

TREE CLASSIFIER

Overall analysis and factor study

O

OUTLOOK

- root decision is based on outlook
Sunny: Further decision depends on humidity.

Overcast: Always leads to "yes" for play (4 instances).

Rainy: Further decision depends on windy.

T

OUTPUT = SUNNY

If humidity ≤ 75 : Play is "yes" (2 instances).

If humidity > 75 : Play is "no" (3 instances).

Insight: Lower humidity encourages outdoor play in sunny weather.

O

OUTPUT = OUTLOOK

Always leads to "yes" (4 instances).

- Insight: Overcast weather is favorable for play regardless of other conditions.

R

OUTPUT = RAINY

- If windy = TRUE: Play is "no" (2 instances).

If windy = FALSE: Play is "yes" (3 instances).

Insight: Rainy and non-windy conditions are suitable for play.

F

FACTORS:

1. Outlook: Primary factor dividing decisions.
2. Humidity: Critical in sunny weather.
3. Windy: Important in rainy weather.

OVERALL ANALYSIS

The model prioritizes **outlook** as the most influential factor.

Humidity affects decisions in sunny conditions, with high humidity discouraging play.

Windiness influences decisions in rainy conditions, where wind discourages play.