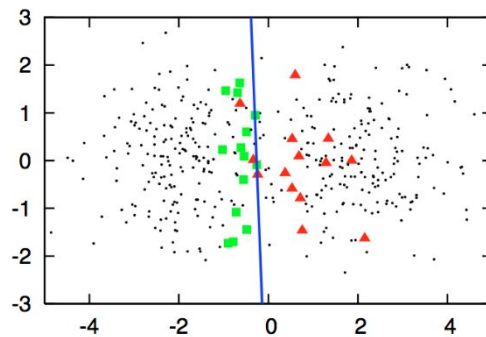
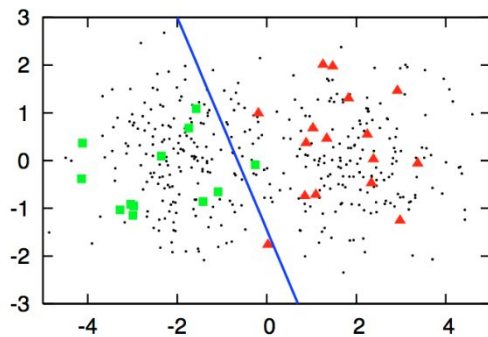
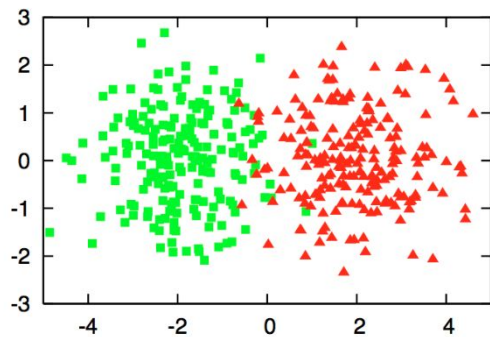


Active learning

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Motivation



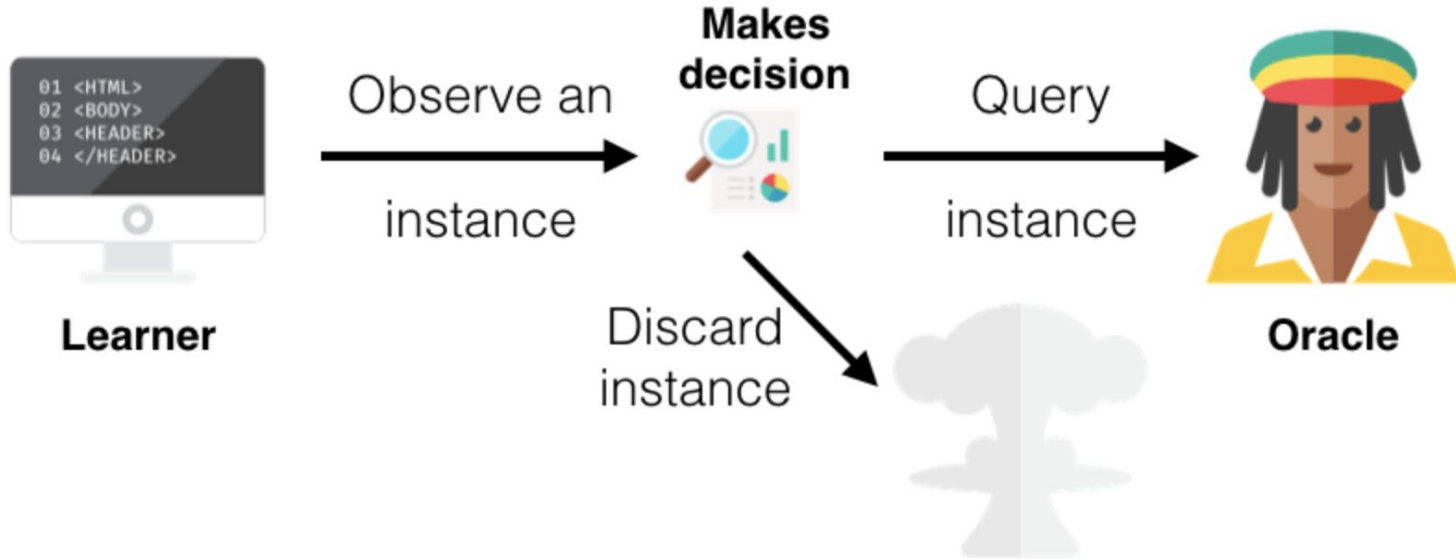
1. Traditional methods (passive learning) and its drawbacks
2. Active learning - when it is better approach?

Typical scenarios in active learning

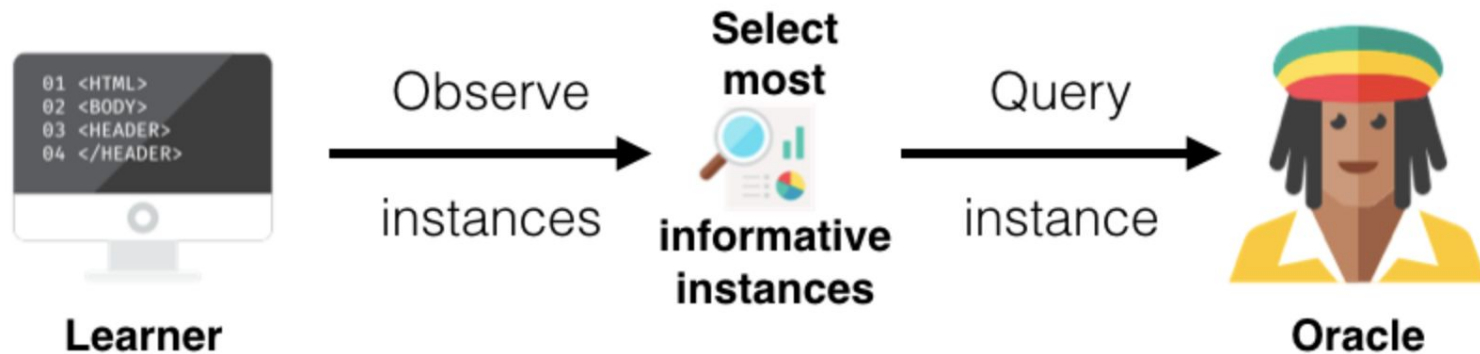
1. Membership query synthesis



2. Stream-based selective sampling



3. Pool-based sampling



Typical scenarios in active learning

| Instances | Label A | Label B | Label C |
|-----------|---------|---------|---------|
| d_1 | 0.9 | 0.09 | 0.01 |
| d_2 | 0.2 | 0.5 | 0.3 |

- Least confidence - d_2
- Margin sampling - d_2
- Entropy sampling - d_2

Example of Active learning

Applications and modern research into Active Learning

Thank you for your attention :)

Sources:

<https://www.datacamp.com/community/tutorials/active-learning>