

## **Back-end Notification Processing Script Rewrite – Fall 2022**

Below is the brief overview of functions used in Text-Locator.py code.

- 1) Initially from line 16-47, required variables are declared. Collection namedtuples were also created that are used in the further processing.
- 2) Error\_report.txt is used to save error messages.
- 3) In the main() the following processing is done
  - The student data file and Translation Control file are read and an error is thrown if it has no records or the file does not exist.
  - After reading the student data, few checks are done for size of ids and reocrd\_types using size\_check() function.
  - OUTPUTTING() function is called. This function creates an html\_output collection variable using student data file and translation control file. Each record (tuple) of this html output variable contains details of a student and also the processed H,O,N,P data that will be used to create the body of the email.
  - read\_all\_email(), this function reads the teacher\_control.csv file and saves this data in a global variable.
  - code\_html(), This function creates html code (entire email body) for each student using data generated by OUTPUTTING() function and saves them as files.
  - Sent\_email(), Send emails to teachers based on data in the teacher control file. The body of the emails is extracted from html files saved by code\_html(). The teacher control file is also updated when a mail is sent.

We can divide the above script into 5 scripts as below

- 1) The main script that imports all the other scripts that are used for reading and processing the files.
- 2) We can create a 2nd script containing functions to read the data like student data, control files data etc.
- 3) The 3rd script can handle creation of data that can be used in emails by combining student data file and translation control file, similar to the OUTPUTTING() function mentioned above.
- 4) The 4th script can use data from the 3rd script and teacher control data to output two files based on teacher preference to use gmail or outlook and also teachers weekly limit of notifications.
- 5) In 5th script, the two output files from 4th script can be used to trigger respective power automatic flows to send the emails.