Roll No: FA22-RCS-012_Assignment02

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Report

These are my results when I input different attributes in arff file and ran J48 classifier on it using WEKA tool:

```
=== Run information ===
Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2
Relation: names
Instances: 100
Attributes: 6
       names
       gender
       even or odd
       starting from vowel
       positive or negative
       output from positive negative
Test mode: 10-fold cross-validation
=== Classifier model (full training set) ===
J48 pruned tree
Positive or negative = +: 1 (50.0)
```

Positive or negative = -: 0 (50.0)

Number of Leaves: 2

Size of the tree: 3

Time taken to build model: 0.01 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 100 100 %

Incorrectly Classified Instances 0 0 %

Kappa statistic 1

Mean absolute error 0

Root mean squared error 0

Relative absolute error 0 %

Root relative squared error 0 %

Total Number of Instances 100

=== Detailed Accuracy By Class ===

TP Rate FP Rate Precision Recall F-Measure MCC ROC Area PRC Area Class

 $1.000 \quad 0.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 0$

 $1.000 \quad 0.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 1.000 \quad 1$

Weighted Avg. 1.000 0.000 1.000 1.000 1.000 1.000 1.000

=== Confusion Matrix ===

3. Write a paragraph about your experience of working with the standard ML pipeline in your own words:

My experience with the standard ML pipeline was very constructive and it gave me hands on experience about how we can use many different attributes to map on outputs so we can apply machine learning algorithms on the given dataset.

100% correctly classified instances were achieved.