Test size: 0.2
Model: top_MultinomialNB
HyperParams:
{
    "alpha": [
        0,
        0.5,
        1,
        10
    ]
}

Classifications: Emotions
Confusion Matrix:
View Visual matrix at:
./precision/confusion_matrix_figures/top_MultinomialNB_emotions_0.png
[[1083 21   8 15 51 11   3 17   3   7   8   2   1 14
     0 73   0 40 69   0 657 20   0   7   0   0   2 22]
 [43 505   8 20 17   2   2   8   3   1 10   1   2   9
     0 13   0 25 12   0 532   4   0   3   0   0   3 10]
 [8 14 208 89 20   6   3 12   1   7 28 15   1   3
     2   5   0   3   3   0 608   5   0   4   0   1   8   8]
 [33 35 98 161 57 12 23 18   5 20 55 21   1   4
     0 11   0   3 10   0 1054 12   0 16   0   1 21 17]
 [130 24 17 47 300 33 17 15 10 14 54   5   0 10
     2 35   0 18 30   0 1396 29   0 23   0   0 13   4]
 [15   5   4   8 15 88   2   6   1   8   9   2   0   0
     0 26   1   8   7   0 420 31   0   1   0   4   8   0]
 [15 12   7 19 16   4 125 57   1   4 22   3   0   1
     1   9   0   3 11   0 627   4   0 13   0   1   1   9]
 [19 12   7 16 19   4 44 201   3   5 18   1   0   5
     2   8   0   2   5   0 740   6   0 12   0   0   2 12]
 [10   6   2   6 15   4   3   3 43   1   3   1   0   2
     0   3   0   4 15   0 285 29   0   1   0   1   0   2]
 [20 14 10 31 40   7   9   4   2 83 27   8   2   0
     4   7   0   1   9   0 622 12   0 14   0   2 34   8]
 [24 23 18 64 67   9 31   5   0 17 211 19   3   2
     3 11   0   7   4   0 972 11   0 13   0   1 16   6]
 [18 10 37 46 16   0   5   2   0 10 24 96   1   0
     7   3   0   1   1   0 288   5   0   2   0   0   9   4]
 [7   5   4 24   5   3   7   6   0   6   9   6 10   1
     1   4   0   1   3   0 191   2   0   3   0   2   1   2]
 [58 12 13   3 16   0   3 15   0   2   6   1   0 42
     0 16   0 42 15   1 319 10   0   5   0   0   3 15]
 [10   6   0   8 11   6   1   2   0   2   5   3   0   0
    49   0   0   0   0   1 199   3   0   5   0   0   4   2]
 [81   8   0   3   7 10   2   3   0   3   3   0   0   2
     0 1054   0 26   8   0 169 17   0   2   0   7   4   0]
 [2   0   1   1   3   1   0   1   0   0   1   0   0   0
     2   1   0   0   0   0 33   1   0   1   0   2   6   2]
 [77 76   5   6 24   9   0   3   1   1   7   0   0   9
     1 30   0 173 42   0 329   7   0   5   0   1   5   3]
 [80 14   1   1   8   6   0   3   1   0   4   0   0   0

```
     0  13   0  20 487   0 352   8   0   2   0   1   0   3]
 [   3   1   2   5   8  10   1   3   0   7   4   0   1   2
     5   1   0   0   0   1 119   6   0   1   0   0   6   1]
 [ 358 178 148 258 375 143 128 177  31  98 327  57  10  43
    35 111   2  99  87   3 8017 108   3 112   3   8  73  75]
 [  46  10   0  10  23  20   6   6  14   2  12   1   0   2
     1  23   0  14  10   0 496 205   0   2   1   0   5   5]
 [  28   2   1   5   3   2   2   0   0   3   4   2   0   0
     1   4   0   7   0   0  85   4   3   1   0   0   0   0]
 [  25  17   5  21  51   9  11   5   1   8  25   0   0   3
     0  11   0   9  10   0 670   7   1  60   0   5   3  15]
 [  20   2   0   2   6   9   1   1   0   1   1   0   0   0
     0  12   0   8   2   0  84   1   0   3   1   0   1   1]
 [   2   4   2   3   5  10   1   1   1  11   4   2   0   0
     0  13   0   0   3   0 140   1   1   3   0  46  19   0]
 [  16   9   5  12  20   9   2   2   4  38  14   4   0   0
     2  16   0   6   3   0 459   6   0   6   0  21 138   3]
 [  44  11  16   8  16   3   7  26   0   5  10   2   0   9
     4   4   0   6   2   0 397   4   0   8   0   0   3 106]]
```
Classsification Report:
View formatted classification report at:
./precision/classification_reports/top_MultinomialNB_0.txt

	precision	recall	f1-score	support
admiration	0.48	0.51	0.49	2134
amusement	0.49	0.41	0.45	1233
anger	0.33	0.20	0.25	1062
annoyance	0.18	0.10	0.12	1688
approval	0.25	0.13	0.17	2226
caring	0.20	0.13	0.16	669
confusion	0.28	0.13	0.18	965
curiosity	0.33	0.18	0.23	1143
desire	0.34	0.10	0.15	439
disappointment	0.23	0.09	0.12	970
disapproval	0.23	0.14	0.17	1537
disgust	0.38	0.16	0.23	585
embarrassment	0.31	0.03	0.06	303
excitement	0.26	0.07	0.11	597
fear	0.40	0.15	0.22	317
gratitude	0.69	0.75	0.72	1409
grief	0.00	0.00	0.00	58
joy	0.33	0.21	0.26	814
love	0.57	0.49	0.53	1004
nervousness	0.17	0.01	0.01	187
neutral	0.40	0.72	0.51	11067
optimism	0.37	0.22	0.28	914
pride	0.38	0.02	0.04	157
realization	0.18	0.06	0.09	972
relief	0.20	0.01	0.01	156
remorse	0.44	0.17	0.24	272
sadness	0.36	0.17	0.23	795
surprise	0.32	0.15	0.21	691

	precision	recall	f1-score	support
accuracy			0.39	34364
macro avg	0.33	0.20	0.22	34364
weighted avg	0.36	0.39	0.35	34364

Classifications: Emotions
Confusion Matrix:
View Visual matrix at:
./precision/confusion_matrix_figures/top_MultinomialNB_sentiments_0.png
[[878 588 1419 886]
 [300 4175 2063 1236]
 [680 1916 5410 3061]
 [293 958 2210 8291]]
Classsification Report:
View formatted classification report at:
./precision/classification_reports/top_MultinomialNB_1.txt

	precision	recall	f1-score	support
ambiguous	0.41	0.23	0.30	3771
negative	0.55	0.54	0.54	7774
neutral	0.49	0.49	0.49	11067
positive	0.62	0.71	0.66	11752
accuracy			0.55	34364
macro avg	0.51	0.49	0.50	34364
weighted avg	0.54	0.55	0.54	34364