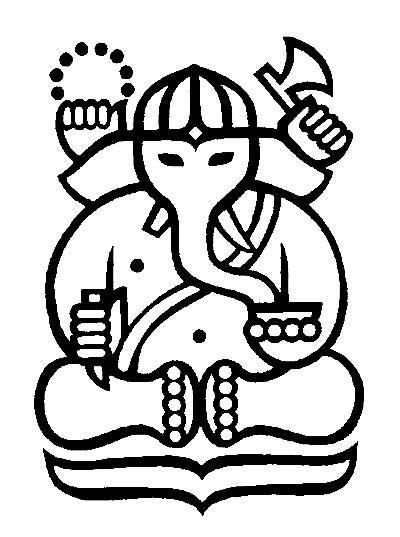
IF4071 Pembelajaran Mesin

**MEMBUAT CLASSIFIER BARU MYID3 DAN MYJ48**



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**HASIL EKSEKUSI TERHADAP DATA TES**

Data: weather.nominal.arff

|  |  |  |
| --- | --- | --- |
|  | MyID3 | MyJ48 |
| Hasil Build Classifier | MyID3  outlook = sunny  | humidity = high: no  | humidity = normal: yes  outlook = overcast: yes  outlook = rainy  | windy = TRUE: no  | windy = FALSE: yes | MyJ48  outlook = sunny  | humidity = high: no 0.0 3.0  | humidity = normal: yes 2.0 0.0  outlook = overcast: yes 4.0 0.0  outlook = rainy  | windy = TRUE: no 0.0 2.0  | windy = FALSE: yes 3.0 0.0 |
| Hasil Classify Using Model | overcast,cool,normal,TRUE,yes | overcast,cool,normal,TRUE,yes |

Data: weather.numeric.arff

|  |  |  |
| --- | --- | --- |
|  | MyID3 | MyJ48 |
| Hasil Build Classifier | MyID3  outlook = sunny  | humidity = <=80: yes  | humidity = >80: no  outlook = overcast: yes  outlook = rainy  | windy = TRUE: no  | windy = FALSE: yes | MyJ48  temperature = <=83.0  | outlook = sunny  | | humidity = <=80.0: yes 2.0 0.0  | | humidity = >80.0: no 0.0 2.0  | outlook = overcast: yes 4.0 0.0  | outlook = rainy  | | windy = TRUE: no 0.0 2.0  | | windy = FALSE: yes 3.0 0.0  temperature = >83.0: no 0.0 1.0 |
| Hasil Classify Using Model | sunny,81,70,TRUE,yes | sunny,81,70,TRUE,yes |

Data: iris.arff

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| --- | --- | --- |
|  | MyID3 | MyJ48 |
| Hasil Build Classifier | MyID3  petallength = <=1: Iris-setosa  petallength = >1  | sepallength = <=5  | | sepalwidth = <=2: Iris-versicolor  | | sepalwidth = >2: Iris-versicolor  | sepallength = >5  | | sepalwidth = <=2: Iris-virginica  | | sepalwidth = >2: Iris-virginica | MyJ48  petallength = <=1.9: Iris-setosa 50.0 0.0 0.0  petallength = >1.9  | sepallength = <=5.4: Iris-versicolor 0.0 6.0 1.0  | sepallength = >5.4  | | sepalwidth = <=3.3: Iris-virginica 0.0 43.0 44.0  | | sepalwidth = >3.3: Iris-virginica 0.0 1.0 5.0 |
| Hasil Classify Using Model | 4.9,1.9,0.9,1,Iris-setosa | 4.9,1.9,0.9,1,Iris-setosa |

**PERBANDINGAN DENGAN HASIL ID3 & J48 WEKA**

Data: weather.nominal.arff

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| --- | --- | --- |
|  | ID3 WEKA | MyID3 |
| Hasil Build Classifier | Id3  outlook = sunny  | humidity = high: no  | humidity = normal: yes  outlook = overcast: yes  outlook = rainy  | windy = TRUE: no  | windy = FALSE: yes | MyID3  outlook = sunny  | humidity = high: no  | humidity = normal: yes  outlook = overcast: yes  outlook = rainy  | windy = TRUE: no  | windy = FALSE: yes |
| Hasil Classify Using Model | overcast,cool,normal,TRUE,yes | overcast,cool,normal,TRUE,yes |

|  |  |  |
| --- | --- | --- |
|  | J48 WEKA | MyJ48 |
| Hasil Build Classifier | J48 pruned tree  ------------------  outlook = sunny  | humidity = high: no (3.0)  | humidity = normal: yes (2.0)  outlook = overcast: yes (4.0)  outlook = rainy  | windy = TRUE: no (2.0)  | windy = FALSE: yes (3.0)  Number of Leaves : 5  Size of the tree : 8 | MyJ48  outlook = sunny  | humidity = high: no 0.0 3.0  | humidity = normal: yes 2.0 0.0  outlook = overcast: yes 4.0 0.0  outlook = rainy  | windy = TRUE: no 0.0 2.0  | windy = FALSE: yes 3.0 0.0 |
| Hasil Classify Using Model | overcast,cool,normal,TRUE,yes | overcast,cool,normal,TRUE,yes |

Data: weather.numeric.arff

|  |  |  |
| --- | --- | --- |
|  | ID3 WEKA | MyID3 |
| Hasil Build Classifier | weka.core.UnsupportedAttributeTypeException: weka.classifiers.trees.Id3: Cannot handle numeric attributes! | MyID3  outlook = sunny  | humidity = <=80: yes  | humidity = >80: no  outlook = overcast: yes  outlook = rainy  | windy = TRUE: no  | windy = FALSE: yes |
| Hasil Classify Using Model | - | sunny,81,70,TRUE,yes |

|  |  |  |
| --- | --- | --- |
|  | J48 WEKA | MyJ48 |
| Hasil Build Classifier | J48 unpruned tree  ------------------  outlook = sunny  | humidity <= 75: yes (2.0)  | humidity > 75: no (3.0)  outlook = overcast: yes (4.0)  outlook = rainy  | windy = TRUE: no (2.0)  | windy = FALSE: yes (3.0)  Number of Leaves : 5  Size of the tree : 8 | MyJ48  temperature = <=83.0  | outlook = sunny  | | humidity = <=80.0: yes 2.0 0.0  | | humidity = >80.0: no 0.0 2.0  | outlook = overcast: yes 4.0 0.0  | outlook = rainy  | | windy = TRUE: no 0.0 2.0  | | windy = FALSE: yes 3.0 0.0  temperature = >83.0: no 0.0 1.0 |
| Hasil Classify Using Model | sunny,81,70,TRUE,yes | sunny,81,70,TRUE,yes |

Data: iris.arff

|  |  |  |
| --- | --- | --- |
|  | ID3 | MyID3 |
| Hasil Build Classifier | weka.core.UnsupportedAttributeTypeException: weka.classifiers.trees.Id3: Cannot handle numeric attributes! | MyID3  petallength = <=1: Iris-setosa  petallength = >1  | sepallength = <=5  | | sepalwidth = <=2: Iris-versicolor  | | sepalwidth = >2: Iris-versicolor  | sepallength = >5  | | sepalwidth = <=2: Iris-virginica  | | sepalwidth = >2: Iris-virginica |
| Hasil Classify Using Model | - | 4.9,1.9,0.9,1,Iris-setosa |

|  |  |  |
| --- | --- | --- |
|  | J48 | MyJ48 |
| Hasil Build Classifier | J48 pruned tree  ------------------  petalwidth <= 0.6: Iris-setosa (50.0)  petalwidth > 0.6  | petalwidth <= 1.7  | | petallength <= 4.9: Iris-versicolor (48.0/1.0)  | | petallength > 4.9  | | | petalwidth <= 1.5: Iris-virginica (3.0)  | | | petalwidth > 1.5: Iris-versicolor (3.0/1.0)  | petalwidth > 1.7: Iris-virginica (46.0/1.0)  Number of Leaves : 5  Size of the tree : 9 | MyJ48  petallength = <=1.9: Iris-setosa 50.0 0.0 0.0  petallength = >1.9  | sepallength = <=5.4: Iris-versicolor 0.0 6.0 1.0  | sepallength = >5.4  | | sepalwidth = <=3.3: Iris-virginica 0.0 43.0 44.0  | | sepalwidth = >3.3: Iris-virginica 0.0 1.0 5.0 |
| Hasil Classify Using Model | 4.9,1.9,0.9,1,Iris-versicolor | 4.9,1.9,0.9,1,Iris-setosa |