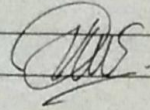


Date _____

Nama : Dimas Al-khusunji
NIM : 221810245
Kelas : 3SI2
No Absen : 10
Dosen : Ibnu Santoso SST., MT.
Mata Kuliah : Data Mining and Knowledge Management
Tanggal Ujian : 27 Oktober 2020

"Saya menyatakan bahwa ujian ini saya kerjakan dengan jujur sesuai dengan kemampuan saya sendiri dan tidak mengutip sebagian atau seluruh pekerjaan orang lain. Jika suatu saat saya melanggar ketentuan ujian, saya siap menerima konsekuensi yang berlaku."

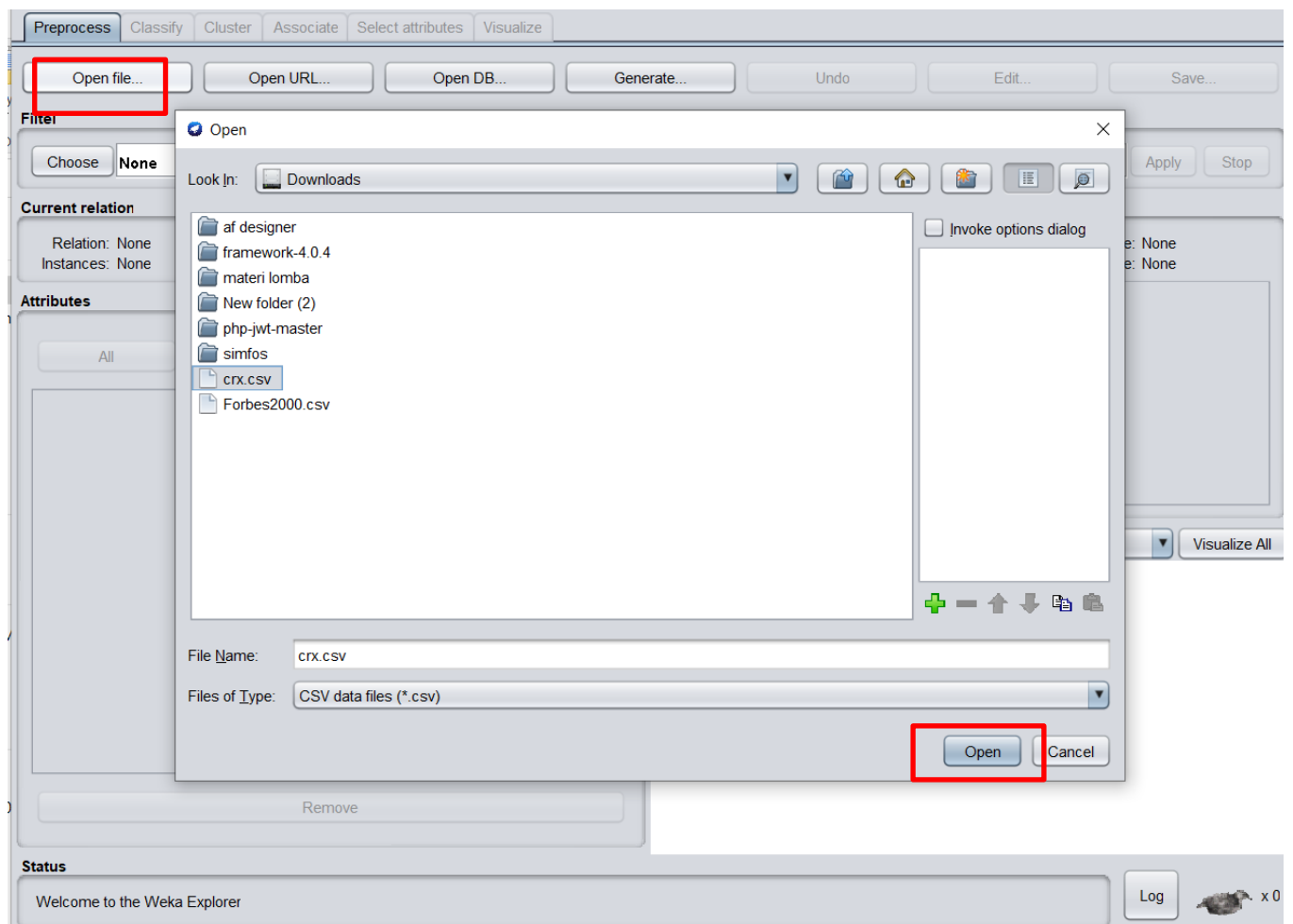


Dimas Al-khusunji

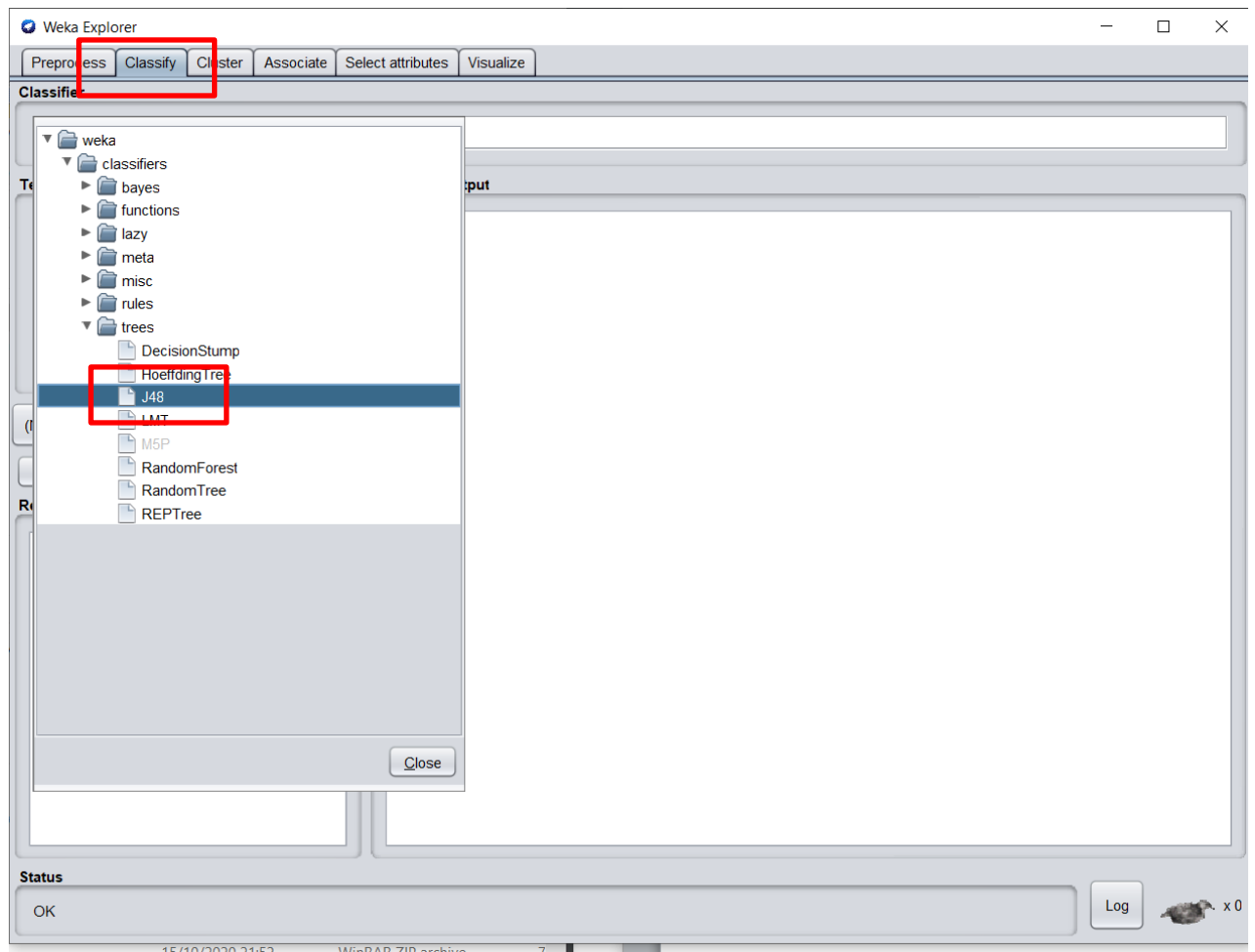
Nama : Dimas Al-khusuufi
NIM : 221810245
Kelas : 3SI2
No Absen : 10
Mata Kuliah : Data Mining n Knowledge Management
Dosen : Ibnu Santoso SST, MT

Japanesse Credit Screening

1. Membuka data



2. Memilih metode untuk ID3, pada weka menggunakan J48.



3. Membagi data menjadi training set sebesar 66% dari jumlah data.

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose J48 -C 0.25 -M 2

Test options

☐ Use training set

☐ Supplied test set Set...

☐ Cross-validation Folds 10

☒ Percentage split % 66

more options...

(Nom) v16

Start Stop

Result list (right-click for options)

14:52:26 - trees_J48

Classifier output

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances	198	84.2553 %
Incorrectly Classified Instances	37	15.7447 %
Kappa statistic	0.6801	
Mean absolute error	0.2032	
Root mean squared error	0.3418	
Relative absolute error	41.0193 %	
Root relative squared error	68.4314 %	
Total Number of Instances	235	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.752	0.079	0.891	0.752	0.816	0.688	0.893	0.836	+
	0.921	0.248	0.811	0.921	0.862	0.688	0.893	0.876	-
Weighted Avg.	0.843	0.170	0.848	0.843	0.841	0.688	0.893	0.857	

=== Confusion Matrix ===

```
a  b  <-- classified as
82  27 |  a = +
10 116 |  b = -
```

Status

OK Log x 0

15/10/2020 21:52 WinRAR 710 archive 7

=== Run information ===

Scheme: weka.classifiers.trees.J48 -C 0.25 -M 2

Relation: crx

Instances: 690

Attributes: 16

v1

v2

v3

v4

v5

v6

v7

v8

v9

v10

v11

v12

v13

v14

v15

v16

Test mode: split 66.0% train, remainder test

=== Classifier model (full training set) ===

J48 pruned tree

v9 = t

| v10 = t: + (228.0/21.0)

| v10 = f

| | v15 <= 444

| | | v7 = v

| | | | v4 = u

| | | | | v14 <= 112: + (16.57/1.57)

| | | | | v14 > 112

| | | | | | v15 <= 70: - (30.0/10.0)

| | | | | | v15 > 70: + (2.0)

| | | | | v4 = +

| | | | | | v13 = g: - (12.0/2.0)

| | | | | | v13 = s: + (3.0/1.0)

```

| | | | | v13 = p: - (0.0)
| | | | | v4 = l: - (0.0)
| | | v7 = h: + (27.24/8.24)
| | | v7 = bb
| | | | v3 <= 1.375: + (5.0/1.0)
| | | | v3 > 1.375: - (9.13/1.0)
| | | v7 = ff: - (5.05/1.0)
| | | v7 = j: - (1.01)
| | | v7 = z: + (0.0)
| | | v7 = o: + (0.0)
| | | v7 = dd: + (1.01/0.01)
| | | v7 = -: + (0.0)
| | v15 > 444: + (21.0/1.0)
v9 = f
| v3 <= 0.165
| | v7 = v
| | | v2 <= 35.58: - (18.72/3.44)
| | | v2 > 35.58: + (3.6/0.16)
| | v7 = h: - (0.0)
| | v7 = bb: + (1.24/0.08)
| | v7 = ff: - (4.96/0.64)
| | v7 = j: + (1.24/0.08)
| | v7 = z: - (0.0)
| | v7 = o: - (0.0)
| | v7 = dd: - (0.0)
| | v7 = -: + (1.24/0.08)
| v3 > 0.165: - (298.0/12.0)

```

Number of Leaves : 29

Size of the tree : 41

Time taken to build model: 0.01 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances	198	84.2553 %
--------------------------------	-----	-----------

Incorrectly Classified Instances	37	15.7447 %
Kappa statistic	0.6801	
Mean absolute error	0.2032	
Root mean squared error	0.3418	
Relative absolute error	41.0193 %	
Root relative squared error	68.4314 %	
Total Number of Instances	235	

=== Detailed Accuracy By Class ===

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Weighted Avg.	0.843	0.170	0.848	0.843	0.841	0.688	0.893	0.857	

=== Confusion Matrix ===

```

a  b  <-- classified as
82 27 | a = +
10 116 | b = -

```

4. Confusion Matrix

Berdasarkan hasil diatas, terlihat jumlah terklasifikasi benar sebesar 198. Sedangkan jumlah terklasifikasi salah sebesar 37.

- Hasil diatas memiliki presisi sebesar 0.891 untuk tanda + dan 0.811 untuk tanda –
 Hasil diatas memiliki recall sebesar 0.752 untuk tanda + dan 0.921 untuk tanda –
 Hasil diatas memiliki F-1 score sebesar 0.688 untuk tanda + dan untuk tanda –