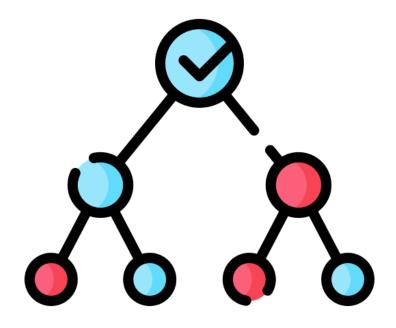
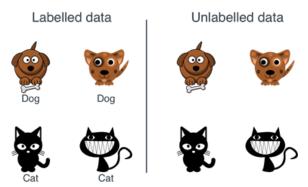
Siddhardhan

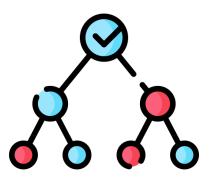
Decision Tree - intuition



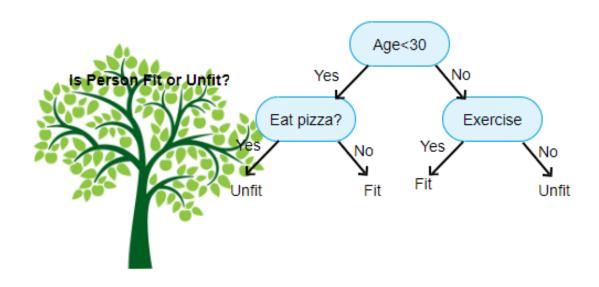
About Decision Tree model:

- 1. Supervised Learning Model
- 2. Used for both Classification & Regression
- 3. Builds Decision Nodes at each step
- 4. Basis of Tree-based models

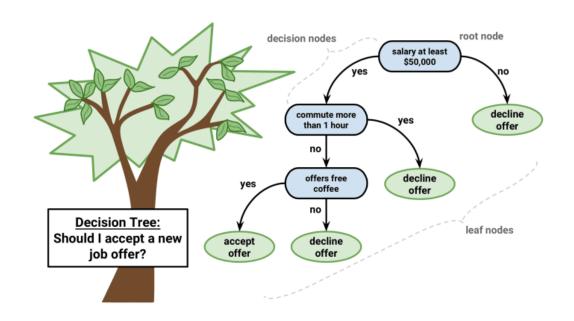




Decision Tree – examples:



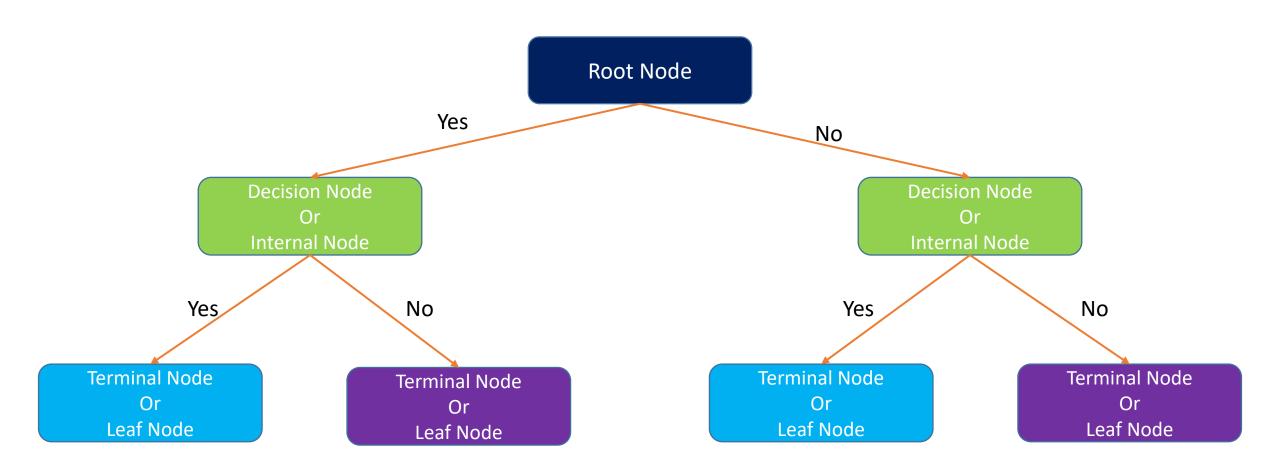
Picture credits: Al Time Journal



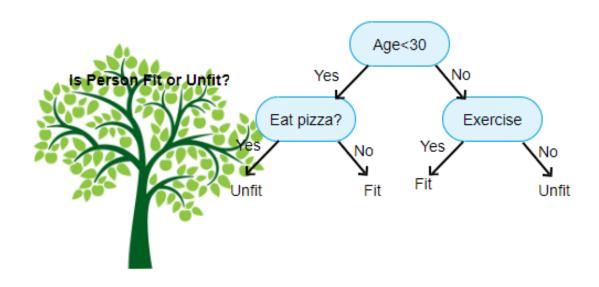
Picture credits:

https://towardsdatascience.com/decision-tree-hugging-b8851f853486

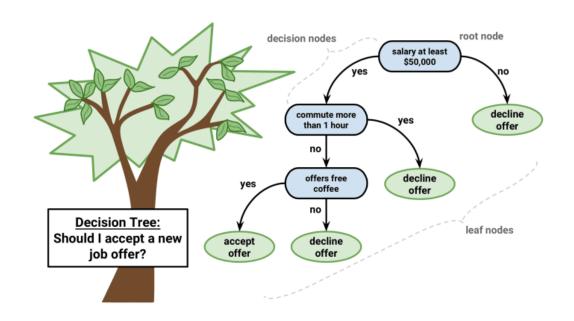
Decision Tree - Terminologies



Decision Tree – examples:



Picture credits: Al Time Journal



Picture credits:

https://towardsdatascience.com/decision-tree-hugging-b8851f853486

Advantages:

- 1. Can be used for both Classification & Regression
- 2. Easy to interpret
- 3. No need for normalization or scaling
- 4. Not sensitive to outliers

Disadvantages:

- 1. Overfitting issue
- Small changes in the data alter the tree structure causing instability
- 3. Training time is relatively higher

