

OUTPUT:

Initial dataset shape and head()

```
Final dataset shape: (20004, 3)
category
Praise          7480
Emotional       5797
Hate/Abuse      2709
Threat          2373
Support         1641
Constructive Criticism    2
Irrelevant/Spam    1
Question/Suggestion    1
Name: count, dtype: int64
```

Accuracy score

```
Model Accuracy: 0.8880279930017496
```

	precision	recall	f1-score	support
Emotional	0.92	0.94	0.93	1173
Hate/Abuse	0.94	0.82	0.87	565
Irrelevant/Spam	0.00	0.00	0.00	1
Praise	0.85	0.96	0.90	1492
Support	0.89	0.70	0.78	321
Threat	0.89	0.72	0.80	449
accuracy			0.89	4001
macro avg	0.75	0.69	0.71	4001
weighted avg	0.89	0.89	0.89	4001

Comment with their predicted category and their suggested reply

```
Comment: Amazing work! Loved the animation.
Predicted Category: Praise
Suggested Reply: Thank you for your kind words! We appreciate your support.
```

Comment: Keep going, you're doing great!

Predicted Category: Praise

Suggested Reply: Thank you for your kind words! We appreciate your support.

Comment: This is trash, quit now.

Predicted Category: Emotional

Suggested Reply: We're glad our content connected with you emotionally.

Comment: I'll report you if this continues.

Predicted Category: Emotional

Suggested Reply: We're glad our content connected with you emotionally.

Comment: This reminded me of my childhood.

Predicted Category: Emotional

Suggested Reply: We're glad our content connected with you emotionally.

Comment: Follow me for followers!

Predicted Category: Praise

Suggested Reply: Thank you for your kind words! We appreciate your support.

Comment: The video was good, but the sound was poor.

Predicted Category: Praise

Suggested Reply: Thank you for your kind words! We appreciate your support.

Comment: Can you make one on topic X?

Predicted Category: Praise

Suggested Reply: Thank you for your kind words! We appreciate your support.

Real time classifier tool

💬 Comment Categorization & Reply Assistant Tool (type 'exit' to stop)

Enter a comment: Hey this project seems cool!

Predicted Category: Praise

Suggested Reply: Thank you for your kind words! We appreciate your support.

Enter a comment: exit