

Relevel function on Y

April 2, 2021 11:30 AM

Recidivism PreProcessing
Nothing Relevelled:

```
levels(Y)
[1] "0" "1"
> levels(Ytrain)
[1] "0" "1"
> levels(Ytest)
[1] "0" "1"
> levels(YhatTestGlmnet)
[1] "0" "1"
> levels(YHatTest)
[1] "0" "1"
> mean(YHatTest == Ytest)
[1] 0.6712899
> mean(YhatTestGlmnet == Ytest)
[1] 0.6712899
```

```
> confusionMatrix(data = YhatTest, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	0 1	
0	579 293	
1	169 401	

Accuracy : 0.6796

```
> confusionMatrix(data = YhatTestGlmnet, reference = Y
test)
Confusion Matrix and Statistics
```

	Reference	
Prediction	0 1	
0	579 293	
1	169 401	

Accuracy : 0.6796

Recidivism PreProcessing
Y Relevelled

```
levels(Y)
[1] "1" "0"
> levels(Ytrain)
[1] "1" "0"
> levels(Ytest)
[1] "1" "0"
> levels(YhatTestGlmnet)
[1] "0" "1"
> levels(YHatTest)
[1] "1" "0"
> mean(YHatTest == Ytest)
[1] 0.6678225
> mean(YhatTestGlmnet == Ytest)
[1] 0.3321775
```

```
> confusionMatrix(data = YhatTest, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	1 0	
1	415 200	
0	279 548	

Accuracy : 0.6678

```
> confusionMatrix(data = YhatTestGlmnet, reference = Y
test)
Confusion Matrix and Statistics
```

	Reference	
Prediction	1 0	
1	279 548	
0	415 200	

Accuracy : 0.3322

Warning message:
In confusionMatrix.default(data = YhatTestGlmnet,
reference = Ytest) :
Levels are not in the same order for reference and data.
Refactoring data to match.

Recidivism PreProcessing
Ytest Relevelled

```
levels(Y)
[1] "0" "1"
> levels(Ytrain)
[1] "0" "1"
> levels(Ytest)
[1] "1" "0"
> levels(YhatTestGlmnet)
[1] "0" "1"
> levels(YHatTest)
[1] "0" "1"
> mean(YHatTest == Ytest)
[1] 0.6900139
> mean(YhatTestGlmnet == Ytest)
[1] 0.6900139
```

```
> confusionMatrix(data = YhatTest, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	1 0	
1	399 152	
0	295 596	

Accuracy : 0.69

Warning message:
In confusionMatrix.default(data = YhatTest,
reference = Ytest) :
Levels are not in the same order for reference and
data. Refactoring data to match.

```
> confusionMatrix(data = YhatTestGlmnet, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	1 0	
1	399 152	
0	295 596	

Accuracy : 0.69

Warning message:
In confusionMatrix.default(data = YhatTestGlmnet,
reference = Ytest) :
Levels are not in the same order for reference and
data. Refactoring data to match.

Recidivism PreProcessing
Ytrain Relevelled

```
levels(Y)
[1] "0" "1"
> levels(Ytrain)
[1] "1" "0"
> levels(Ytest)
[1] "0" "1"
> levels(YhatTestGlmnet)
[1] "0" "1"
> levels(YHatTest)
[1] "1" "0"
> mean(YHatTest == Ytest)
[1] 0.6934813
> mean(YhatTestGlmnet == Ytest)
[1] 0.3065187
```

```
> confusionMatrix(data = YhatTest, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	0 1	
0	559 253	
1	189 441	

Accuracy : 0.6935

Warning message:
In confusionMatrix.default(data = YhatTest, reference =
Ytest) :
Levels are not in the same order for reference and
data. Refactoring data to match.

```
> confusionMatrix(data = YhatTestGlmnet, reference = Ytest)
Confusion Matrix and Statistics
```

	Reference	
Prediction	0 1	
0	189 441	
1	559 253	

Accuracy : 0.3065