigm where an algorithm learns a function from labeled training data, consisting of input-output pairs, to make predictions about unseen data.

- The goal of supervised learning is for the trained model to accurately predict the output for new, unseen data.
- Supervised learning is commonly used for tasks like **classification** (predicting a category, e.g., spam or not spam) and **regression** (predicting a continuous value, e.g., house prices).



Supervised Learning



Real-Life Examples of Classification

- Gmail → Spam vs. Not Spam
- Netflix → Movie recommendation (genre classification)
- Banking → Loan approval (high risk vs. low risk)
- Medical → Cancer detection (positive/negative)

