Test size: 0.2

Model: base DecisionTree

HyperParams:

40

7 15

4

3

0

1

4

3

```
Classifications: Emotions
```

Confusion Matrix:

```
View Visual matrix at:
./precision/confusion_matrix_figures/base_DecisionTree_emotions_0.png
[[1198 47 22 47 132 23 12 19
                            12 14
                                  15
                                     7 4 50
   73 1 50 81 3 247 26 7 12
                               3
                                        20]
                                  1
[ 58 701 18 46 41
                 7 7 11 9 9 18 6
                                      5 19
       1 42 15 1 174 6 0 8 0 2
                                    3 15]
    27 381 165 32 12 20 29 3 32 39 40 4
              0 204
                        0 9 0 4 4 11]
                      2
    2
       1
          5 1
    66 230 375 106 25 44 36
                            12 77 91 58 14
51
       4 12 10 3 387 10 0
                            10
                               2
                                  6 17 16]
[193 50 53 138 623 69 45 38 38 50 60 18 11
                                            28
       1 36 39 4 613 28 1 23 7 4
                                      9 15]
    25
       21 44 76 160 9 12 8 15 20
                                   0 3
[ 40
    13
                1 142 27 0 5 0 9 13
    14
       4 11 12
    28 31 56 45 11 293 118 7 17 26 6
    5
          3 10 3 236 5 0 14
                              1
                                 0
                                    1 11]
  6
       0
       35 63 50 11 167 393 9 10 20
                                     2 4
 28
    16
          3 8 0 257 5
                        2 5
                                 2 1 201
    6
                             1
       0
    11
       9 16 36 12 9 10 123 12
                                 8 1
                                       2 15
 18
             9 2 100 21
    5
                           5
                                 1
                                    3
                                      2]
  2
          5
                        0
                              1
    19 50 114 58 21 19 12
                           9 175 57 30 7
             8 10 243
                      1 1
                           15 3
                                 7 42 171
        1
 32
    31
       94 163 121 23 68 22
                           7 80 366 25 12
             5 1 374 15 0 20
    10
       4
           9
                               1
                                  5 21
                                        91
                  3 10 3 3 29 39 127
    18 68 106 30
 12
                                       5
                1 92 3 0 3 1 2 1
 17
        1
          2
             1
       19 31 23 6 13 5 3 15 11 12 45
  7
          3
             2
               2 74 1 0 4 0
                               7
                                   1
                                      31
       17 20 34 4 10 30
    35
                           8 6 6
                                   3
                                      1 116
               4 132
       0 36 11
                      8
                           7
                                    3 181
                         1
                              1 0
                         3 13 10
       14 22
             15
                5 4
                      6
                                 14
                7 46
                      1
                         0
                          3 1
 126
     1
        1
           1
             1
                                 0
                                    3
                                      2]
[112 13 4 17 38 21 2 10
                          2
                             7
                                8
                                  1
                                      1
                                        14
                0 54 10
  0 1037 0 24
              9
                          3
                            2
                                6 11
                                      2
                                        1]
                  2
                             1
          4 4
               1
                       1
                          4
                                1
    0 1
                    1
                                  0
                                     0
    0 5 0 0 0 14 0
                           2
                                2
                                   8
                       1
                             0
                                      01
                 14 3
[100 107 9 17 51
                       10
                          8
                              4
                                6
                                   2
                                        46
       3 216 50
                 0 111
                          3
                             3
    27
                       3
                                6
                                   1
                                     5
                                        21
                       7
                          18
                             7
                                5
    25
        1 12 49
                 19 6
                                   6
[ 149
                                        16
       0 47 518
                 2 85
                       4
                             3
                                  3
                          0
                               0
                                       2]
       8 17 15
               16
                     4
                   4
                        1 16
                              6
                                 3
                                    2
                                       0
             0 25 36 1 0
       0 0
                                 8 0
                                       3]
                           0 0
[554 339 405 698 1041 263 417 409 156 280 516 116 51 147
       11 146 112 43 4755 98 6 135 14 28 78 79]
       17 35 90 42 21 14 47 19 19 1
        2
          20 12 0 206 216
                           2
                                   2
                                      7
    17
                             6
                                4
  7
                                        7
```

2

3

0

```
0 6 0 0 43
                          5 1
                       6
                                          01
                                1
        25 69 112 25 25 12 10 36 47
 56
     48
                                            5
                                               6
        2
           14 7 2 344 8 0 62 1
                                      9
  10
     10
                                            15]
                        2
                                2
[ 20
        2
                 13 2
                              3
     4
           6 24
                           0
                                    0
                  0 32
                        2
     9
        0 12
              3
                           0
                              2 16
  0
                                    0
                                       1
                                           0]
              19
                 9 10
                        4
                           3
  4
     4
        5
           17
                             27
                                 4 1
                                        6
        5
     12
                  0 31
                        1
                             5
                                           1]
  0
           0
              1
                          0
                                 0 83
                                       19
        31 67 53 22 12
                          3
                              9 87 50
                                       16
                                           13
[ 20
     14
                        2
                             16 0 55 144
  15
           3
             5
                 8 134
                           1
        4
     14 23 32 40 5 23 37
                             4 20 20
[ 64
                                           8 33
                                       9
                 1 158 4 0 11 0 0 4 151]]
             2
        1 16
Classification Report:
View formatted classification report at:
./precision/classification_reports/base_DecisionTree_0.txt
```

precision recall f1-score support

admiration amusement anger annoyance approval caring confusion curiosity desire disappointmen	0.24 0.21 0.19 0.23 0.31 0.24 t 0.1	2 0.5 0.36 0.28 0.24 0.30 0.34 0.28	2 0.18 0.24 0.21 0.26 0.33 0.26 18 0.1	8 1233 1062 3 1688 2226 669 965 1143 439 7 970
disapproval	0.25	0.24	0.24	1537
disgust	0.25	0.22	0.23	585
embarrassme	nt 0.	.21 0	.15 0.	17 303
excitement	0.20	0.19	0.20	
	0.33		0.36	317
gratitude	0.74			-
		0.09		58
		0.27		814
, ,			0.54	
nervousness			3 0.1	
neutral				
optimism				914
•		0.24		157
pride realization				972
	0.16			
		0.10	0.14	156
	0.34		0.32	272
sadness			0.24	795
surprise	0.36	0.22	0.27	691
accuracy macro avg weighted avg		0.28		34364

Classifications: Emotions

Confusion Matrix: View Visual matrix at:

./precision/confusion_matrix_figures/base_DecisionTree_sentiments_0.png

[[1778 598 905 490]

[889 4649 1530 706] [1603 2517 5228 1719]

[856 1326 2524 7046]]

Classification Report:

View formatted classification report at:

./precision/classification_reports/base_DecisionTree_1.txt precision recall f1-score support

3771 ambiguous 0.35 0.47 0.40 negative 0.51 0.60 0.55 7774 11067 neutral 0.51 0.47 0.49 positive 0.71 0.60 0.65 11752

accuracy 0.54 34364 macro avg 0.52 0.54 0.52 34364 weighted avg 0.56 0.54 0.55 34364