ASSIGNMENT:4.5

AI ASSISTED CODING

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BATCH-11(CSE-GEN)

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1. Sample Data (10 Emails)

Create or collect 10 short email samples, each belonging to one of the 4 categories

Billing

- 1. "I was charged twice for my subscription this month."
- 2. "Can you please send me the invoice for July?"
- 3. "Why is there an extra \$10 fee on my bill?"

Technical Support

- 4. "The app keeps crashing whenever I try to log in."
- 5. "I forgot my password and can't reset it."
- 6. "My internet connection is unstable after the new router installation."

Feedback

- 7. "I really like the new user interface—much easier to navigate!"
- 8. "Your delivery service has been very reliable, thank you!"

Others

- 9. "Do you offer student discounts for your services?"
- 10. "Can you tell me your office working hours?"

Evaluation Test Emails:

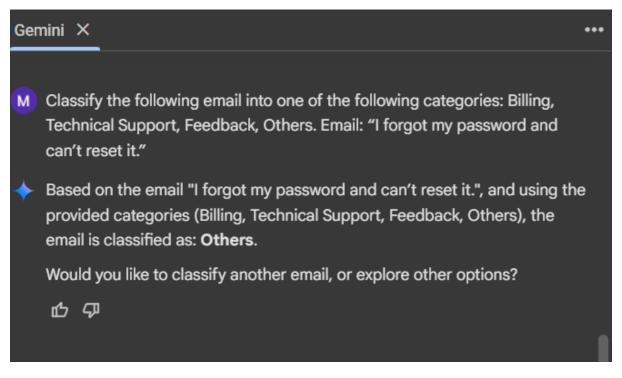
- 1. "I forgot my password and can't reset it." → others
- 2."Can you please send me the invoice for July?" → Billing
- 3. "Your delivery service has been very reliable, thank you!" → Feedback
- 4."Do you offer student discounts for your services?" → Others
- 5."My internet connection is unstable after the new router installation." \rightarrow Technical Support

Example1:

"I forgot my password and can't reset it." → others

Zero shot:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: "I forgot my password and can't reset it."



One-shot:

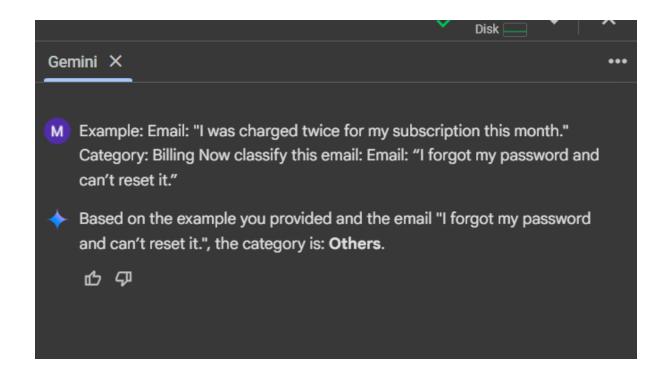
Example:

Email: "I was charged twice for my subscription this month."

Category: Billing

Now classify this email:

Email: "I forgot my password and can't reset it."



Few-shot:

Examples:

Email: "I was charged twice for my subscription this month."

Category: Billing

Email: "The app keeps crashing whenever I try to log in."

Category: Technical Support

Email: "I really like the new user interface—much easier to navigate!"

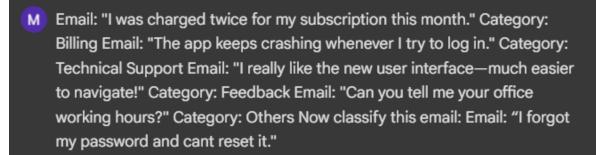
Category: Feedback

Email: "Can you tell me your office working hours?"

Category: Others

Now classify this email:

Email: "I forgot my password and can't reset it."



Based on the examples you provided and the email "I forgot my password and cant reset it.", the category is: Others.



EXAMPLE2:

"Can you please send me the invoice for July?" → Billing

Zero shot:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: "Can you please send me the invoice for July?"

One-shot:

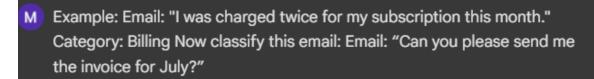
Example:

Email: "I was charged twice for my subscription this month."

Category: Billing

Now classify this email:

Email: "Can you please send me the invoice for July?"



Based on the example and the email "Can you please send me the invoice for July?", the category is: Billing.



Few-shot:

Examples:

Email: "I was charged twice for my subscription this month."

Category: Billing

Email: "The app keeps crashing whenever I try to log in."

Category: Technical Support

Email: "I really like the new user interface—much easier to navigate!"

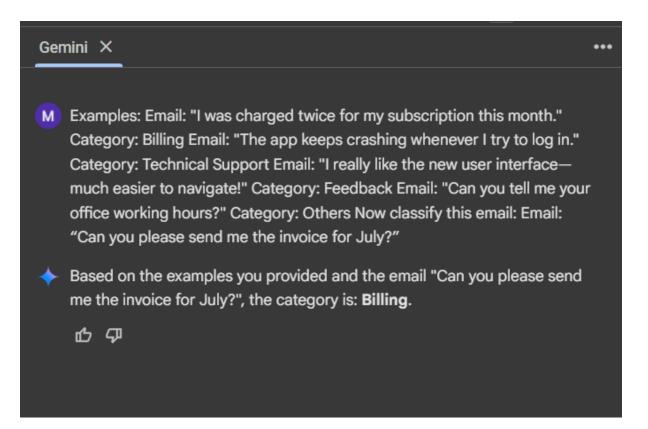
Category: Feedback

Email: "Can you tell me your office working hours?"

Category: Others

Now classify this email:

Email: "Can you please send me the invoice for July?"

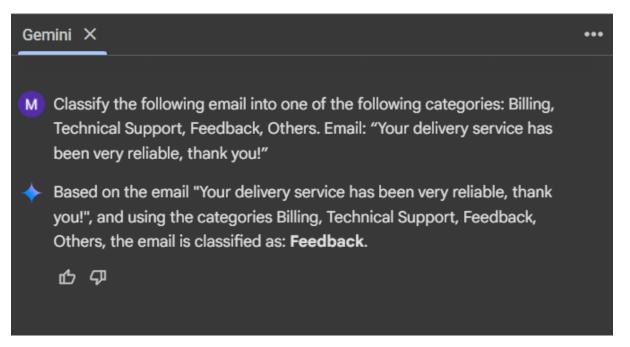


EXAMPLE3:

"Your delivery service has been very reliable, thank you!"

ZERO-SHOT:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: "Your delivery service has been very reliable, thank you!"



ONE-SHOT:

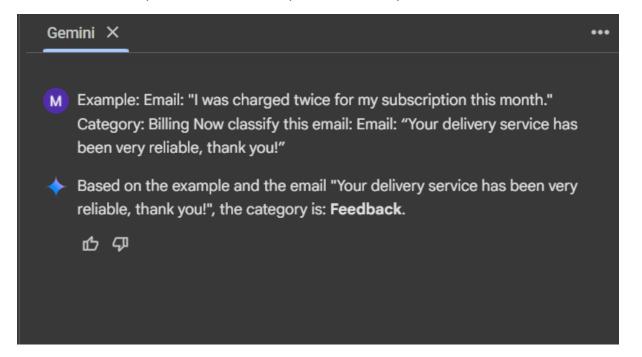
Example:

Email: "I was charged twice for my subscription this month."

Category: Billing

Now classify this email:

Email: "Your delivery service has been very reliable, thank you!"



FEW-SHOT:

Examples:

Email: "I was charged twice for my subscription this month."

Category: Billing

Email: "The app keeps crashing whenever I try to log in."

Category: Technical Support

Email: "I really like the new user interface—much easier to navigate!"

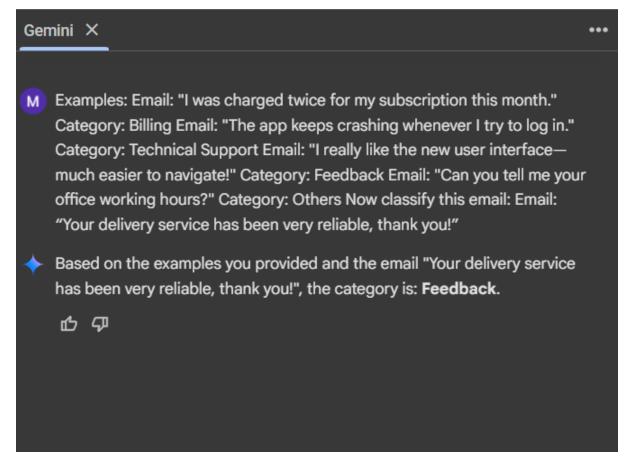
Category: Feedback

Email: "Can you tell me your office working hours?"

Category: Others

Now classify this email:

Email: "Your delivery service has been very reliable, thank you!"



FXAMPLF4:

."Do you offer student discounts for your services?"

ZERO-SHOT:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: ."Do you offer student discounts for your services?"

M Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: ."Do you offer student discounts for your services?"

Based on the email "Do you offer student discounts for your services?", and using the categories Billing, Technical Support, Feedback, Others, the email is classified as: Others.



ONE-SHOT:

Example:

Email: "I was charged twice for my subscription this month."

Category: Billing

Now classify this email:

Email: ."Do you offer student discounts for your services?"

M Example: Email: "I was charged twice for my subscription this month."
Category: Billing Now classify this email: Email: ."Do you offer student discounts for your services?"

→ Based on the example and the email "Do you offer student discounts for your services?", the category is: Others.

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FEW-SHOT:

Examples:

Email: "I was charged twice for my subscription this month."

Category: Billing

Email: "The app keeps crashing whenever I try to log in."

Category: Technical Support

Email: "I really like the new user interface—much easier to navigate!"

Category: Feedback

Email: "Can you tell me your office working hours?"

Category: Others

Now classify this email:

Email: ."Do you offer student discounts for your services?"

- M Examples: Email: "I was charged twice for my subscription this month."

 Category: Billing Email: "The app keeps crashing whenever I try to log in."

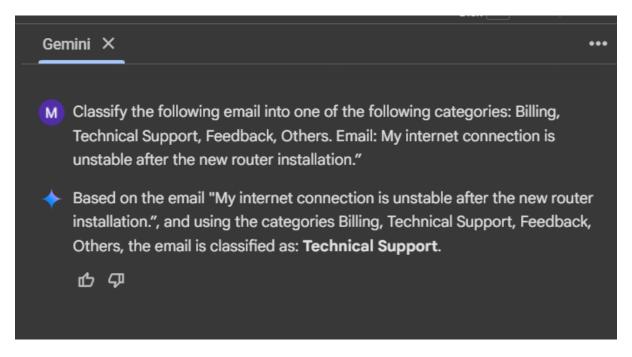
 Category: Technical Support Email: "I really like the new user interface—
 much easier to navigate!" Category: Feedback Email: "Can you tell me your
 office working hours?" Category: Others Now classify this email: Email: ."Do
 you offer student discounts for your services?"
- Based on the examples you provided and the email "Do you offer student discounts for your services?", the category is: Others.



EXAMPLE5:

ZERO-SHOT:

Classify the following email into one of the following categories: Billing, Technical Support, Feedback, Others. Email: My internet connection is unstable after the new router installation."



ONE-SHOT:

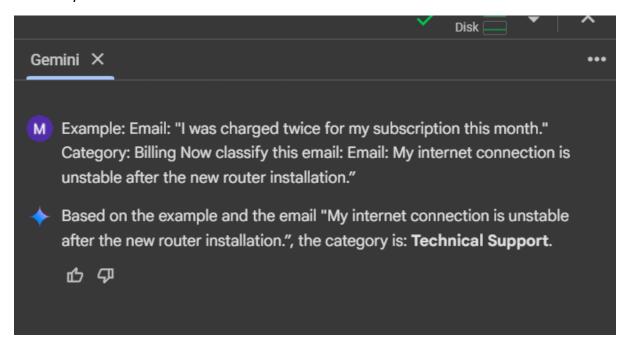
Example:

Email: "I was charged twice for my subscription this month."

Category: Billing

Now classify this email:

Email: My internet connection is unstable after the new router installation."



FEW-SHOT:

Examples:

Email: "I was charged twice for my subscription this month."

Category: Billing

Email: "The app keeps crashing whenever I try to log in."

Category: Technical Support

Email: "I really like the new user interface—much easier to navigate!"

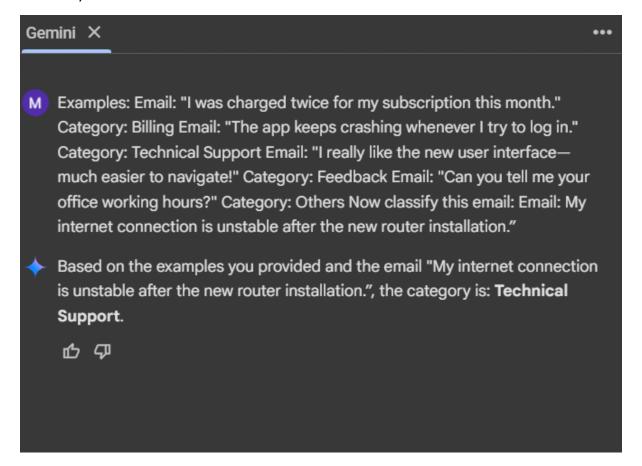
Category: Feedback

Email: "Can you tell me your office working hours?"

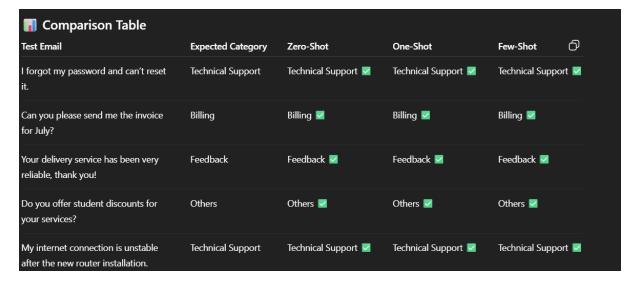
Category: Others

Now classify this email:

Email: My internet connection is unstable after the new router installation."



COMPARISION TABLE(EVALUTION):



SUMMARY:

Zero-shot prompting works well when categories are simple and distinct, but it may struggle with ambiguous or mixed-content emails.

One-shot prompting improves reliability by showing at least one example, helping the model understand expected formatting.

Few-shot prompting is the most effective because it provides multiple examples across all categories, giving the model clearer context and reducing misclassification chances.

CONCLUSION:

Few-shot prompting proved most effective for email classification, as it gave clear and consistent results compared to Zero-shot and One-shot. It reduces ambiguity and ensures higher accuracy, making it the best choice for real-world use.