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Modul XI

Praktikum

- Induksi aturan dari data training

RuleModel

```
if Kelembaban_Udara ≤ 82.500 then YA  (1 / 6)
if Cuaca = Cerah then TIDAK  (3 / 0)
if Cuaca = Mendung then YA  (0 / 2)
if Suhu ≤ 70.500 then YA  (0 / 1)
else TIDAK  (0 / 0)

correct: 12 out of 13 training examples.
```

- Model induksi aturan berdasarkan Performance Vector

accuracy: 65.00% +/- 45.00% (micro average: 71.43%)

	true TIDAK	true YA	class precision
pred. TIDAK	2	1	66.67%
pred. YA	3	8	72.73%
class recall	40.00%	88.89%	

- Hasil aturan asosiasi
  - FP-Growth

No. of Sets: 26
Total Max. Size: 4

Min. Size: 1
Max. Size: 4
Contains Item:
Update View

Size	Support	Item 1	Item 2	Item 3	Item 4
1	0.500	Kelembaban_Udara			
1	0.429	Berangin			
1	0.429	Suhu			
1	0.357	Cuaca = Cerah			
1	0.357	Cuaca = Hujan			
1	0.286	Cuaca = Mendung			
2	0.214	Kelembaban_Udara	Berangin		
2	0.214	Kelembaban_Udara	Suhu		
2	0.214	Kelembaban_Udara	Cuaca = Cerah		
2	0.143	Kelembaban_Udara	Cuaca = Hujan		
2	0.143	Kelembaban_Udara	Cuaca = Mendung		
2	0.143	Berangin	Suhu		
2	0.143	Berangin	Cuaca = Cerah		
2	0.143	Berangin	Cuaca = Hujan		
2	0.143	Berangin	Cuaca = Mendung		
2	0.214	Suhu	Cuaca = Cerah		

No. of Sets: 26
Total Max. Size: 4

Min. Size: 1
Max. Size: 4
Contains Item:
Update View

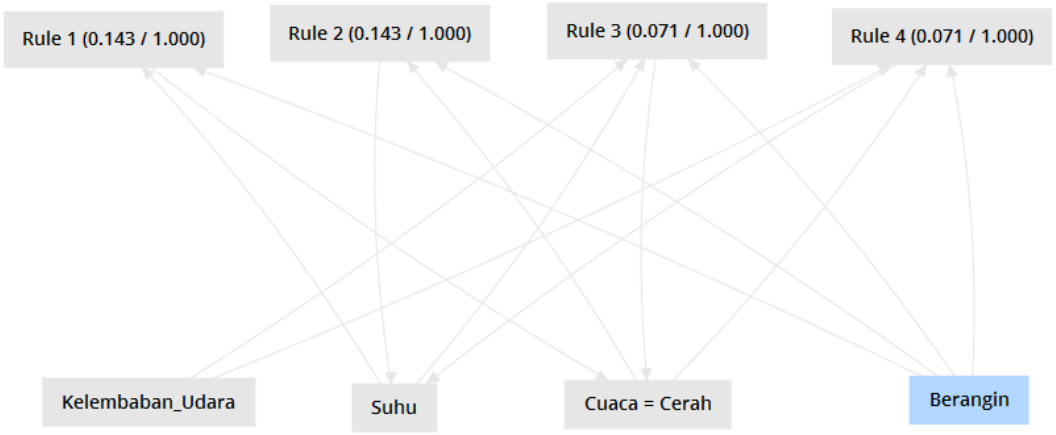
Size	Support	Item 1	Item 2	Item 3	Item 4
2	0.143	Kelembaban_Udara	Cuaca = Hujan		
2	0.143	Kelembaban_Udara	Cuaca = Mendung		
2	0.143	Berangin	Suhu		
2	0.143	Berangin	Cuaca = Cerah		
2	0.143	Berangin	Cuaca = Hujan		
2	0.143	Berangin	Cuaca = Mendung		
2	0.214	Suhu	Cuaca = Cerah		
2	0.071	Suhu	Cuaca = Hujan		
2	0.143	Suhu	Cuaca = Mendung		
3	0.071	Kelembaban_Udara	Berangin	Suhu	
3	0.071	Kelembaban_Udara	Berangin	Cuaca = Cerah	
3	0.071	Kelembaban_Udara	Berangin	Cuaca = Hujan	
3	0.071	Kelembaban_Udara	Berangin	Cuaca = Mendung	
3	0.143	Kelembaban_Udara	Suhu	Cuaca = Cerah	
3	0.071	Kelembaban_Udara	Suhu	Cuaca = Mendung	
3	0.143	Berangin	Suhu	Cuaca = Cerah	
4	0.071	Kelembaban_Udara	Berangin	Suhu	Cuaca = Cerah

  - Table View

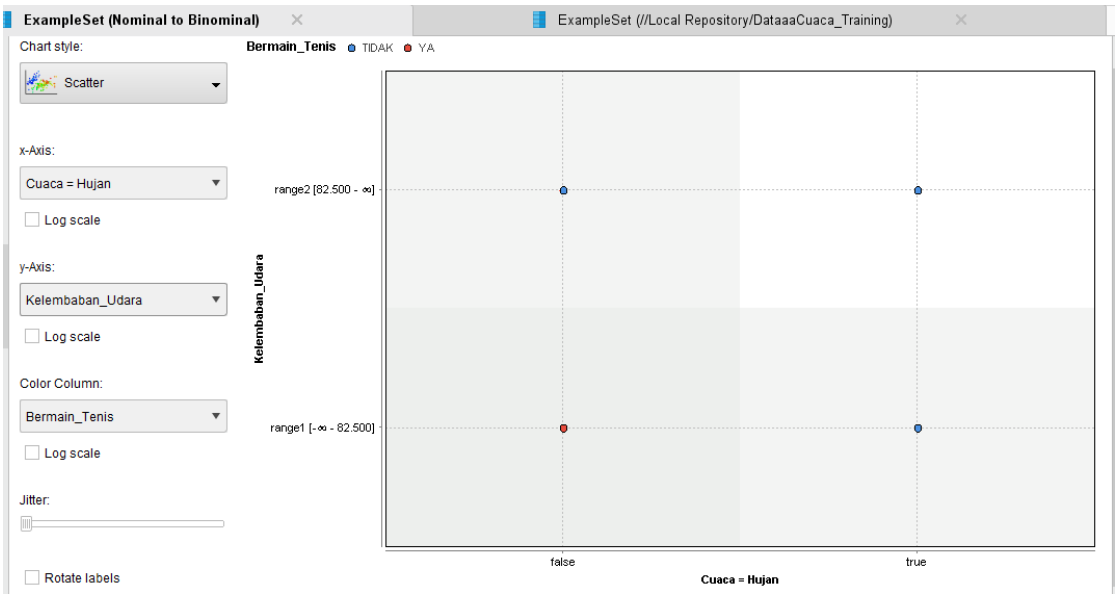
No.	Premises	Conclusion	Support	Confidence
1	Berangin, Suhu	Cuaca = Cerah	0.143	1
2	Berangin, Cuaca = Cerah	Suhu	0.143	1
3	Kelembaban_Udara, Berangin, Suhu	Cuaca = Cerah	0.071	1
4	Kelembaban_Udara, Berangin, Cuaca = Cerah	Suhu	0.071	1

Confidence	LaPlace	Gain	p-s	Lift	Convicti...
1	1	-0.143	0.092	2.800	∞
1	1	-0.143	0.082	2.333	∞
1	1	-0.071	0.046	2.800	∞
1	1	-0.071	0.041	2.333	∞

- Graph View



- ExampleSet (Nominal2Binominal –> charts view)



Tugas

- Induksi aturan dari data training

RuleModel

```
if rerata_sks > 18.500 then TEPAT  (2 / 10)
if gender = PRIA then TERLAMBAT  (4 / 0)
if jurusan_sma = IPA then TEPAT  (0 / 2)
if jurusan_sma = IPS then TERLAMBAT  (1 / 0)
else TEPAT  (0 / 0)

correct: 17 out of 19 training examples.
```

- Model induksi aturan berdasarkan Performance Vector

accuracy: 65.00% +/- 32.02% (micro average: 65.00%)

	true TERLAMBAT	true TEPAT	class precision
pred. TERLAMBAT	4	4	50.00%
pred. TEPAT	3	9	75.00%
class recall	57.14%	69.23%	

PerformanceVector

```
PerformanceVector:
accuracy: 65.00% +/- 32.02% (micro average: 65.00%)
ConfusionMatrix:
True:   TERLAMBAT       TEPAT
TERLAMBAT:      4       4
TEPAT:  3       9
```

a) Number of bins = 2

- FP-Growth

No. of Sets: 13
Total Max. Size: 2

Min. Size: 1
Max. Size: 2
Contains Item:

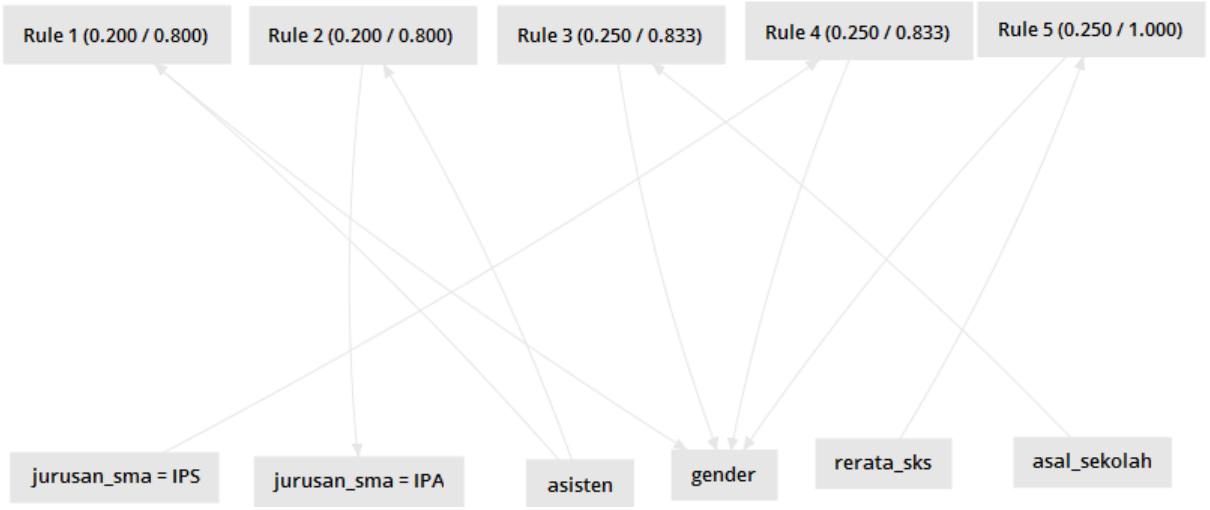
Update View

Size	Support	Item 1	Item 2
1	0.750	gender	
1	0.500	jurusan_sma = IPA	
1	0.300	asal_sekolah	
1	0.300	jurusan_sma = IPS	
1	0.250	asisten	
1	0.250	rerata_sks	
1	0.200	jurusan_sma = LAIN	
2	0.350	gender	jurusan_sma = IPA
2	0.250	gender	asal_sekolah
2	0.250	gender	jurusan_sma = IPS
2	0.200	gender	asisten
2	0.250	gender	rerata_sks
2	0.200	jurusan_sma = IPA	asisten

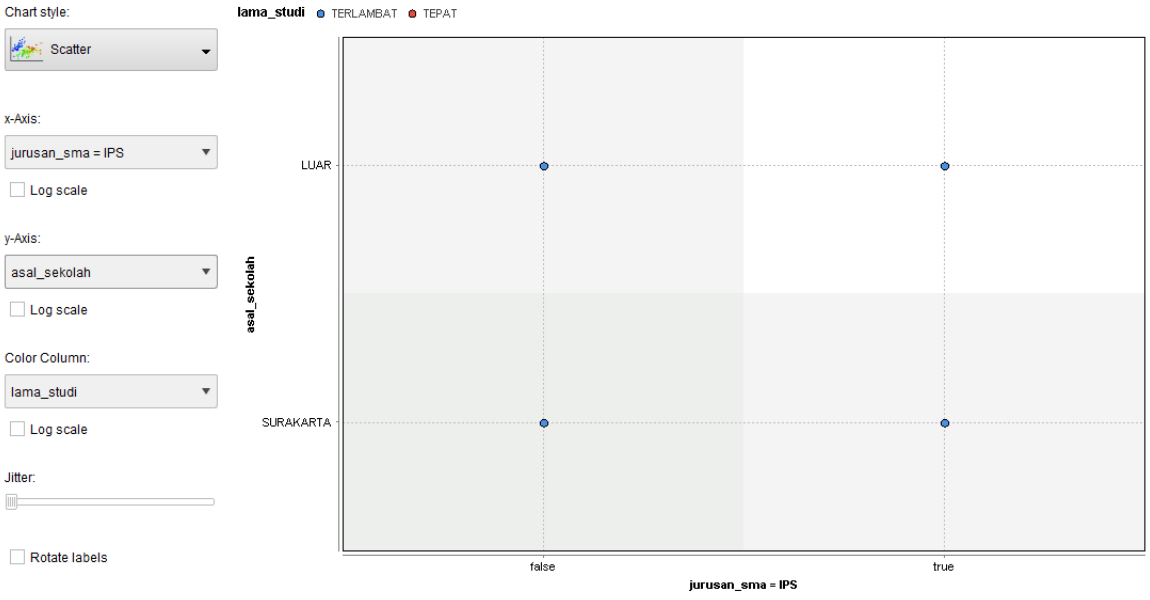
- Table View

No.	Premises	Conclusion	Support	Confidence	LaPlace	Gain	p-s	Lift	Convicti...
3	asal_sekolah	gender	0.250	0.833	0.962	-0.350	0.025	1.111	1.500
4	jurusan_sma = IPS	gender	0.250	0.833	0.962	-0.350	0.025	1.111	1.500
5	rerata_sks	gender	0.250	1	1	-0.250	0.062	1.333	∞

- Graph View



- ExampleSet (Nominal2Binominal –> charts view)



b) Number of bins = 3

- FP-Growth

No. of Sets: 19

Total Max. Size: 2

Min. Size: 1

Max. Size: 2

Contains Item:

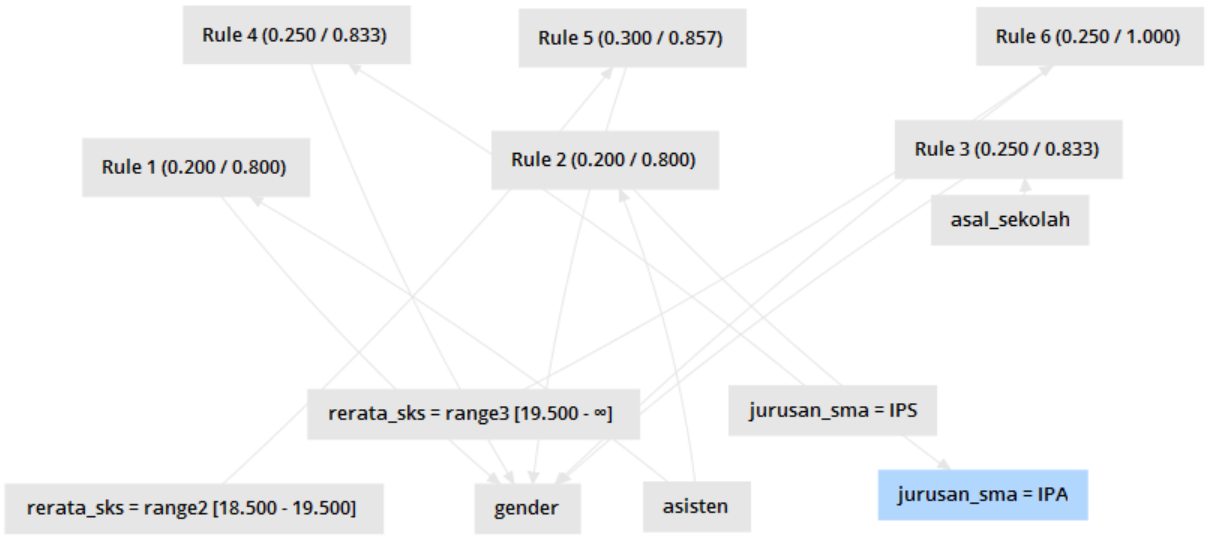
Update View

Size	Support	Item 1	Item 2
1	0.750	gender	
1	0.500	jurusan_sma = IPA	
1	0.400	rerata_sks = range1 [-∞ - 18.500]	
1	0.350	rerata_sks = range2 [18.500 - 19.500]	
1	0.300	asal_sekolah	
1	0.300	jurusan_sma = IPS	
1	0.250	asisten	
1	0.250	rerata_sks = range3 [19.500 - ∞]	
1	0.200	jurusan_sma = LAIN	
2	0.350	gender	jurusan_sma = IPA
2	0.200	gender	rerata_sks = range1 [-∞ - 18.500]
2	0.300	gender	rerata_sks = range2 [18.500 - 19.500]
2	0.250	gender	asal_sekolah
2	0.250	gender	jurusan_sma = IPS
2	0.200	gender	asisten
2	0.250	gender	rerata_sks = range3 [19.500 - ∞]
2	0.200	jurusan_sma = IPA	rerata_sks = range1 [-∞ - 18.500]
2	0.200	jurusan_sma = IPA	rerata_sks = range2 [18.500 - 19.500]
2	0.200	jurusan_sma = IPA	asisten

- Table View

No.	Premises	Conclusion	Support	Confidence
3	asal_sekolah	gender	0.250	0.833
4	jurusan_sma = IPS	gender	0.250	0.833
5	rerata_sks = range2 [18.500 - 19.500]	gender	0.300	0.857
6	rerata_sks = range3 [19.500 - ∞]	gender	0.250	1

- Graph View



- ExampleSet (Nominal2Binominal –> charts view)