

## *To use*

- To use the code, you must have Python installed. It is easier to run the code from Jupyter as it shows right away if there are problems while finding the tail or any interrupts in the use of the code.

- You MUST have the following Python packages installed:

Required packages:

pip install cookiejar

pip install mechanize

pip install beautifulsoup4

pip install pandas

latest commands to install packages are found here just provide name of package (latest versions):

<https://pypi.org/>

can install using command prompt or Jupyter if pip is installed you can search for install pip for Python (Version) (Operating system) windows, Linux, MAC

- I run the code in a laptop with widows 11, the version of python was “Python 3.9.12”.

1. First run “flight\_history.py” if you don’t have the excel file within the folder.
2. Second, open the “scraping.ipynb” file in jupyter
  - a. Run the first box, which is the imports
  - b. Run the second box which has the credentials and list of tail numbers to get data on.
    - i. Format for list of tails is ['N42CU','N43CU',  
, 'N545LM','N546LM','N548LM','N724DE']
  - c. Run the third box, this will initialize the process and will show as it gets data in each tail.
    - i. If the code stops in a specific tail number with an error copy tail number and look up in FlightAware website to see if there is no data on it or any other problem requiring any other action.
    - ii. To continue remove problematic tail from list and continue running the code.
  - d. Running the fourth box will show the data you gathered.
  - e. Running the fifth box will read the csv file saved from scraping the data.
  - f. All other boxes can be modified to run other tests on data.
3. To change the name of the file exported (Excel) edit “flight\_history.py” and go to the bottom of the page in line 93 to change name.