

# XG Boosting

XG Boost as a n optimized  
implementation of gradient boosting

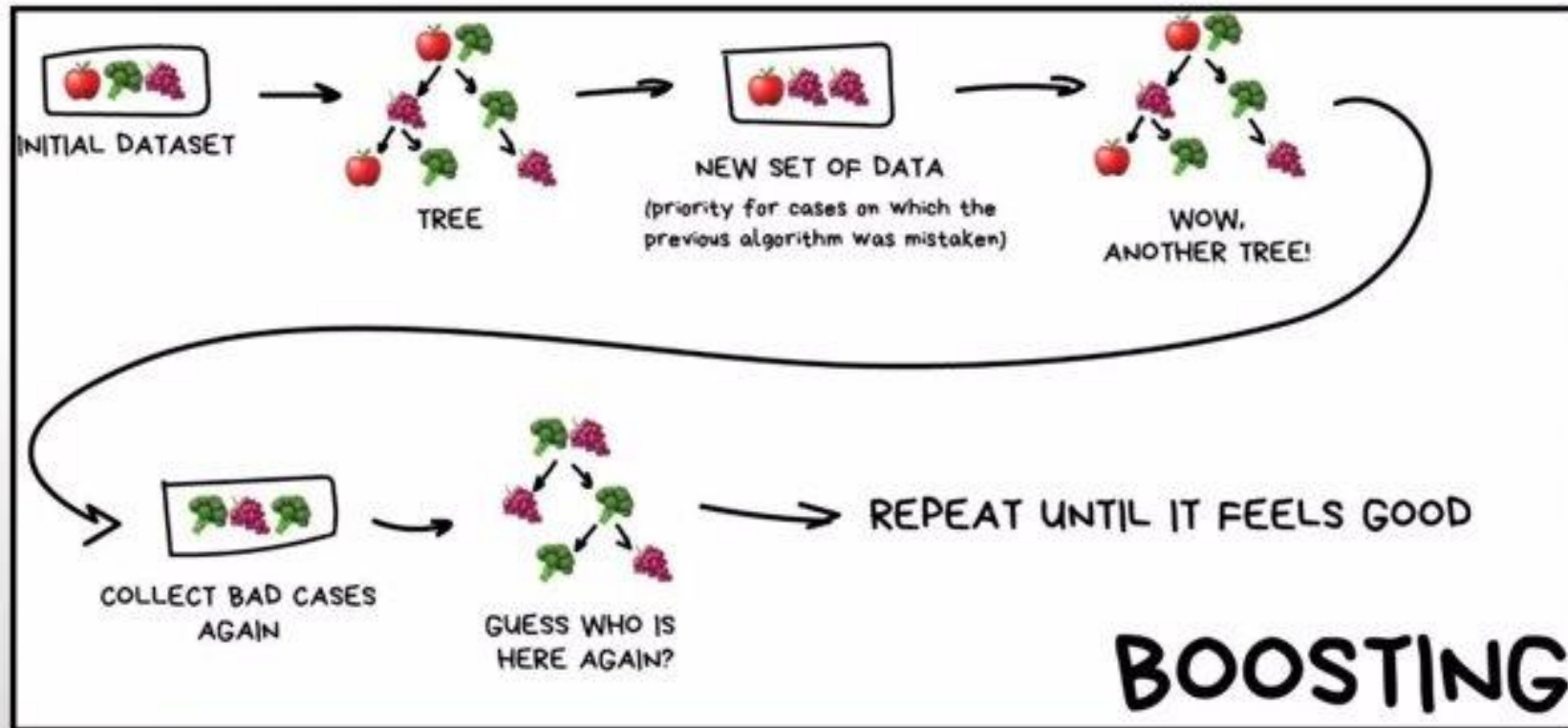
Distributed Machine learning process

But XG Boosting has additional  
functionality

More computational speed and more  
efficiency

# Gradient Boosting

## GRADIENT BOOSTING – A BOOSTING APPROACH



XG Boos used for

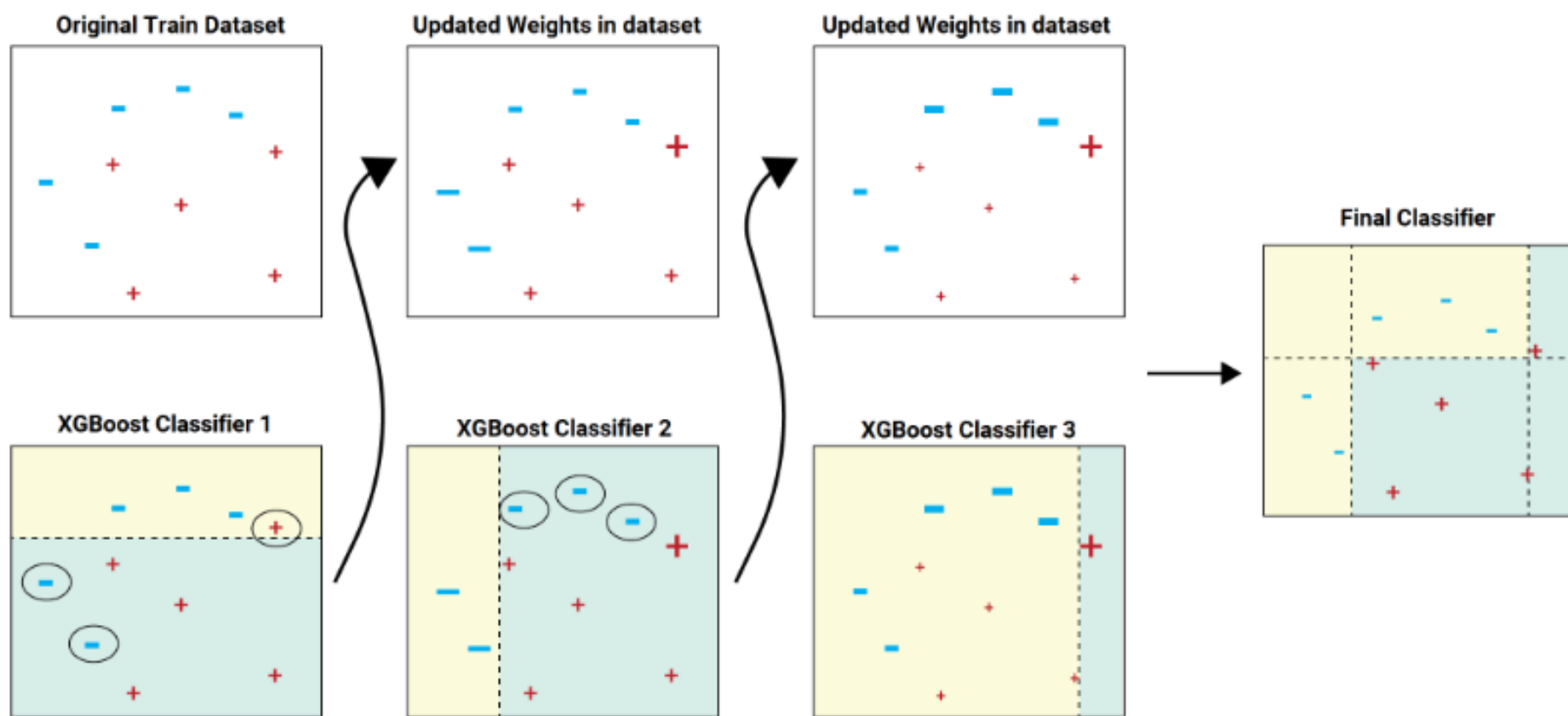
```
graph TD; A[XG Boos used for] --> B[Regression]; A --> C[Classification];
```

The diagram consists of a central blue rounded rectangle at the top containing the text 'XG Boos used for'. Two blue arrows point downwards from the bottom of this rectangle to two separate blue rounded rectangles below it. The left rectangle contains the word 'Regression' and the right rectangle contains the word 'Classification'. The entire diagram is enclosed in a hand-drawn orange border.

Regression

Classification

# XG Boosting – Ensemble Learning



XGBoost incorporates regularization techniques to prevent overfitting and improve generalization.

XGBoost utilizes tree pruning to reduce model complexity and enhance performance.

XGBoost provides a measure of feature importance, allowing you to identify the most influential features in your dataset.