In[131]:=
```
levelNames = {"a1", "a2", "b1", "b2"};
```

In[132]:=
```
rootPath = NotebookDirectory[];
```

In[133]:=
```
texts = Table[Import[ FileNameJoin[{rootPath , "data", "sentences" ,
       StringJoin[ level, " sentences.txt"]}]], {level, levelNames}];
```

In[134]:=
```
TextSentences[texts[[1]], 4] (*Show 4 sentences, only A1 level*)
```

Out[134]=
```
{I would like that, my dear., I would like to order  la carte.,
 I would like to compose a message., Beautiful work.}
```

In[135]:=
```
Flatten[TextSentences[#, 1] &@texts]
(*Show 1 sentence, all levels in one array*)
```

Out[135]=
```
{I would like that, my dear., That's Speedy!,
 And guess what?, He couldn't even guess.}
```

In[136]:=
```
sentencesFull = TextSentences[#] &@texts;
```

In[137]:=
```
nSents = All;
```

In[138]:=
```
sentences = Map[Take[#, nSents] &, sentencesFull];
```

In[139]:=
```
nameLength = {levelNames, Map[Length, sentences]}^T;
```

In[140]:=
```
(*sent2d = DimensionReduce[Flatten[sentences],2];*)
```

In[141]:=
```
labels = Flatten[Table[Table[x[[1]], x[[2]]], {x, nameLength}]];
```

In[142]:=
```
(*byLevels=GroupBy[Thread[sent2d→labels],Last→First];*)
```

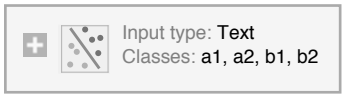
In[143]:=
```
(*ListPlot[Values[byLevels],
 PlotLegends→Keys[byLevels],PlotStyle→PointSize[Medium]]*)
```

In[144]:=
```
allData = Thread[Flatten[sentences] → labels];
```

In[145]:=
```
trainingData = RandomSample[allData, Round[0.7 Length[allData]]];
```

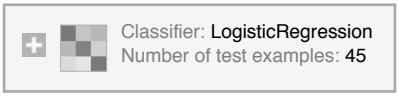
In[146]:=
```
testingData = Complement[allData, trainingData];
```

In[147]:=
```
trainedClassifier = Classify[trainingData]
```

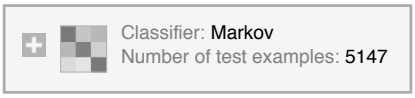
Out[147]=
```
ClassifierFunction[
```


```
]
```

In[148]:=
```
cm = ClassifierMeasurements[trainedClassifier, testingData]
```

```
ClassifierMeasurementsObject[
```


```
]
```

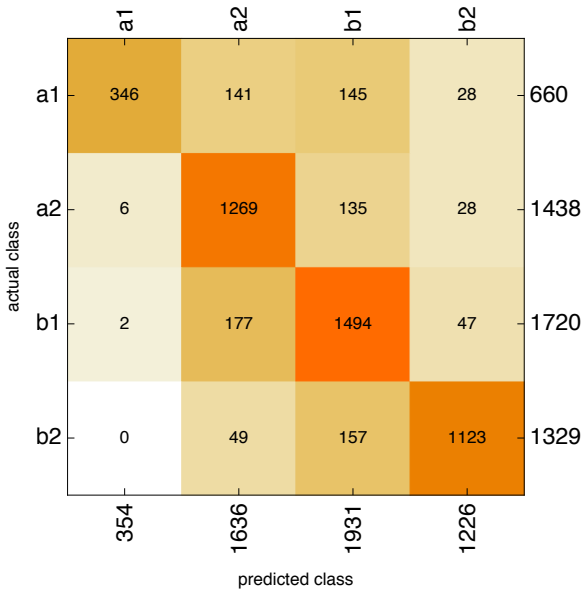
Out[148]=
```
ClassifierMeasurementsObject[
```


```
]
```

General: Input expression ClassifierMeasurementsObject[…] contains insufficient information to interpret the result.

In[149]:=
```
cm["ConfusionMatrixPlot"]
```

Out[149]=



In[150]:=
```
cm["Accuracy"]
```

Out[150]=
```
0.822227
```