**python-smartsheet-collation-script**

A Python application that loads smartsheets, filters based on set criteria, writes to a “result” smartsheet (“Collation Master Sheet”), updates selected cells, and saves the results.

This script does the following:

* Clear all rows from the collation master smartsheet
* Load Smartsheets related to anti-drugs
* Loop through the rows
* Check for rows that meet criteria
* Write the results back to the master sheet
* Update cell values
* Delete excess rows

**Interested in adding to this script and / or adapting it for your purposes? Take note of the following:**

* Familiarize yourself with the Smartsheet API and understand how data is organized: <http://smartsheet-platform.github.io/api-docs/>
* Make an empty “result sheet” that has all the wanted columns already made. You will need to reference these column names in the code, so it knows which to write to

(e.g. result\_column\_map[“Program”]).

* A screenshot of a cell phone

  Description automatically generated
* Retrieve the Smartsheet IDs of the sheets you want to read from or write to. You can find this under the properties tab of any Smartsheet. You must provide this information.

A close up of text on a screen

Description automatically generated

* The get\_sheet(sheet\_id, rowsToAdd, step\_name) function loops through every row of the specified Smartsheet ID and calls evaluate\_sheet(source\_row, step\_name) for every row. It returns all the rows that you want to add in the rowsToAdd list variable. You most likely *don’t need to modify* this function.

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* The evaluate\_sheet(source\_row, step\_name) function returns a new row of a specified format (with New Cell()) that meets some specified criteria. You NEED to modify this function to fit criteria relevant for your purposes, mainly:
  + What columns are you interested in adding (e.g. target, start date, end date, REGN#)?
  + What rows should be excluded (ex. not an anti-drug)?
  + Which column(s) in the target sheet maps 1:1 with the column(s) in my result sheet?
  + Append the new cells to a new row and return the new row.
* clear\_rows(sheet\_id. rows\_to\_delete) deletes all rows (listed as row IDs) in the rows\_to\_delete list variable.
* update\_sheet(sheet\_id, bol) works similarly to get\_sheet() except that instead of adding new rows, it updates existing ones by looping through rows of the “result sheet.”

**Setup on MacOS**

Navigate to Terminal command line. Install Python 3 on MacOS (please follow steps carefully). You need to install XCode, Homebrew, and Python 3. You can ignore the Virtual Environments section.

* <https://installpython3.com/mac/>

Install the smartsheet Python SDK from [pypi](https://pypi.python.org/pypi/smartsheet-python-sdk)

* $ pip3 install smartsheet-python-sdk

Install the DateTime package

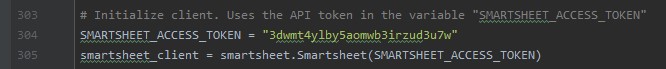
* $ pip3 install DateTime

**Configure**

Create an API Access Token for Smartsheet (don’t use mine):

* <https://help.meisterplan.com/hc/en-us/articles/115003776834-Creating-an-API-Access-Token-for-Smartsheet>

Edit the code to use your own access token by replacing the token in quotation marks with your own:

* 
* SMARTSHEET\_ACCESS\_TOKEN = “YOUR TOKEN”

**Build and run the application.**

* $ python3 antidrug\_collation\_script.py

The result sheet (where everything is written) is currently the “Collation Master Sheet” but can configured to be any sheet that you want.

A log file named rwsheet.log will accumulate information about API calls.

**See also**

* <http://smartsheet-platform.github.io/api-docs/>
* <https://github.com/smartsheet-platform/smartsheet-python-sdk>