ML Flow Set Up

Setting up a python virtual environment and MLflow on Window

1. Create Virtual environment at C:\
    - Open CMD
    - Change directory to C:\
    - Create Python virtual environment from the following command:
        i. python -m venv <Environment_Name>
        ii. E.g. python -m venv FinalProjectEnv

2. Activate the environment
    - <Environment_Name>\Scripts\activate
    - E.g. FinalProjectEnv\Scripts\activate

3. Install ML Flow library in the Python virtual environment from the following command:
    - pip install mlflow

4. Install Jupyter and ipykernel
    - pip install ipykernel

5. Add your env to Jupyter (on VScode):
    - Open project folder
    - Command Palette (Ctrl+Shift+P)
    - Select Python: Select Interpreter
    - Select Enter Interpret path...
    - Select Find...
    - Choose: ./<Environment_Name>/Scripts/python.exe

6. Select kernel (On VScode)
    - Open Jupyter Notebook
    - Click on Select Kernel
    - Choose <Environment_Name>

    *If the file is .py, choose the kernel by Ctrl+Shift+P and select the <Environment_Name>

    *Install python + jupyter extension, if it is not installed.

Start ML Flow

1. Open CMD
    - Change directory to the folder where mlruns folder is located from the following command:
    - cd path/to/the/folder
    - E.g. C:\Users\Asus\FinalProjectOperAI
2. Activate the environment on the project folder
    - C:\<Environment_Name>\Scripts\activate
    - E.g. C:\FinalProjectEnv\Scripts\activate
3. Start ML Flow with the following command:
    - mlflow ui --backend-store-uri file:///c:/Users/Asus/FinalProjectOperAI/mlruns
    - Open the following URL to access ML Flow web browser:
    - http://127.0.0.1:5000
4. In your python file, include the following command:
    - mlflow.set_tracking_uri(f"sqlite:///{os.path.abspath('../mlflow.db')}")