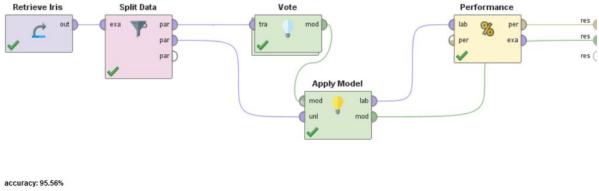
# TA1 - Agustín Fernández

## Ejercicio 1

## Votación



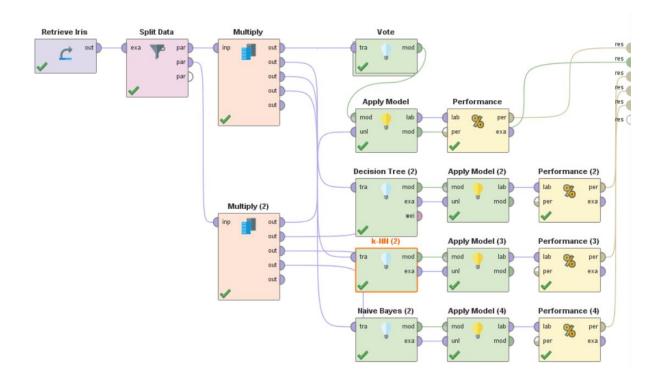
|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |  |
|-----------------------|------------------|----------------------|---------------------|-----------------|--|
| pred. Iris-setosa     | 16               | 0                    | 0                   | 100.00%         |  |
| pred. Iris-versicolor | 0                | 16                   | 1                   | 94.12%          |  |
| pred. Iris-virginica  | 0                | 1                    | 11                  | 91.67%          |  |
| class recall          | 100.00%          | 94.12%               | 91.67%              |                 |  |

#### Parámetros

Decision Tree: maximal depth 10, gain\_ratio, minimal leaf size 2, minimal size of split 4

k-NN: k 3, mixedMeasures, mixedEuclidianDistance

Naive Bayes: laplace correction



## **Decision Tree Performance**

#### accuracy: 93.33%

|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
|-----------------------|------------------|----------------------|---------------------|-----------------|
| pred. Iris-setosa     | 16               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 16                   | 2                   | 88.89%          |
| pred. Iris-virginica  | 0                | 1                    | 10                  | 90.91%          |
| class recall          | 100.00%          | 94.12%               | 83.33%              |                 |

## k-NN Performance

|  | ract |  |  |
|--|------|--|--|
|  |      |  |  |
|  |      |  |  |

| ассигасу: 97.78%      |                  |                      |                     |                 |
|-----------------------|------------------|----------------------|---------------------|-----------------|
|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
| pred. Iris-setosa     | 15               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 15                   | 1                   | 93.75%          |
| pred. Iris-virginica  | 0                | 0                    | 14                  | 100.00%         |
| class recall          | 100.00%          | 100.00%              | 93.33%              |                 |

# Naive Bayes Performance

## accuracy: 97.78%

|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
|-----------------------|------------------|----------------------|---------------------|-----------------|
| pred. Iris-setosa     | 15               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 15                   | 1                   | 93.75%          |
| pred. Iris-virginica  | 0                | 0                    | 14                  | 100.00%         |
| class recall          | 100.00%          | 100.00%              | 93.33%              |                 |

# Ejercicio 2

### **Decision Tree**

#### accuracy: 95.56%

|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
|-----------------------|------------------|----------------------|---------------------|-----------------|
| pred. Iris-setosa     | 16               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 16                   | 1                   | 94.12%          |
| pred. Iris-virginica  | 0                | 1                    | 11                  | 91.67%          |
| class recall          | 100.00%          | 94.12%               | 91.67%              |                 |

## k-NN

### accuracy: 97.78%

|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
|-----------------------|------------------|----------------------|---------------------|-----------------|
| pred. Iris-setosa     | 15               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 15                   | 1                   | 93.75%          |
| pred. Iris-virginica  | 0                | 0                    | 14                  | 100.00%         |
| class recall          | 100.00%          | 100.00%              | 93.33%              |                 |

## Naive Bayes

## accuracy: 97.78%

|                       | true Iris-setosa | true Iris-versicolor | true Iris-virginica | class precision |
|-----------------------|------------------|----------------------|---------------------|-----------------|
| pred. Iris-setosa     | 15               | 0                    | 0                   | 100.00%         |
| pred. Iris-versicolor | 0                | 15                   | 1                   | 93.75%          |
| pred. Iris-virginica  | 0                | 0                    | 14                  | 100.00%         |
| class recall          | 100.00%          | 100.00%              | 93.33%              |                 |