HIBP_email_checker_V2

Modules

<u>pandas</u> <u>requests</u> <u>time</u>

Functions

main()

Specifies the content to be passed into iterate_over_csv, calls Iterate_over_csv with file paths and start row, and prints out the emails and row numbers of the rows in the CSV that made a bad request to HIBP's API (Response status code = 400 or 403).

iterate_over_csv(file_path_with_emails, content=None, append=False, start_row=0, stop_row=0, lookup_file_path=None)

Reads a CSV file_path and a start_row for which row to start processing data on. The CSV file should be the All CAR Members list from Pardot.

:param file_path_with_emails: The file path that contains the emails to be checked.

:param content: Either a list of headers if new CSV is
 wanted as a result, otherwise, provide a file path
 that will be used to append the results to. If a file path
 is provided, 'content' is then to be used in conjuction with
 'append'. If 'content' is a file path and 'append' is True,
 the results of the program will be appended to the file
 provided by the file path. If append is False, a new CSV
 will be created and all of that file's headers will be
 used as the fields to be found. If the latter is the
 case, be sure that the headers of the content file have the
 same exact headers as wherever the data associated with
 the email is coming from.

Default is None, i.e. create a new CSV with all headers and data associated with the emails within 'file path with emails'.

- :param append: If 'append' is True, the program will append the
 results to the file provided by content. If 'append' is
 False, the program will create a new CSV with the file
 name specified by the global variable'save_to_file_path',
 but with the same headers as the file specified by content.
- :param start_row: The row to start processing data on in email file path.
- :param stop_row: The row, inclusive, in the CSV file to stop processing data on.
- :param lookup_file_path: If the data associated with the emails
 exist in another file, pass the file path here. Should be
 used if for example, 'file_path_with_emails' only has a
 specific list of emails to check, but the data associated

with the emails exists within a different file.

process_email(index, email, email df, lookup df)

Calls check_if_pwned. If True is returned, add email to pwned emails and add all data specified in content to DataFrame.

:param index: The current row we are at in 'email df'.

:param email: The email we are processing.

:param email_df: The DataFrame that contains the emails to be processed.

:param lookup_df: The DataFrame, if not None, that contains the data associated with the email if 'email_df' does not have the data.

check_if_pwned(email)

Method to check if the email has been pwned (Response status_codde = 200), if email has not been pwned (Response status_code = 404), or something went wrong. Either an error (Response status_code = 400 or 403), or too many requests have been made (Response status_code = 429), and we must wait until we can make another request to HIBP's API at: https://haveibeenpwned.com/API/v3.

:param email: The email to be checked if pwned.

pwned emails to csv()

Converts pwned_emails_df DataFrame that contains the pwned emails that Have been found to a CSV file, then prints the current row we are at within the CSV file that contains the emails to be processed.

Data

```
API_KEY = '48ec8f5a94384bc083178a91adf26cf3'

HIBP_URI = 'https://haveibeenpwned.com/api/v3/breachedaccount/'

bad_excel_rows = []

headers = {'hibp-api-key': '48ec8f5a94384bc083178a91adf26cf3', 'user-agent': 'CAR

HIBP Email Checker'}

pwned_emails = []

pwned_emails_df = Empty DataFrame Columns: [] Index: []

pwned_emails_df_row_log = 0

save_to_file_path = '/Users/username/Desktop/File Name.csv'

user agent = 'CAR HIBP Email Checker'
```