4/21 2025

* Using openpyxl
  + openpyxl is a Python library used to read and write Excel files (.xlsx)
  + We used openpyxl here because pandas doesn’t handle Excel writing directly — it needs a library like openpyxl (for .xlsx) or xlsxwriter to actually write the file.
* pandas = great for data manipulation

openpyxl = actually saves your spreadsheet to .xlsx

* When we have the code such as:

output\_df.to\_excel("order\_breakdown.xlsx", index=False)

By default, pandas writes row numbers (the index) into the Excel file as the first column.

Using index=False tells it:

❌ "Hey, I don’t want that extra index column — just give me the clean data."

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* For automatically creating datetime: **datetime**

date\_str = datetime.now().strftime("%Y-%m-%d")

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* Add a GUI (Graphical User Interface) to select input file
* If I haven’t had the UI I could use this to make my user more comfortable when selecting files.

**Backend Part**

* Using Fast API to improve the speed and receive more requests in a short time
* Build the virtual environment to isolate the project
* Especially when using external packages like fastapi, pandas, openpyxl, etc.
* Maintain the dependencies cleaner
  + You can freeze dependencies in requirements.txt and easily recreate it later.
* Activate:

venv\Scripts\activate

* Deactivate:

deactivate

* Problem facing here:

I got this error message after activating it venv\Scripts\activate :

File C:\Users\Ariel\OneDrive - FDG\FDG-Shipping server\Ariel\Projects\Automate\_Correct\_Form\venv\Scripts\Activate.ps1 cannot be loaded because running scripts is disabled on this system. For more information, see about\_Execution\_Policies at https:/go.microsoft.com/fwlink/?LinkID=135170. At line:1 char:1 + venv\Scripts\activate + ~~~~~~~~~~~~~~~~~~~~~ + CategoryInfo : SecurityError: (:) [], PSSecurityException + FullyQualifiedErrorId : UnauthorizedAccess

Solution:

Run this line of code first:

Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Scope Process

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* Since I just moved my backend files into a backend/ folder, so now my main app file is at:

backend/main.py  
So I need to run Uvicorn from outside the backend/ folder, and point it to the module correctly:

uvicorn backend.main:app -–reload

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* 1. To avoid CORS issues, you'll need to install and configure CORS in FastAPI:
     1. First install:

pip install fastapi[all] # Includes CORS middleware

* + 1. And then add in your code:

from fastapi.middleware.cors import CORSMiddleware

app.add\_middleware(

CORSMiddleware,

allow\_origins=["http://localhost:3000"], # or ["\*"] for dev

allow\_credentials=True,

allow\_methods=["\*"],

allow\_headers=["\*"],

)

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1. Frontend
   1. Create the react application by

npx create-react-app

npm start

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* 1. NOTICE! Since when using “create-react-app”, it will automatically create a .gitignore under the frontend folder for me, so
     + - since I already have a gitignore in the frontend folder(create-react-app automatically generate for me), I think frontend/ folder will accidentally be treated as a separate Git repository — a so-called "embedded repo" or nested Git repo.
       - Recursively remove the .git folder inside your frontend/ directory.
       - In Windows, the command would be:

Remove-Item -Recurse -Force frontend\.git

* + - * And then add the git add . => git commit -m “keep going” as usual
  1. Don’t forget to add a .gitignore file under the root project to avoid uploading bulky stuff.