

Gen AI based Email Classifier - Demo

Requirements:

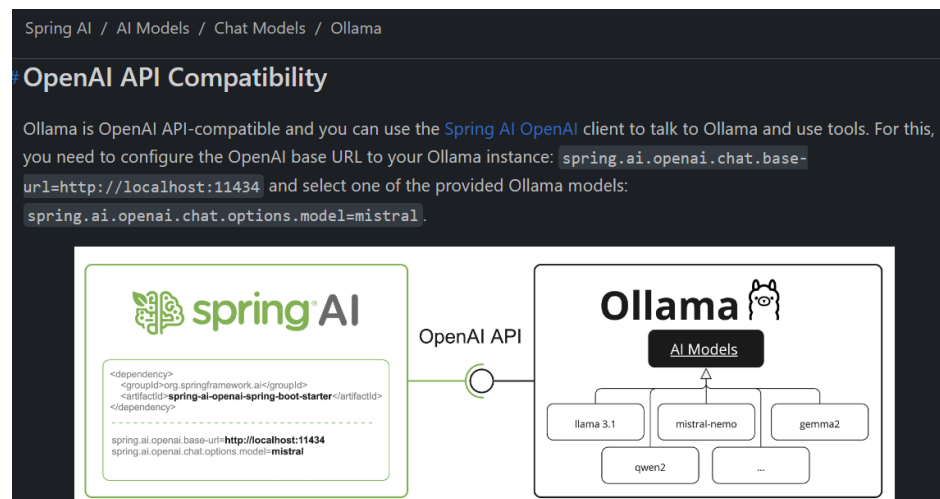
1. Read the emails from shared folder (as smtp setup is cumbersome for hackathon)
2. Extract the subject, content/body, attachments if any
3. Classify the email by its request and sub request types
4. Extract the key attributes which will help to identify which support request to be raised
5. Use open source tools

Solution:

- There are multiple AI LLMs available, though the expectation is to use the open source, OLLAMA will fit into the requirement as :
 - It can be setup locally or on our own hosted servers
 - Identify the model and enhance them as a customized ones
 - Very well documented with Spring AI

Technology: Spring AI

Spring AI very well works with Ollama.



How to Run:

1. Setup the Ollama locally
 - a. Download the windows installer and install it
 - b. Pull and push the models
2. Keep the email (.eml) files in the shared path
3. Run the Gied-Hack-Then-N-Now application
 - a. Call the api <http://localhost:8080/api/email/process>
4. Get the results as below:

```
localhost:8080/api/email/process

pretty print

[{"emailName": "inputdata1.eml", "classification": "Loan Repayment Notification", "details": {"dealISIN": "8-Nov-2023 AGENT DEFAULT 999-999-9999", "facilityCUSIP": "13861EAF7", "facilityISIN": "US13861EAF79", "lenderMEI": "US11058422", "effectiveDate": "10-Nov-2023", "loanAmount": "USD 425,000,000.00", "repaidAmount": "USD 20,000,000.00", "previousGlobalPrincipalBalance": "USD 45,000,000.00", "newGlobalPrincipalBalance": "USD 25,000,000.00", "lenderSharePrincipalBalance(Previous)": "USD 3,176,470.59", "lenderSharePrincipalBalance(New)": "USD 1,764,705.88", "SOFR(US)TermOptionPaymentAmount": "USD 1,411,764.71", "accountNumber": "XXXXXXXX0720"}, "reasoning": "The email body mentions a loan facility and an adjustment in the lender shares, indicating an account update related to a loan.", "keywords": ["Loan", "Facility", "Adjustment", "Lender Shares", "Commitment"], "relevantLines": ["It has been Increased to USD 5,542,963.55.", "For: WELLS FARGO BANK, NA"], "dealName": "ABTB MID-ATLANTIC LLC $171.3MM 11-4-2022", "accountNumber": "0026693011", "bankName": "Citizens Bank NA", "amountToFund": "$24,714.36"}]
```