Model: top_DecisionTree_2.5
HyperParams:
{
   "criterion": [
     "entropy"
  ],
  "max_depth": [
     2,
     5
  ],
  "min_samples_split": [
     1,
     2,
     3
  ]
}

Classifications: Emotions
Confusion Matrix:
View Visual matrix at:
./precision/confusion_matrix_figures/top_DecisionTree_2.5_emotions_0.png

```
[[   1   50   0   1    0   0    0    0    0   1    0    0
     0    0   0  60    0  13  360    0 8978    0   0   0
     0    8   0   0]
 [   0 1861   0   0    0   0    0    0    0   0    1    0
     0    0   0  29    0   5   70    0 3554    0   0   0
     0   11   0   0]
 [   0   31   1   1    0   0    0    0    0   0    0    0
     0    0   0  16    0   0   33    0 4559    0   0   0
     0   16   0   0]
 [   0  116   0   0    0   0    0    0    0   1    1    0
     0    0   0  55    0   5   70    0 7192    0   0   0
     0   34   0   0]
 [   0   81   0   1    0   0    0    0    0   0    5    0
     0    0   0  30    0   9  142    0 9851    0   0   0
     0   28   0   0]
 [   0   15   0   0    0   0    0    0    0   1    1    0
     0    0   0  11    0   5   59    0 2999    0   0   0
     0   69   0   0]
 [   0   49   0   0    0   0    0    0    0   0    3    0
     0    0   0  13    0   2   33    0 4316    0   0   0
     0   19   0   0]
 [   0   48   0   0    0   0    0    0    0   0    1    0
     1    0   0  22    0   7   38    0 5190    0   0   0
     0   18   0   0]
 [   0   16   0   0    0   0    0    0    0   2    1    0
     0    0   0   8    0   4   57    0 1856    0   0   0
     0    1   0   0]
 [   0   35   0   0    0   0    0    0    0   0    3    0
     0    0   0  14    0   4   29    0 4087    0   0   0
     0   60   0   0]
 [   0   78   0   0    2   0    0    0    0   1    4    0
     0    0   0  19    0   6   53    0 6728    0   0   0
```

```
                 0   56    0    0]
 [    0   22    0    0     0    0    0     0    0    0    0    0
      0    0    0    4     0    1   12     0 2545    0    0    0
      0   10    0    0]
 [    0   13    0    0     0    0    0     0    0    0    0    0
      0    0    0    5     0    0   12     0 1235    0    0    0
      0   35    0    0]
 [    0   23    0    0     0    0    0     0    0    0    0    0
      0    0    0    8     0    1   64     0 2618    0    0    0
      0    4    0    0]
 [    0   25    0    0     0    0    0     0    0    0    0    0
      0    0    0    1     0    2    9     0 1562    0    0    0
      0    4    0    0]
 [    8   21    8   27     5    0    0     0    0    0    3    0
      0    0    0 4566     0    7   67     0 1545    0    0    0
      0  116    0    0]
 [    0    1    0    0     0    0    0     0    0    0    0    0
      0    0    0    1     0    0    2     0  293    0    0    0
      0   18    0    0]
 [    0  129    0    0     0    0    0     0    0    2    0    0
      1    0    0   25     0    7  194     0 3521    0    0    0
      0    4    0    0]
 [    0   27    0    0     0    0    0     0    0   13    1    0
      1    0    0   14     0   98 2629     0 1675    0    0    0
      0    4    0    0]
 [    0    2    0    0     0    0    0     0    0    0    0    0
      0    0    0    3     0    0    6     0  697    0    0    0
      0    6    0    0]
 [    0  515    0    2     3    0    0     0    0    4    6    0
      1    0    0  186     0   44  575     0 48217    0    0    0
      0  174    0    0]
 [    0   29    0    0     0    0    0     0    0    0    0    0
      0    0    0   17     0    6   62     0 3953    0    0    0
      0   15    0    0]
 [    0    7    0    0     0    0    0     0    0    0    0    0
      0    0    0    1     0    1    3     0  615    0    0    0
      0    1    0    0]
 [    0   39    0    1     0    0    0     0    0    0    0    0
      0    0    0   12     0    2   40     0 4153    0    0    0
      0   31    0    0]
 [    2    5    0    0     0    0    0     0    0    0    1    0
      0    0    0   39     0    0    2     0  657    0    0    0
      0    0    0    0]
 [    0   16    0    0     0    0    0     0    0    1    0    0
      0    0    0    1     0    0    5     0  601    0    0    0
      0  721    0    0]
 [    0   29    0    0     0    0    0     0    0    0    0    0
      0    0    0    6     0    3   23     0 3071    0    0    0
      0  336    0    0]
 [    0   21    0    0     0    0    0     0    0    0    0    0
      0    0    0    8     0    0   14     0 3069    0    0    0
      0    5    0    0]]
```
Classsification Report:

View formatted classification report at:
./precision/classification_reports/top_DecisionTree_2.5_0.txt

	precision	recall	f1-score	support
admiration	0.09	0.00	0.00	9472
amusement	0.56	0.34	0.42	5531
anger	0.11	0.00	0.00	4657
annoyance	0.00	0.00	0.00	7474
approval	0.00	0.00	0.00	10147
caring	0.00	0.00	0.00	3160
confusion	0.00	0.00	0.00	4435
curiosity	0.00	0.00	0.00	5325
desire	0.00	0.00	0.00	1945
disappointment	0.00	0.00	0.00	4232
disapproval	0.13	0.00	0.00	6947
disgust	0.00	0.00	0.00	2594
embarrassment	0.00	0.00	0.00	1300
excitement	0.00	0.00	0.00	2718
fear	0.00	0.00	0.00	1603
gratitude	0.88	0.72	0.79	6373
grief	0.00	0.00	0.00	315
joy	0.03	0.00	0.00	3883
love	0.56	0.59	0.58	4462
nervousness	0.00	0.00	0.00	714
neutral	0.35	0.97	0.51	49727
optimism	0.00	0.00	0.00	4082
pride	0.00	0.00	0.00	628
realization	0.00	0.00	0.00	4278
relief	0.00	0.00	0.00	706
remorse	0.40	0.54	0.46	1345
sadness	0.00	0.00	0.00	3468
surprise	0.00	0.00	0.00	3117
accuracy			0.38	154638
macro avg	0.11	0.11	0.10	154638
weighted avg	0.20	0.38	0.23	154638

Classifications: Emotions
Confusion Matrix:
View Visual matrix at:
./precision/confusion_matrix_figures/top_DecisionTree_2.5_sentiments_0.png
```
[[    5    12 16560   578]
 [    1    33 33231  1384]
 [    4    31 47503  2189]
 [   10   164 39080 13853]]
```
Classsification Report:
View formatted classification report at:
./precision/classification_reports/top_DecisionTree_2.5_1.txt

	precision	recall	f1-score	support
ambiguous	0.25	0.00	0.00	17155
negative	0.14	0.00	0.00	34649
neutral	0.35	0.96	0.51	49727
positive	0.77	0.26	0.39	53107
accuracy			0.40	154638
macro avg	0.38	0.30	0.23	154638
weighted avg	0.43	0.40	0.30	154638