Decision Trees 101

Bert Gollnick
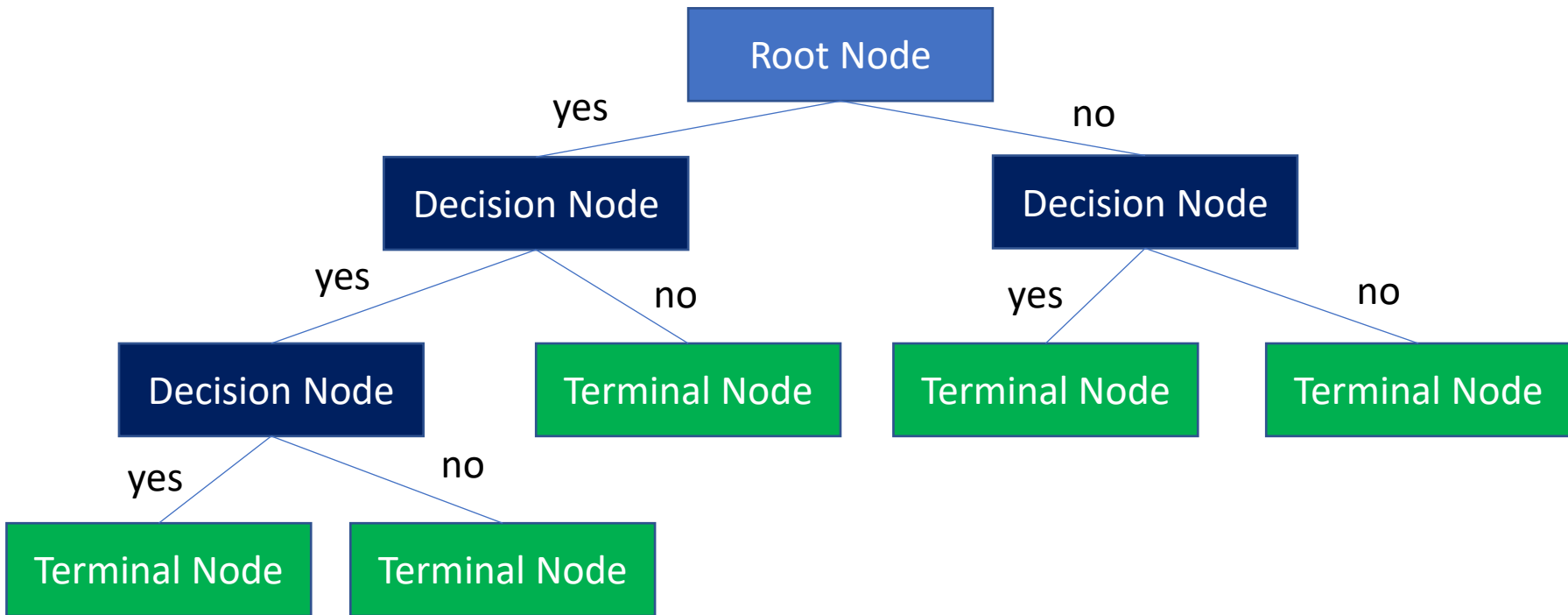
Decision Trees

- Classification and Regression technique
- CART – Classification and Regression Trees
- Tree is reversed (root at the top)
- Root, decision, and leaf nodes
- Based on nodes, the tree splits into edges
- Leads to the next node
- …
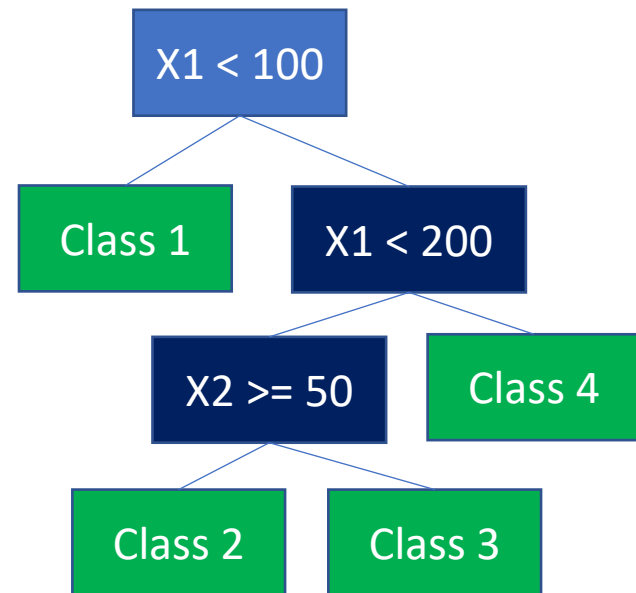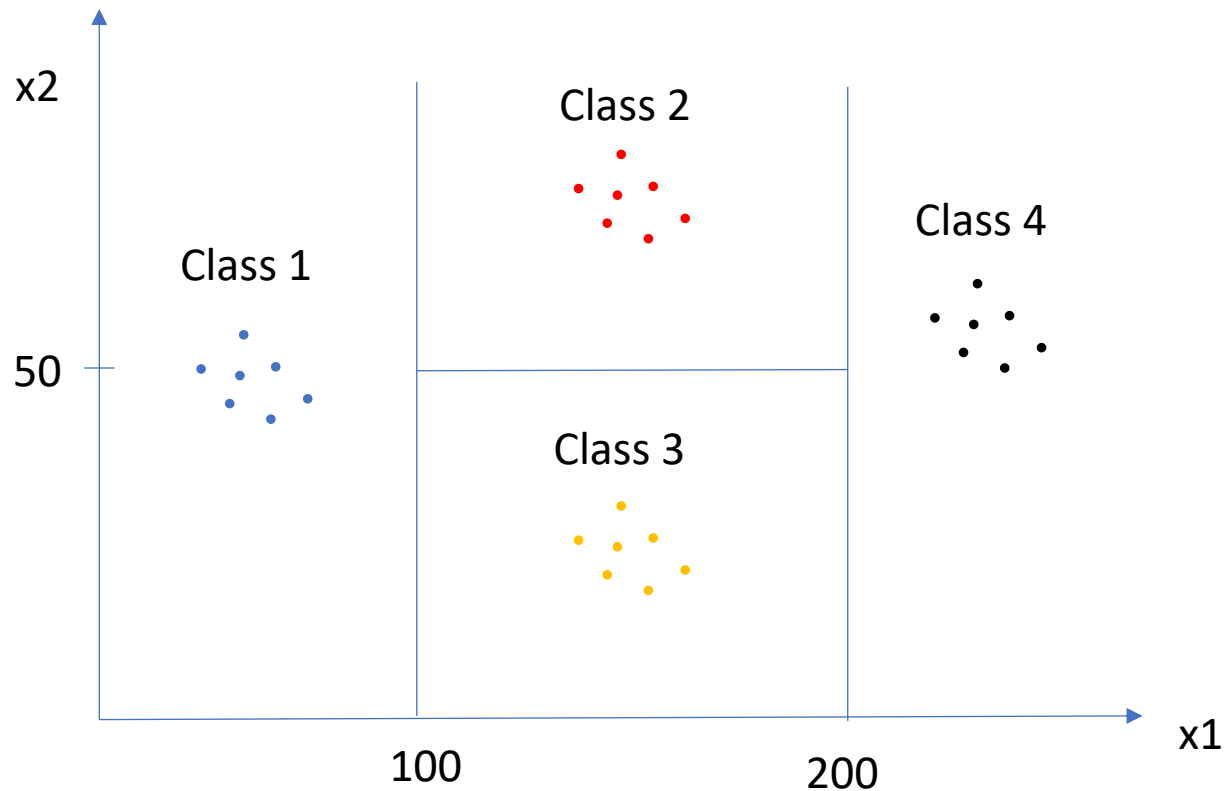- terminal edge, that does not split any more is decision leaf
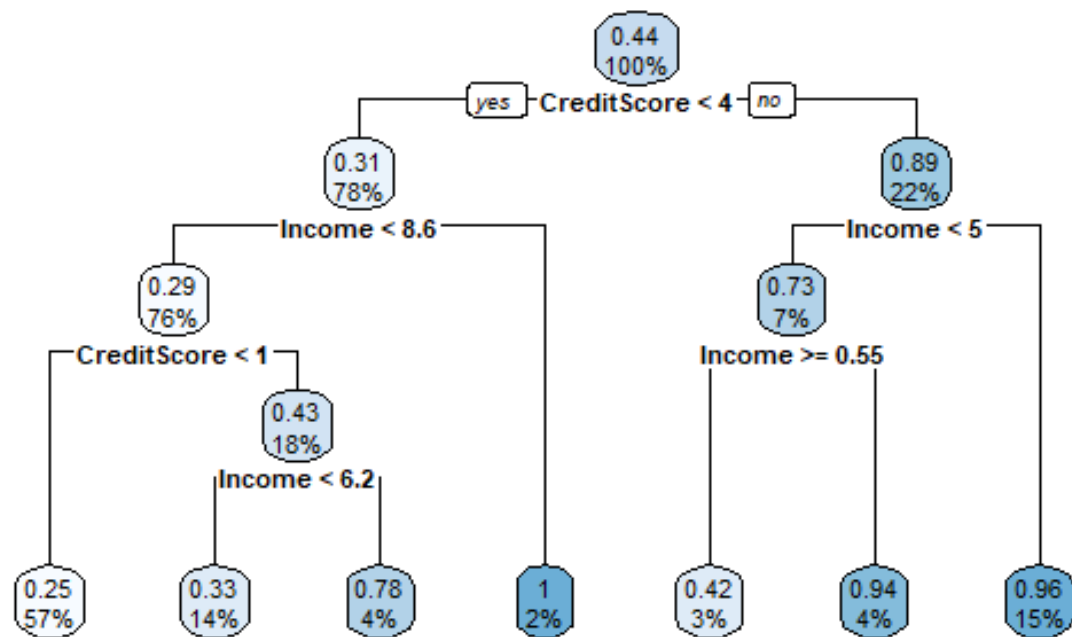
Decision Trees

General Example

Decision Trees

Principle

Decision Trees

Example: Credit Approval

Decision Trees

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- Simple to understand
- Simple to visualise
- Numerical and categorical variables
- Used for classification and regression

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- Very prone to overfitting for deep decision trees
- Very prone to underfitting for flat decision trees