

How To Document:

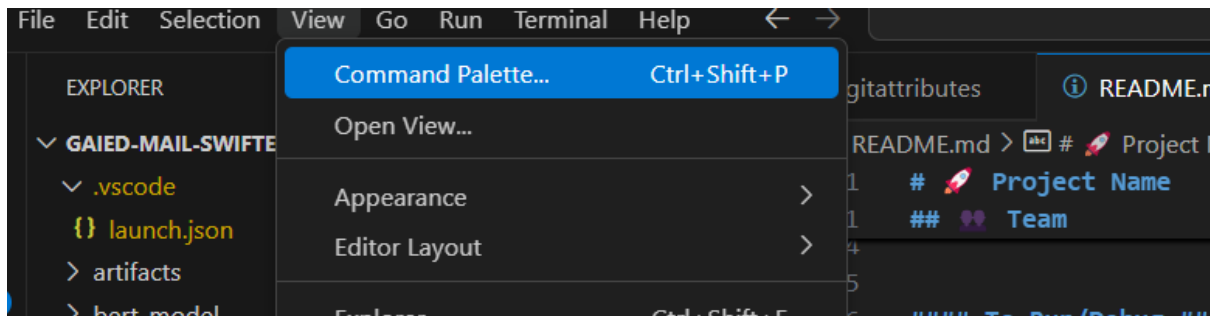
Please run “git lfs install” as model file is larger than 100MB

1. Setup in Local:

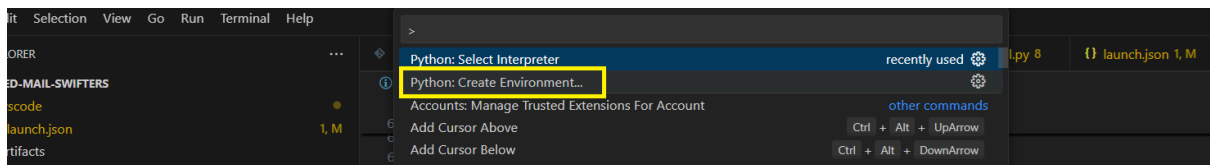
Install Python

Open code in VS Code

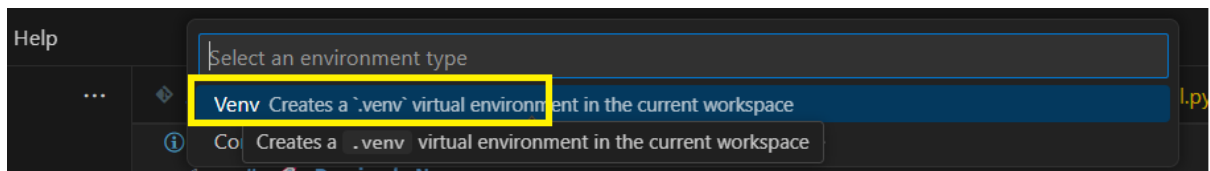
Go to View -> Command Palette



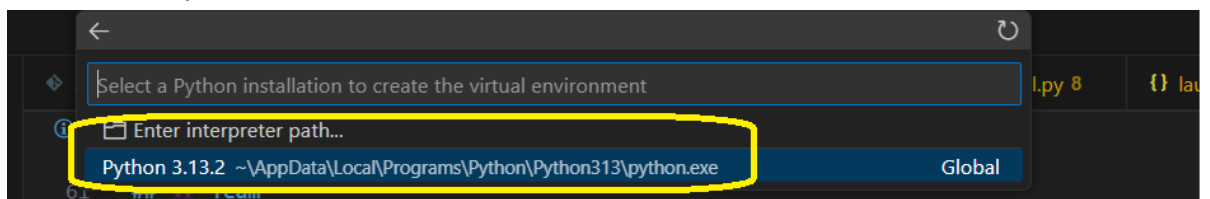
Click on create environment



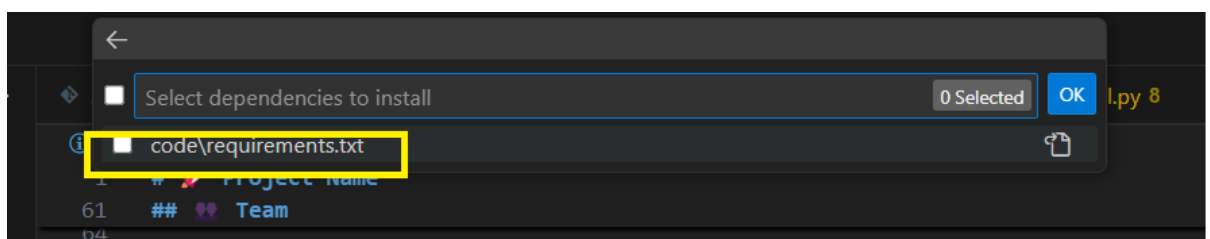
Select Venv



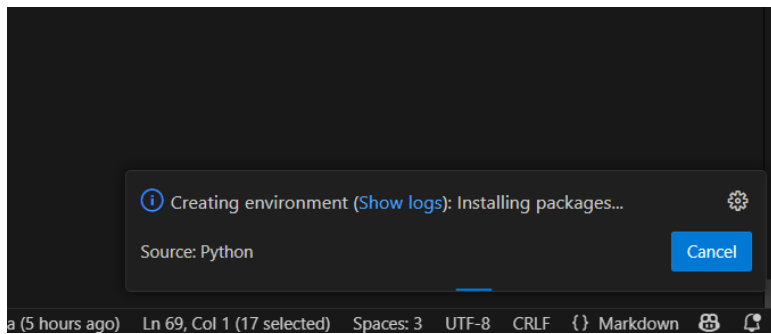
Choose interpreter



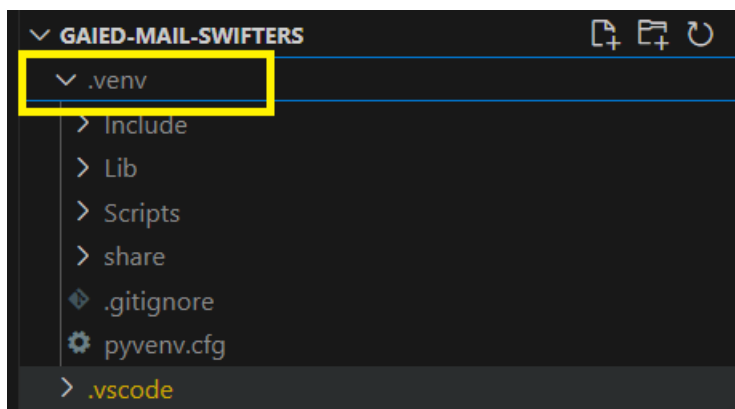
Choose requirements file



And click OK, it takes a while to create virtual environment

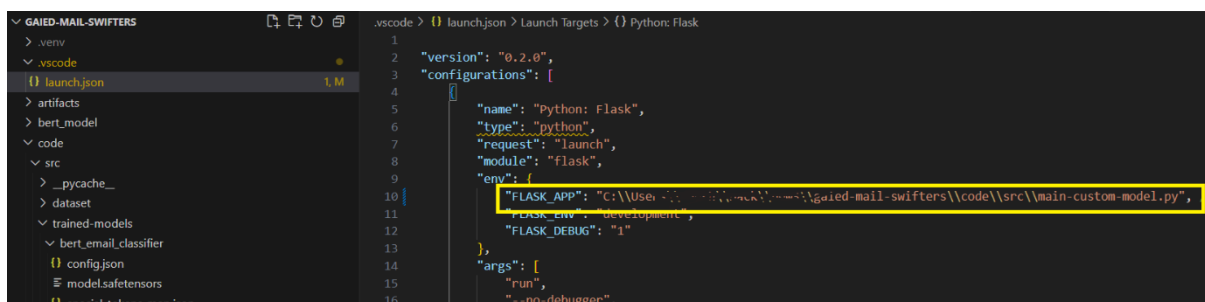


Once done we can see .venv folder



Creating this virtual environment is optional, if not created it will get the python packages from system, we may get into version issues.

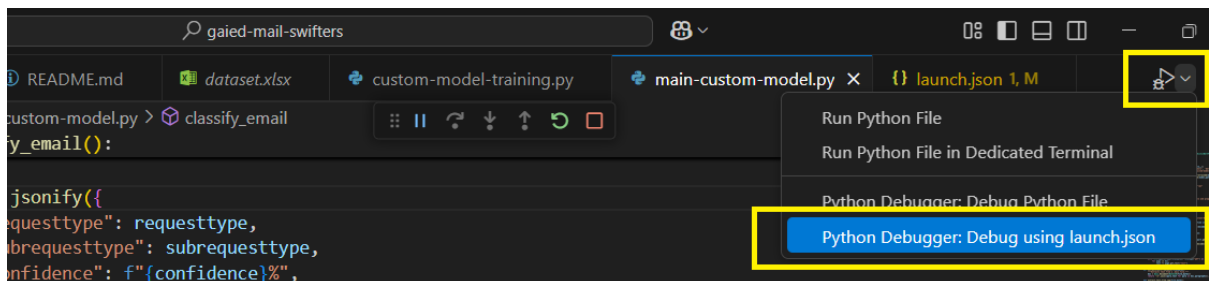
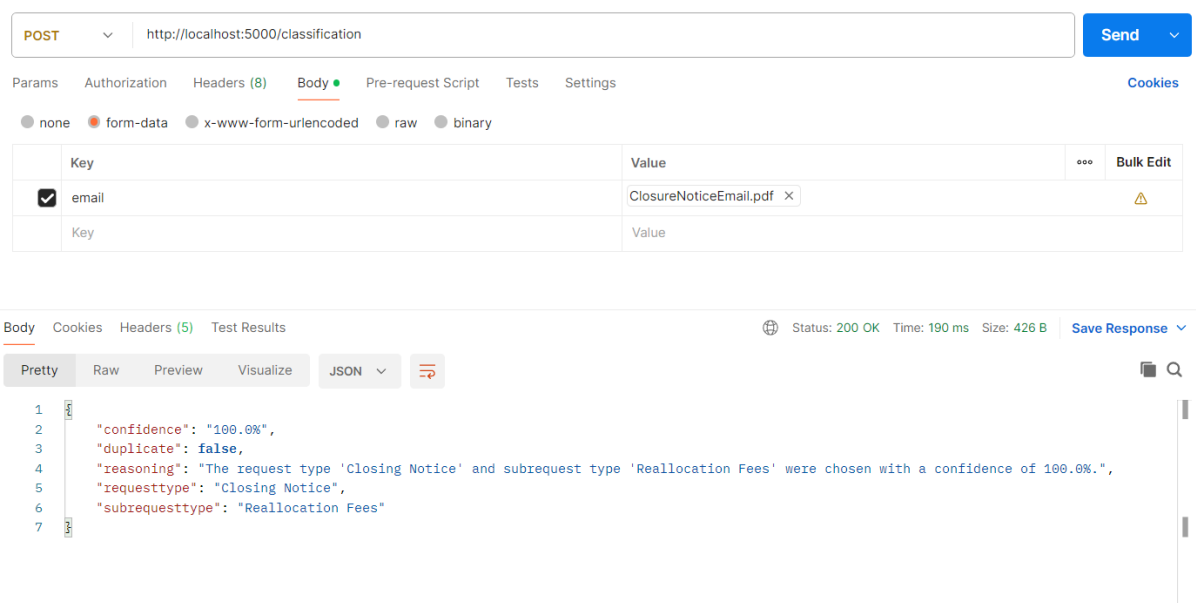
Update this path as per local machine in .vscode -> launch.json



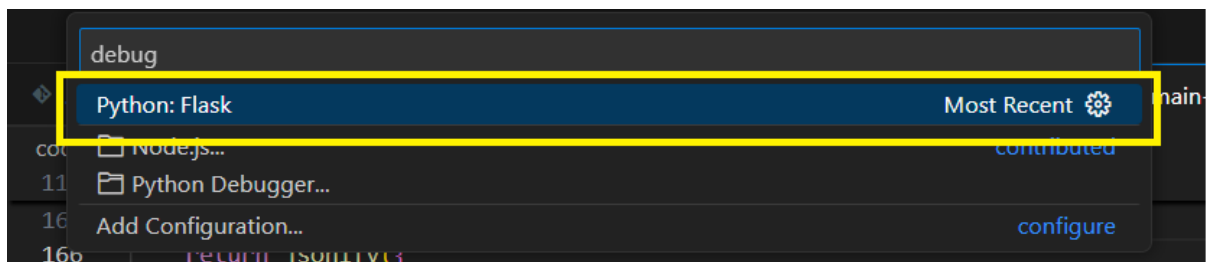
2. Classification API

Open “main-custom-model.py” file under “code\\src\\main-custom-model.py”

From VS Code -> Run -> Choose either Run Without Debugging or Start Debugging, To debug



From command palette choose flask if debugging



3. [OPTIONAL] Postman Sample Request:

We can take the running host url from VS Code terminal

```
119
120     file = request.files["email"]
121     text_content = ""
122     attachments = []
123
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS Python Debug Console

```
PS C:\Users\Anush\Hack\new3\gaied-mail-swifters>
PS C:\Users\Anush\Hack\new3\gaied-mail-swifters> c:; cd 'c:\Users\Anush\Hack\new3\gaied-mail-swifters'; & 'c:\Users\Anush\Hack\new3\gaied-mail-swifters\venv\Scripts\python.exe' 'c:\Users\Anush\vscode\extensions\ms-python.debugpy-2025.4.1-win32-x64\bundle\libs\debugpy\launcher' -m 'flask' 'run' '--no-debugger' '--no-reload'
PS C:\Users\Anush\Hack\new3\gaied-mail-swifters> ^C
PS C:\Users\Anush\Hack\new3\gaied-mail-swifters>
PS C:\Users\Anush\Hack\new3\gaied-mail-swifters> c:; cd 'c:\Users\Anush\Hack\new3\gaied-mail-swifters'; & 'c:\Users\Anush\Hack\new3\gaied-mail-swifters\venv\Scripts\python.exe' 'c:\Users\Anush\vscode\extensions\ms-python.debugpy-2025.4.1-win32-x64\bundle\libs\debugpy\launcher' -m 'flask' 'run' '--no-debugger' '--no-reload'
* Serving Flask app 'C:\Users\Anush\Hack\new3\gaied-mail-swifters\code\src\main-custom-model.py'
* Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
* Running on http://127.0.0.1:5000
Press CTRL+C to quit
127.0.0.1 - - [25/Mar/2025 17:45:22] "POST /classify HTTP/1.1" 200 -
```

POST http://localhost:5000/classification Send

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

none form-data x-www-form-urlencoded raw binary

Key	Value	...	Bulk Edit
<input checked="" type="checkbox"/> email	ClosureNoticeEmail.pdf		
Key	Value		

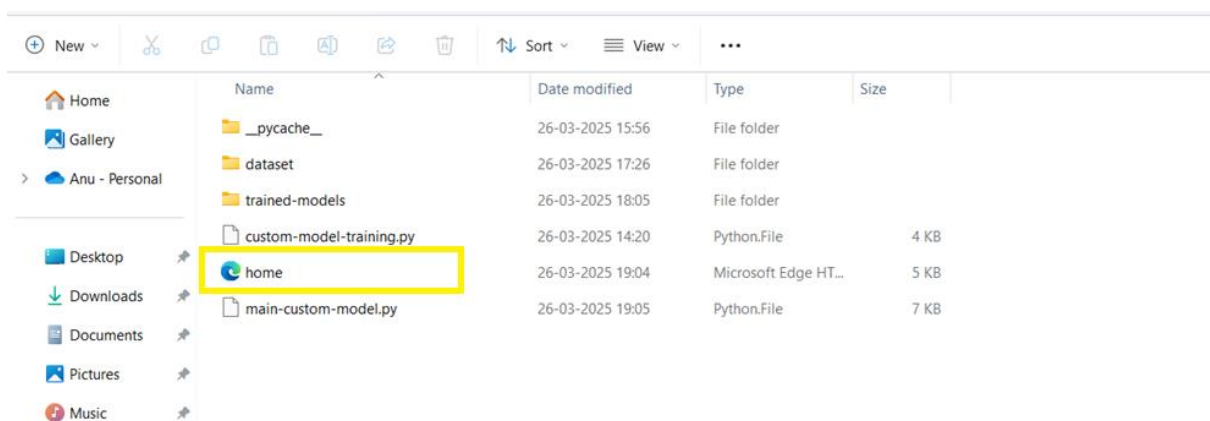
Body Cookies Headers (5) Test Results Status: 200 OK Time: 122 ms Size: 426 B Save Response

Pretty Raw Preview Visualize JSON

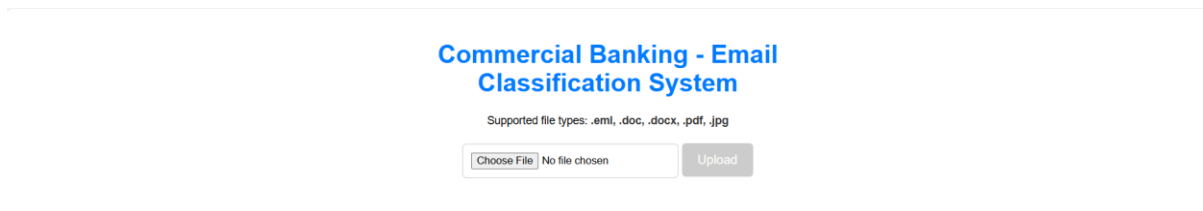
```
1 {
2   "confidence": "100.0%",
3   "duplicate": false,
4   "reasoning": "The request type 'Closing Notice' and subrequest type 'Reallocation Fees' were chosen with a confidence of 100.0%.",
5   "requesttype": "Closing Notice",
6   "subrequesttype": "Reallocation Fees"
7 }
```

4. UI Part

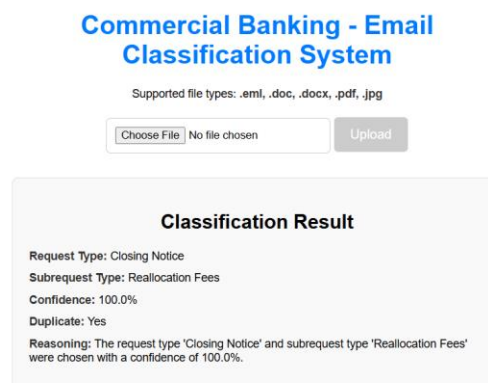
Go to -> code\src\home.html to open home.html in browser



In browser:



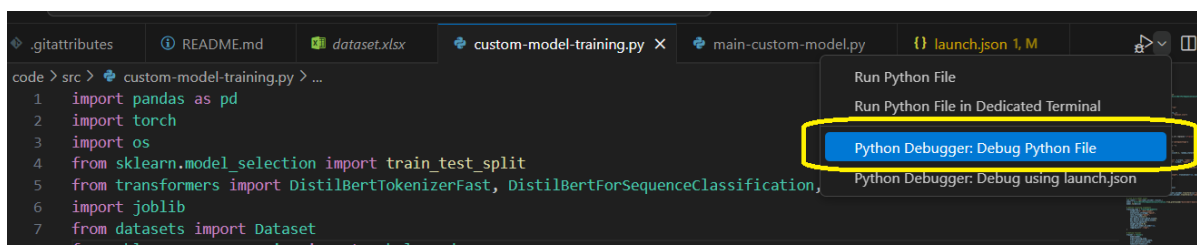
Choose .eml/.docx/.pdf/.jpg file and click on upload



5. [Optional if we change dataset] Model training:

We have used BERT Transformer model and trained that using dataset under “code\src\dataset\dataset.xlsx”

To train model open “code\src\custom-model-training.py” file and in VS Code go to Run -> either Start Debugging or Run Without Debugging, if debugging option is chosen then use this option



When execution is done it will save trained model files under “code\src\trained-models” path