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1  import os
2  import requests
3  import shutil
4
5  from Logger import Logging
6
7  logger_obj = Logging('Advance Image Downloader') # Creating a custom based logger
8  logger_obj.initialize_logger() # Instantiating the logger object
9
10
11 class Download:
12
13     def __init__(self, result=None):
14         """
15         This function initializes the content of the downloaded files
16         :param result: Cassandra object of the downloadable result content
17         """
18         try:
19             self.content = result
20         except Exception as e:
21             logger_obj.print_log('(Download.py(__init__) - Something went wrong ' + str(e), '
exception')
22             raise Exception(e)
23
24     @staticmethod
25     def create_dir(req_id):
26         """
27         This function is used to create a directory for storing the images
28         """
29         try:
30             # If the folder doesn't exist then create that folder inside the directory
31             if not os.path.exists(req_id):
32                 os.mkdir(req_id)
33
34         except Exception as e:
35             logger_obj.print_log('(Download.py(create_dir) - Something went wrong ' + str(e), '
exception')
36             raise Exception(e)
37
38     def download_images(self, search_term, req_id):
39         """
40         This function is used to download the images over the internet and then store in the
41         folder created
42         """
43         try:
44             counter = 1
45             for row in self.content:
46                 url = row.url
47                 req = requests.get(url, stream=True, headers={"User-Agent": "Mozilla/5.0 (X11;
Linux x86_64) "
48                                     "AppleWebKit/537.36 (KHTML, like Gecko) "
                                     "Chrome/51.0.2704.103 Safari/537.36"})

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49         print('Counter = {} Header = {} URL = {}'.format(counter, req.headers, url))
50
51         logger_obj.print_log('Filetype is {}'.format(req.headers['Content-Type'].split('/')[1
52 ]), 'info')
53
54         filetype = req.headers['Content-Type'].split('/')[1].split(';')[0]
55
56         # For the files having webp as a extension
57         if filetype not in ['jpeg', 'png']:
58             filetype = 'jpeg'
59
60         req.raw.decode_content = True
61         with open(req_id + '/' + search_term + '_' + str(counter) + '.' + filetype, 'wb') as file
62 :
63             file.write(req.content)
64             file.close()
65             counter += 1
66
67     except Exception as e:
68         logger_obj.print_log('(Download.py(download_images) - Something went wrong ' +
69 str(e), 'exception')
70         raise Exception(e)
71
72     @staticmethod
73     def create_zip(req_id):
74         """
75         This function will be responsible for creating the zip file of the Downloaded Images
76         folder
77         :param req_id: The Unique id of the request
78         """
79         try:
80             if not os.path.exists(req_id + '_zipfile.zip'):
81                 shutil.make_archive(req_id + '_zipfile', 'zip', req_id)
82
83         except Exception as e:
84             logger_obj.print_log('(Download.py(create_zip) - Something went wrong ' + str(e), '
85 exception')
86             raise Exception(e)
87
88     @staticmethod
89     def delete_file(req_id):
90         """
91         This function will delete the given files
92         :param req_id: The Unique id of the request
93         """
94         try:
95             # If the zip exists then remove that from the system
96             if os.path.exists(req_id + '_zipfile.zip'):
97                 os.remove(req_id + '_zipfile.zip')
98                 print('Zip file is deleted')
99
100             # If the folder exists then remove that from the system

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96         if os.path.exists(req_id):
97             shutil.rmtree(req_id)
98             print('Image Folder is deleted')
99
100         except Exception as e:
101             logger_obj.print_log('(Download.py(delete_old_file) - Something went wrong ' + str(
102                 e), 'exception')
103             raise Exception(e)
```