Model: top_MLP
HyperParams:

```
{
    "activation": [
        "logistic",
        "tanh",
        "relu",
        "identity"
    ],
    "hidden_layer_sizes": [
        [
            60,
            80
        ],
        [
            20,
            20,
            20
        ]
    ],
    "solver": [
        "adam",
        "sgd"
    ],
    "max_iter": [
        2
    ]
}
```

Classifications: Emotions
Confusion Matrix:
View Visual matrix at: ./precision/confusion_matrix_figures/top_MLP_emotions_2.png

```
[[1064   29    8    6   61    9    2   11   11    5    8    8    1   16
     7   52    0   59  112    0  600   23    0    5    0    0    4   33]
 [  28  743    8    9    5    0    2    4    0    0   10    2    2    1
     1   10    0   27   15    0  339    5    0    1    0    3    3   15]
 [   5   13  306   60   11    6    3    8    1    8   31   25    1    0
     7    4    0    7    4    0  540    2    0    1    0    5    5    9]
 [  21   49  126  119   42    5   10   14    6   13   86   40    3    5
    18    7    0   10   18    0 1034   10    0    6    0    7   16   23]
 [ 101   32   11   22  323   30   17   12   14   12   56   12    1    5
     5   21    0   32   53    0 1400   34    0   11    0    6    8    8]
 [  20   11    6    3   20  103    2    5    5    3    9    3    0    0
     4   10    0   11   14    0  375   36    0    2    0   16   10    1]
 [   9   21   10   12   14    5  131   48    1    2   23    6    0    2
     4    6    0    5   13    0  625    2    0   10    0    3    4    9]
 [  19   18    9    7   11    5   38  207    3    4   14    2    3    5
     7    7    0    7   11    0  733    5    0    3    0    3    3   19]
 [   7    9    0    4   10    3    2    2  105    2    0    1    0    3
     2    1    0    5   23    0  221   37    0    0    0    1    0    1]
 [   7   16   25   16   19    7    7    4    5   88   38   17    2    0
     9    6    0    7    9    0  596    8    0    6    0   11   53   14]
 [  19   28   21   33   58   13   30    4    4   12  221   17    3    1
```

```
    11  11   0   7   9   0 976  12   0   7   0  13  18   9]
 [  7  10  44  36   8   0   1   1   1  10  21 138   2   0
   22   2   0   1   2   0 261   4   0   0   0   1   9   4]
 [  4   6   9  11   8   4   5   2   0   3   7  11  28   1
    3   2   0   1   5   0 177   1   0   1   0   8   5   1]
 [ 48  20  10   0  13   0   3  14   1   0   2   1   0  63
    2   7   0  51  21   0 301  11   0   3   0   0   4  22]
 [  1   5   2   4   2   4   0   1   0   2   3   6   1   0
  140   0   0   0   0   0 136   5   0   2   0   0   3   0]
 [ 84   6   1   2  10  10   6   0   1   3   2   0   0   0
    0 1098   0  41   9   0  92  17   0   0   0  23   3   1]
 [  1   0   0   0   2   1   0   0   0   1   1   0   0   0
    4   2   0   0   0   0  33   0   0   0   0   4   8   1]
 [ 62 109   4   1  13   3   1   5   2   2   4   0   0   7
    3  22   0 248  65   0 250   7   0   0   0   1   2   3]
 [ 38  17   2   2   8   4   0   2   5   1   4   0   0   2
    2   8   0  28 694   0 174   7   0   1   0   2   2   1]
 [  1   1   3   4   5   7   1   2   0  13   3   1   2   2
   15   1   0   1   0   0 114   5   0   0   0   0   5   1]
 [250 233 145 118 307 122 112 139  42  79 298  53   8  24
   60  69   0 106 140   0 8418 122   0  43   0  38  71  70]
 [ 41  11   2   4  18  16   7   3  25   3  11   2   0   4
    0  16   0  21  20   0 396 303   0   4   0   1   2   4]
 [ 30   2   0   0   4   2   0   1   0   3   2   1   0   0
    1   2   0   8   0   0  94   3   0   0   0   0   4   0]
 [ 12  28   3  13  51   7   7   4   4   7  28   1   0   5
    7   8   0   9  10   0 665   7   0  58   0   5   7  26]
 [ 17   2   0   1   7  11   1   1   0   1   2   0   0   0
    1  10   0  18   3   0  77   1   0   1   0   0   2   0]
 [  2   4   2   5   9   3   1   0   3   5   2   2   2   0
    1   5   0   0   0   0  60   1   0   3   0 152  10   0]
 [ 10   9  10   9  10   9   1   2   5  33  16   8   0   0
   11   4   0   8   5   0 364   6   0   3   0  82 188   2]
 [ 36   8  11   5  10   2   8  26   2   1  14   7   0   8
    5   1   0   4   2   0 324   4   0   7   0   2   2 202]]
```
Classsification Report:
View formatted classification report at:
./precision/classification_reports/top_MLP_4.txt

	precision	recall	f1-score	support
admiration	0.55	0.50	0.52	2134
amusement	0.52	0.60	0.56	1233
anger	0.39	0.29	0.33	1062
annoyance	0.24	0.07	0.11	1688
approval	0.31	0.15	0.20	2226
caring	0.26	0.15	0.19	669
confusion	0.33	0.14	0.19	965
curiosity	0.40	0.18	0.25	1143
desire	0.43	0.24	0.31	439
disappointment	0.28	0.09	0.14	970
disapproval	0.24	0.14	0.18	1537
disgust	0.38	0.24	0.29	585
embarrassment	0.47	0.09	0.15	303

	precision	recall	f1-score	support
excitement	0.41	0.11	0.17	597
fear	0.40	0.44	0.42	317
gratitude	0.79	0.78	0.78	1409
grief	0.00	0.00	0.00	58
joy	0.34	0.30	0.32	814
love	0.55	0.69	0.61	1004
nervousness	0.00	0.00	0.00	187
neutral	0.43	0.76	0.55	11067
optimism	0.45	0.33	0.38	914
pride	0.00	0.00	0.00	157
realization	0.33	0.06	0.10	972
relief	0.00	0.00	0.00	156
remorse	0.39	0.56	0.46	272
sadness	0.42	0.24	0.30	795
surprise	0.42	0.29	0.35	691
accuracy			0.44	34364
macro avg	0.35	0.27	0.28	34364
weighted avg	0.41	0.44	0.39	34364

Classifications: Emotions
Confusion Matrix:
View Visual matrix at:
./precision/confusion_matrix_figures/top_MLP_sentiments_2.png
[[1055 618 1513 585]
 [278 4640 2038 818]
 [680 2123 6151 2113]
 [319 1035 2462 7936]]
Classsification Report:
View formatted classification report at:
./precision/classification_reports/top_MLP_5.txt

	precision	recall	f1-score	support
ambiguous	0.45	0.28	0.35	3771
negative	0.55	0.60	0.57	7774
neutral	0.51	0.56	0.53	11067
positive	0.69	0.68	0.68	11752
accuracy			0.58	34364
macro avg	0.55	0.53	0.53	34364
weighted avg	0.57	0.58	0.57	34364