

```
1 "C:\Users\Just Me\anaconda3\python.exe" models\  
  train_classifier.py data/DisasterResponse.db models/  
  classifier.pkl  
2 [nltk_data] Downloading package punkt to C:\Users\  
  Just  
3 [nltk_data]      Me\AppData\Roaming\nltk_data...  
4 [nltk_data]      Package punkt is already up-to-date!  
5 [nltk_data] Downloading package wordnet to C:\Users\  
  Just  
6 [nltk_data]      Me\AppData\Roaming\nltk_data...  
7 [nltk_data]      Package wordnet is already up-to-date!  
8 Loading data...  
9      DATABASE: data/DisasterResponse.db  
10 Building model...  
11 Training model...  
12 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn\  
  feature_extraction\text.py:528: UserWarning: The  
  parameter 'token_pattern' will not be used since '  
  tokenizer' is not None'  
13     warnings.warn(  
14 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn\  
  feature_extraction\text.py:528: UserWarning: The  
  parameter 'token_pattern' will not be used since '  
  tokenizer' is not None'  
15     warnings.warn(  
16 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn\  
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  parameter 'token_pattern' will not be used since '  
  tokenizer' is not None'  
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  parameter 'token_pattern' will not be used since '  
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21     warnings.warn(  
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```

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22 feature_extraction\text.py:528: UserWarning: The
   parameter 'token_pattern' will not be used since '
   tokenizer' is not None'
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   parameter 'token_pattern' will not be used since '
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   parameter 'token_pattern' will not be used since '
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31     warnings.warn(
32 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn\
   feature_extraction\text.py:528: UserWarning: The
   parameter 'token_pattern' will not be used since '
   tokenizer' is not None'
33     warnings.warn(
34 Evaluating model...
35 ('related',)           precision    recall  f1-
   score    support
36
37           0           0.73      0.27      0.39      1230
38           1           0.81      0.97      0.88      4013
39
40     accuracy                    0.81      5243
41     macro avg           0.77      0.62      0.64      5243
42 weighted avg           0.79      0.81      0.77      5243
43
44 ('request',)           precision    recall  f1-

```

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44 score      support
45
46          0          0.89          0.99          0.94          4343
47          1          0.91          0.41          0.57          900
48
49      accuracy
50      macro avg          0.90          0.70          0.75          5243
51 weighted avg          0.89          0.89          0.87          5243
52
53 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn\
  metrics\_classification.py:1344:
  UndefinedMetricWarning: Precision and F-score are ill
  -defined and being set to 0.0 in labels with no
  predicted samples. Use `zero_division` parameter to
  control this behavior.
54     _warn_prf(average, modifier, msg_start, len(result
  ))
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  predicted samples. Use `zero_division` parameter to
  control this behavior.
58     _warn_prf(average, modifier, msg_start, len(result
  ))
59 ('offer',)          precision      recall      f1-
  score      support
60
61          0          1.00          1.00          1.00          5218
62          1          0.00          0.00          0.00          25
63
64      accuracy
65      macro avg          0.50          0.50          0.50          5243

```

66	weighted avg	0.99	1.00	0.99
	5243			
67				
68	('aid_related',)		precision	recall
	f1-score support			
69				
70	0	0.76	0.89	0.82
	3046			
71	1	0.80	0.62	0.70
	2197			
72				
73	accuracy			0.78
	5243			
74	macro avg	0.78	0.76	0.76
	5243			
75	weighted avg	0.78	0.78	0.77
	5243			
76				
77	('medical_help',)		precision	recall
	f1-score support			
78				
79	0	0.92	1.00	0.96
	4822			
80	1	0.62	0.04	0.08
	421			
81				
82	accuracy			0.92
	5243			
83	macro avg	0.77	0.52	0.52
	5243			
84	weighted avg	0.90	0.92	0.89
	5243			
85				
86	('medical_products',)		precision	
	recall f1-score support			
87				
88	0	0.95	1.00	0.98
	4989			
89	1	0.65	0.05	0.09
	254			
90				

```

91      accuracy                                0.95
    5243
92      macro avg                0.80        0.52        0.54
    5243
93      weighted avg            0.94        0.95        0.93
    5243
94
95      ('search_and_rescue',)                precision
    recall  f1-score    support
96
97              0                0.97        1.00        0.99
    5098
98              1                0.88        0.05        0.09
    145
99
100     accuracy                                0.97
    5243
101     macro avg                0.92        0.52        0.54
    5243
102     weighted avg            0.97        0.97        0.96
    5243
103
104 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
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    ))
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108 ill-defined and being set to 0.0 in labels with no
    predicted samples. Use `zero_division` parameter to
    control this behavior.
109     _warn_prf(average, modifier, msg_start, len(result
    ))
110 ('security',)                precision    recall  f1-
    score      support
111
112           0          0.98          1.00          0.99
    5142
113           1          0.00          0.00          0.00
    101
114
115     accuracy                0.98
    5243
116     macro avg          0.49          0.50          0.50
    5243
117     weighted avg          0.96          0.98          0.97
    5243
118
119 ('military',)                precision    recall  f1-
    score      support
120
121           0          0.97          1.00          0.98
    5058
122           1          0.75          0.03          0.06
    185
123
124     accuracy                0.97
    5243
125     macro avg          0.86          0.52          0.52
    5243
126     weighted avg          0.96          0.97          0.95
    5243
127
128 ('child_alone',)            precision    recall
    f1-score      support
129
130           0          1.00          1.00          1.00
    5243
131

```

132	accuracy			1.00
	5243			
133	macro avg	1.00	1.00	1.00
	5243			
134	weighted avg	1.00	1.00	1.00
	5243			
135				
136	('water',)		precision	recall f1-
	score support			
137				
138	0	0.95	1.00	0.97
	4909			
139	1	0.94	0.20	0.33
	334			
140				
141	accuracy			0.95
	5243			
142	macro avg	0.95	0.60	0.65
	5243			
143	weighted avg	0.95	0.95	0.93
	5243			
144				
145	('food',)		precision	recall f1-
	score support			
146				
147	0	0.93	0.99	0.96
	4678			
148	1	0.89	0.41	0.56
	565			
149				
150	accuracy			0.93
	5243			
151	macro avg	0.91	0.70	0.76
	5243			
152	weighted avg	0.93	0.93	0.92
	5243			
153				
154	('shelter',)		precision	recall f1-
	score support			
155				
156	0	0.93	1.00	0.96

156	4787				
157		1	0.89	0.22	0.36
	456				
158					
159	accuracy				0.93
	5243				
160	macro avg		0.91	0.61	0.66
	5243				
161	weighted avg		0.93	0.93	0.91
	5243				
162					
163	('clothing',)			precision	recall f1-
	score support				
164					
165		0	0.99	1.00	0.99
	5159				
166		1	0.90	0.11	0.19
	84				
167					
168	accuracy				0.99
	5243				
169	macro avg		0.94	0.55	0.59
	5243				
170	weighted avg		0.98	0.99	0.98
	5243				
171					
172	('money',)			precision	recall f1-
	score support				
173					
174		0	0.98	1.00	0.99
	5125				
175		1	0.71	0.04	0.08
	118				
176					
177	accuracy				0.98
	5243				
178	macro avg		0.85	0.52	0.53
	5243				
179	weighted avg		0.97	0.98	0.97
	5243				
180					

181	('missing_people',)			precision	
	recall	f1-score	support		
182					
183		0	0.99	1.00	1.00
	5191				
184		1	1.00	0.02	0.04
	52				
185					
186	accuracy				0.99
	5243				
187	macro avg		1.00	0.51	0.52
	5243				
188	weighted avg		0.99	0.99	0.99
	5243				
189					
190	('refugees',)			precision	recall f1-
	score	support			
191					
192		0	0.97	1.00	0.98
	5071				
193		1	0.00	0.00	0.00
	172				
194					
195	accuracy				0.97
	5243				
196	macro avg		0.48	0.50	0.49
	5243				
197	weighted avg		0.94	0.97	0.95
	5243				
198					
199	('death',)			precision	recall f1-
	score	support			
200					
201		0	0.96	1.00	0.98
	4988				
202		1	0.89	0.09	0.17
	255				
203					
204	accuracy				0.96
	5243				
205	macro avg		0.92	0.55	0.57

```

205 5243
206 weighted avg      0.95      0.96      0.94
    5243
207
208 ('other_aid',)      precision      recall      f1
    -score      support
209
210      0      0.87      1.00      0.93
    4565
211      1      0.67      0.01      0.02
    678
212
213      accuracy      0.87
    5243
214      macro avg      0.77      0.51      0.48
    5243
215 weighted avg      0.85      0.87      0.81
    5243
216
217 ('infrastructure_related',)      precision
    recall      f1-score      support
218
219      0      0.94      1.00      0.97
    4903
220      1      0.25      0.00      0.01
    340
221
222      accuracy      0.93
    5243
223      macro avg      0.59      0.50      0.49
    5243
224 weighted avg      0.89      0.93      0.90
    5243
225
226 ('transport',)      precision      recall      f1
    -score      support
227
228      0      0.96      1.00      0.98
    5014
229      1      0.71      0.07      0.12
    229

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230
231     accuracy                                0.96
    5243
232     macro avg                            0.84    0.53    0.55
    5243
233     weighted avg                        0.95    0.96    0.94
    5243
234
235 ('buildings',)                precision    recall    f1
    -score    support
236
237         0                0.95    1.00    0.97
    4958
238         1                0.87    0.07    0.13
    285
239
240     accuracy                                0.95
    5243
241     macro avg                            0.91    0.53    0.55
    5243
242     weighted avg                        0.94    0.95    0.93
    5243
243
244 ('electricity',)                precision    recall
    f1-score    support
245
246         0                0.98    1.00    0.99
    5137
247         1                0.75    0.03    0.05
    106
248
249     accuracy                                0.98
    5243
250     macro avg                            0.87    0.51    0.52
    5243
251     weighted avg                        0.98    0.98    0.97
    5243
252
253 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
    \metrics\_classification.py:1344:
    UndefinedMetricWarning: Precision and F-score are

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253 ill-defined and being set to 0.0 in labels with no
    predicted samples. Use `zero_division` parameter to
    control this behavior.
254     _warn_prf(average, modifier, msg_start, len(result
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    ill-defined and being set to 0.0 in labels with no
    predicted samples. Use `zero_division` parameter to
    control this behavior.
258     _warn_prf(average, modifier, msg_start, len(result
    ))
259 ('tools',)                precision    recall  f1-
    score    support
260
261             0             0.99         1.00         1.00
    5211
262             1             0.00         0.00         0.00
    32
263
264     accuracy                                0.99
    5243
265     macro avg             0.50         0.50         0.50
    5243
266 weighted avg             0.99         0.99         0.99
    5243
267
268 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
    \metrics\_classification.py:1344:
    UndefinedMetricWarning: Precision and F-score are
    ill-defined and being set to 0.0 in labels with no
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```

```

268 control this behavior.
269     _warn_prf(average, modifier, msg_start, len(result
    ))
270 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
    \metrics\_classification.py:1344:
    UndefinedMetricWarning: Precision and F-score are
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    control this behavior.
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    ))
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    ))
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    ill-defined and being set to 0.0 in labels with no
    predicted samples. Use `zero_division` parameter to
    control this behavior.
275     _warn_prf(average, modifier, msg_start, len(result
    ))
276 ('hospitals',)                precision    recall  f1
    -score      support
277
278              0              0.99      1.00      0.99
    5182
279              1              0.00      0.00      0.00
    61
280
281      accuracy                      0.99
    5243
282      macro avg              0.49      0.50      0.50
    5243
283      weighted avg              0.98      0.99      0.98
    5243

```

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284
285 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
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    predicted samples. Use `zero_division` parameter to
    control this behavior.
290     _warn_prf(average, modifier, msg_start, len(result
    ))
291 ('shops',)                precision    recall  f1-
    score    support
292
293           0           1.00      1.00      1.00
    5217
294           1           0.00      0.00      0.00
    26
295
296     accuracy                        1.00
    5243
297     macro avg           0.50      0.50      0.50
    5243
298     weighted avg          0.99      1.00      0.99
    5243
299
300 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn

```

```

300 \metrics\_classification.py:1344:
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    ill-defined and being set to 0.0 in labels with no
    predicted samples. Use `zero_division` parameter to
    control this behavior.
303     _warn_prf(average, modifier, msg_start, len(result
    ))
304 ('aid_centers',)                precision    recall
    f1-score   support
305
306          0          0.99          1.00          0.99
    5187
307          1          0.00          0.00          0.00
    56
308
309      accuracy                                0.99
    5243
310      macro avg          0.49          0.50          0.50
    5243
311 weighted avg          0.98          0.99          0.98
    5243
312
313 ('other_infrastructure',)                precision
    recall  f1-score   support
314
315          0          0.96          1.00          0.98
    5011
316          1          0.00          0.00          0.00
    232
317
318      accuracy                                0.96
    5243
319      macro avg          0.48          0.50          0.49

```

319	5243				
320	weighted avg	0.91	0.96	0.93	
	5243				
321					
322	('weather_related',)			precision	
	recall f1-score support				
323					
324	0	0.87	0.97	0.92	
	3812				
325	1	0.88	0.62	0.73	
	1431				
326					
327	accuracy			0.87	
	5243				
328	macro avg	0.88	0.80	0.82	
	5243				
329	weighted avg	0.88	0.87	0.87	
	5243				
330					
331	('floods',)		precision	recall	f1-
	score support				
332					
333	0	0.95	1.00	0.97	
	4816				
334	1	0.94	0.35	0.51	
	427				
335					
336	accuracy			0.95	
	5243				
337	macro avg	0.94	0.67	0.74	
	5243				
338	weighted avg	0.94	0.95	0.93	
	5243				
339					
340	('storm',)		precision	recall	f1-
	score support				
341					
342	0	0.95	0.99	0.97	
	4781				
343	1	0.79	0.41	0.54	
	462				


```

344
345     accuracy                                0.94
      5243
346     macro avg                0.87        0.70        0.75
      5243
347     weighted avg            0.93        0.94        0.93
      5243
348
349 C:\Users\Just Me\anaconda3\lib\site-packages\sklearn
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    predicted samples. Use `zero_division` parameter to
    control this behavior.
354     _warn_prf(average, modifier, msg_start, len(result
    ))
355 ('fire',)                precision    recall  f1-
    score    support
356
357         0         0.99         1.00         1.00
      5193
358         1         0.00         0.00         0.00
      50
359
360     accuracy                                0.99

```

360	5243				
361	macro avg	0.50	0.50	0.50	
	5243				
362	weighted avg	0.98	0.99	0.99	
	5243				
363					
364	('earthquake',)		precision	recall	
	f1-score support				
365					
366	0	0.97	0.99	0.98	
	4744				
367	1	0.92	0.74	0.82	
	499				
368					
369	accuracy			0.97	
	5243				
370	macro avg	0.95	0.86	0.90	
	5243				
371	weighted avg	0.97	0.97	0.97	
	5243				
372					
373	('cold',)		precision	recall	f1-
	score support				
374					
375	0	0.98	1.00	0.99	
	5139				
376	1	0.86	0.06	0.11	
	104				
377					
378	accuracy			0.98	
	5243				
379	macro avg	0.92	0.53	0.55	
	5243				
380	weighted avg	0.98	0.98	0.97	
	5243				
381					
382	('other_weather',)		precision	recall	
	f1-score support				
383					
384	0	0.95	1.00	0.97	
	4962				

```

385          1          0.60          0.01          0.02
386      281
387      accuracy          0.95
388      5243
388      macro avg          0.77          0.51          0.50
389      5243
389      weighted avg          0.93          0.95          0.92
390      5243
391      ('direct_report',)          precision          recall
392      f1-score          support
393          0          0.86          0.99          0.92
394      4208
394          1          0.87          0.33          0.48
395      1035
396      accuracy          0.86
397      5243
397      macro avg          0.87          0.66          0.70
398      5243
398      weighted avg          0.86          0.86          0.83
399      5243
399
400      Saving model...
401      MODEL: models/classifier.pkl
402      Trained model saved!
403
404      Process finished with exit code 0
405

```