```python
# -*- coding: cp1251 -*-
import csv
import os
import threading
import time
import winsound
from multiprocessing import Pool

import selenium.webdriver.support.expected_conditions as EC
import undetected_chromedriver as uc
from selenium.webdriver.common.action_chains import ActionChains
from selenium.webdriver.remote.webdriver import By
from selenium.webdriver.support.wait import WebDriverWait

my_path = f"{os.getcwd()}\\CIAN_diplom"

with open(rf"{my_path}\df_flats.csv", "a", encoding="utf-8", newline="") as ouf:
    writer = csv.writer(ouf, delimiter="$", quotechar="|", quoting=csv.QUOTE_MINIMAL)
    writer.writerow(
        (
            "link",
            "last_update",
            "title",
            "JK",
            "start_price",
            "start_date",
            "building",
            "date_readiness",
            "full_price",
            "price_for_sq_meter",
            "metro_station",
            "metro_distance",
            "city",
            "district",
            "area",
            "street",
            "house",
            "full_square",
            "living_square",
            "kitchen_square",
            "floor",
            "finishing",
            "developer",
            "date_creation",
            "info_about_flat_1",
            "info_about_flat_2",
            "info_about_flat_3",
            "info_about_flat_4",
            "info_about_flat_5",
            "info_about_flat_6",
            "info_about_flat_7",
            "info_about_flat_8",
            "info_about_flat_9",
            "info_about_house_1",
            "info_about_house_2",
            "info_about_house_3",
        )
    )

xpath_dict = {
    "from_date": '//*[@id="frontend-offer-card"]/div[1]/div[1]/div[2]/div[1]/div[1]/span',
    "from_date2": '//*[@id="frontend-offer-card"]/main/div[1]/div[2]/div[1]/div[1]/',
    "title": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[1]/h1',
    "title2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[1]/h1',
    "JK": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[1]/div/a',
    "JK2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[2]/a',
    "building": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[1]/div[2]/span[1]',
    "building2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div/div[2]/span[1]',
    "date_readiness": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[2]/span[2]',
    "date_readiness2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[2]/span',
    "full_price": '//*[@id="frontend-offer-card"]/div[1]/div[3]/div/div[1]/div[1]/div[1]/div[3]/div/div[1]/span',
    "full_price2": '//*[@id="frontend-offer-card"]/main/div[3]/div/div[1]/div[1]/div[2]/div/div[1]/div/span/span[1]',
    "price_sq": '//*[@id="frontend-offer-card"]/div[1]/div[3]/div/div[1]/div[1]/div[3]/div/div/div[1]/p[2]',
    "price_sq2": '//*[@id="frontend-offer-card"]/main/div[3]/div/div[1]/div[1]/div[2]/div/div/div[1]/div/div/div[1]/span',
    "metro_station": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/ul[1]/li[1]/a',
    "metro_station2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/ul[2]/li[1]/a',
    "metro_station3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/ul[1]/li[1]/a',
    "metro_station4": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/ul[2]/li[1]/a',
    "metro_distance": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/ul[1]/li[1]/span',
    "metro_distance2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/ul[2]/li[1]/span',
    "metro_distance3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/ul[1]/li[1]/span',
    "metro_distance4": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/ul[1]/li[1]/span/span',
    "city": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/div/div/a[1]',
    "city2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/address/a[1]',
    "district": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/div/div/a[2]',
    "district2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/address/a[2]',
    "area": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/div/div/a[3]',
    "area2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/address/a[3]',
    "street": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/div/div/a[4]',
    "street2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/address/a[4]',
    "house": '//*[@id="frontend-offer-card"]/div[1]/div[2]/section/div/div/div[2]/address/div/div/a[5]',
    "house2": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/section/div/div[1]/div[3]/address/a[5]',
    "full_square": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[1]/div[2]/span[2]',
    "full_square2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[4]/div[1]/div[2]/span[2]',
    "full_square3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/div[2]/div/div[1]/div[1]',
    "living_square": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[2]/div[2]/span[2]',
    "living_square2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[4]/div[2]/div[2]/span[2]',
    "living_square3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/div[2]/div/div[2]/div[1]',
    "kitchen_square": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[3]/div[2]/span[2]',
    "kitchen_square2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[4]/div[3]/div[2]/span[2]',
    "kitchen_square3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/div[2]/div/div[3]/div[1]',
    "floor": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[4]/div[2]/span[2]',
    "floor2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[4]/div[4]/div[2]/span[2]',
    "floor3": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/div[2]/div/div[4]/div[1]',
    "finishing": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[7]/div[2]/span[2]',
    "finishing2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[3]/div[6]/div[2]/span[2]',
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107         "finishing3": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[4]/div[7]/div[2]/span[2]',
108         "finishing4": '//*[@id="frontend-offer-card"]/main/div[2]/div[1]/div[2]/div/div[5]/div[1]',
109         "developer": '//*[@id="author"]/div[2]/a/h2',
110         "developer2": '//*[@id="author"]/div/div/div/div/div[1]/div[1]/span[2]',
111         "developer3": '//*[@id="author"]/div[2]/span',
112         "button_date_creation": '//*[@id="frontend-offer-card"]/div[1]/div[1]/div[2]/div[1]/div[2]/button[@data-name="OfferStats"]',
113         "button_date_creation2": '//*[@id="frontend-offer-card"]/main/div[1]/div[2]/div[1]/div[2]/a',
114         "date creation": "/html/body/div[5]/div/div/div[2]/div/div/div[1]/div[1]",
115         "info about flat_1": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[1]/p[2]',
116         "info about flat_2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[2]/p[2]',
117         "info about flat_3": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[3]/p[2]',
118         "info about flat_4": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[4]/p[2]',
119         "info about flat_5": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[5]/p[2]',
120         "info about flat_6": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[6]/p[2]',
121         "info about flat_7": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[7]/p[2]',
122         "info about flat_8": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[8]/p[2]',
123         "info about flat_9": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[1]/div[2]/div[9]/p[2]',
124         "info about flat_11": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[1]/p[2]',
125         "info about flat_21": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[2]/p[2]',
126         "info about flat_31": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[3]/p[2]',
127         "info about flat_41": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[4]/p[2]',
128         "info about flat_51": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[5]/p[2]',
129         "info about flat_61": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[6]/p[2]',
130         "info about flat_71": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[7]/p[2]',
131         "info about flat_81": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[8]/p[2]',
132         "info about flat_91": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[1]/div[2]/div[9]/p[2]',
133         "info about flat_12": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[1]/span[2]',
134         "info about flat_22": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[2]/span[2]',
135         "info about flat_32": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[3]/span[2]',
136         "info about flat_42": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[4]/span[2]',
137         "info about flat_52": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[5]/span[2]',
138         "info about flat_62": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[6]/span[2]',
139         "info about flat_72": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[7]/span[2]',
140         "info about flat_82": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[8]/span[2]',
141         "info about flat_92": '//*[@id="frontend-offer-card"]/main/div[2]/div[3]/div[2]/div/div/section/article/ul/li[9]/span[2]',
142         "info about house_1": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[2]/div[2]/div[1]/p[2]',
143         "info about house_2": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[2]/div[2]/div[2]/p[2]',
144         "info about house_3": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[5]/div/div/div/div[1]/div[2]/div[2]/div[3]/p[2]',
145         "info about house_11": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[2]/div[2]/div[1]/p[2]',
146         "info about house_21": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[2]/div[2]/div[2]/p[2]',
147         "info about house_31": '//*[@id="frontend-offer-card"]/div[1]/div[2]/div[6]/div/div/div/div[1]/div[2]/div[2]/div[3]/p[2]',
148         "start price button": '//*[@id="frontend-offer-card"]/div[1]/div[3]/div/div[1]/div[1]/div[1]/div[3]/div/div[2]/div/div/button[@data-name="Price
149         "start price button2": '//*[@id="frontend-offer-card"]/main/div[3]/div/div[1]/div/div[2]/div/div[1]/div/div[1]/div[@class="a10a3f92e9--icon--Ri
150         "start price": '//*[@id="frontend-offer-card"]/div[1]/div[3]/div/div[1]/div[1]/div[1]/div[3]/div/div[2]/div/div/div/div/div/div/div/div[3]/tabl
151         "start price2": '//*[@id="frontend-offer-card"]/main/div[3]/div/div[1]/div[1]/div[2]/div[1]/div/div/div/div/div/div/div/div[3]/table
152         "start date": '//*[@id="frontend-offer-card"]/div[1]/div[3]/div/div[1]/div[1]/div[1]/div[3]/div/div[2]/div/div/div/div/div/div/div/div[3]/tabl
153         "start date2": '//*[@id="frontend-offer-card"]/main/div[3]/div/div[1]/div[position()<2]/div[2]/div/div[1]/div/div[1]/div/div/div/div/div/di
154         "unpublished": '//*[@id="frontend-offer-card"]/div[1]/div[1]/div[@data-name="OfferUnpublished"]',
155         "unpublished2": '//*[@id="frontend-offer-card"]/main/div[1]/div[@data-name="OfferUnpublished"]',
156         "captcha": '//*[@id="captcha"]',
157 }
158
159 url_list = []
160
161 with open(rf"{my_path}\flat_urls.txt", "r", encoding="utf-8") as f:
162     for line in f:
163         url_list.append(line.rstrip())
164
165 whole_time = time.time()
166
167 threadLocal = threading.local()
168
169
170 def get_driver() -> None:
171     """
172     Create webdriver and reassign attributes to use same driver multiple times
173     """
174     driver = getattr(threadLocal, "driver", None)
175     chromeOptions = uc.ChromeOptions()
176     chromeOptions.add_argument("--headless")
177     if driver is None:
178         driver = uc.Chrome(chrome_options=chromeOptions)
179     setattr(threadLocal, "driver", driver)
180     return driver
181
182
183 def melody() -> None:
184     """
185     Signals to notify about captcha
186     """
187     winsound.PlaySound("SystemExit", winsound.SND_ALIAS)
188     winsound.PlaySound("SystemExit", winsound.SND_ALIAS)
189     winsound.PlaySound("SystemHand", winsound.SND_ALIAS)
190     winsound.PlaySound("SystemExit", winsound.SND_ALIAS)
191     winsound.PlaySound("SystemExit", winsound.SND_ALIAS)
192
193
194 def get_urls(url: str) -> None:
195     global date_creation, flat_data
196     driver = get_driver()
197     try:
198         start_time = time.time()
199         full_url = url
200         driver.get(full_url)
201         driver._web_element_cls = uc.UCWebElement
202
203         try:
204             captcha = driver.find_elements(By.XPATH, xpath_dict["captcha"])
205             if captcha[-1] != []:
206                 print("Captcha")
207                 melody()
208                 time.sleep(25)
209         except:
210             pass
211
212         try:
213             from_date = driver.find_element(
214                 By.XPATH, xpath_dict["from_date"]
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214                        By.XPATH, xpath_dict["from_date"]
215                    ).get_attribute("innerText")
216            except:
217                try:
218                    from_date = driver.find_element(
219                        By.XPATH, xpath_dict["from_date2"]
220                    ).get_attribute("innerText")
221                except:
222                    from_date = ""

224            try:
225                title = driver.find_element(By.XPATH, xpath_dict["title"]).get_attribute(
226                    "innerText"
227                )
228            except:
229                try:
230                    title = driver.find_element(
231                        By.XPATH, xpath_dict["title2"]
232                    ).get_attribute("innerText")
233                except:
234                    title = ""

236            try:
237                JK = driver.find_element(By.XPATH, xpath_dict["JK"]).get_attribute(
238                    "innerText"
239                )
240            except:
241                try:
242                    JK = driver.find_element(By.XPATH, xpath_dict["JK2"]).get_attribute(
243                        "innerText"
244                    )
245                except:
246                    JK = ""

248            try:
249                building = driver.find_element(
250                    By.XPATH, xpath_dict["building"]
251                ).get_attribute("innerText")
252            except:
253                try:
254                    building = driver.find_element(
255                        By.XPATH, xpath_dict["building2"]
256                    ).get_attribute("innerText")
257                except:
258                    building = ""

260            try:
261                date_readiness = driver.find_element(
262                    By.XPATH, xpath_dict["date_readiness"]
263                ).get_attribute("innerText")
264            except:
265                try:
266                    date_readiness = driver.find_element(
267                        By.XPATH, xpath_dict["date_readiness2"]
268                    ).get_attribute("innerText")
269                except:
270                    date_readiness = ""

272            try:
273                full_price = driver.find_element(
274                    By.XPATH, xpath_dict["full_price"]
275                ).get_attribute("innerText")
276            except:
277                try:
278                    full_price = driver.find_element(
279                        By.XPATH, xpath_dict["full_price2"]
280                    ).get_attribute("innerText")
281                except:
282                    full_price = ""

284            try:
285                price_sq = driver.find_element(
286                    By.XPATH, xpath_dict["price_sq"]
287                ).get_attribute("innerText")
288            except:
289                try:
290                    price_sq = driver.find_element(
291                        By.XPATH, xpath_dict["price_sq2"]
292                    ).get_attribute("innerText")
293                except:
294                    price_sq = ""

296            try:
297                metro_station = driver.find_element(
298                    By.XPATH, xpath_dict["metro_station"]
299                ).get_attribute("innerText")
300            except:
301                try:
302                    metro_station = driver.find_element(
303                        By.XPATH, xpath_dict["metro_station2"]
304                    ).get_attribute("innerText")
305                except:
306                    try:
307                        metro_station = driver.find_element(
308                            By.XPATH, xpath_dict["metro_station3"]
309                        ).get_attribute("innerText")
310                    except:
311                        try:
312                            metro_station = driver.find_element(
313                                By.XPATH, xpath_dict["metro_station4"]
314                            ).get_attribute("innerText")
315                        except:
316                            metro_station = ""

318            try:
319                metro_distance = driver.find_element(
320                    By.XPATH, xpath_dict["metro_distance"]
321                ).get_attribute("innerText")
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322              except:
323                  try:
324                      metro_distance = driver.find_element(
325                          By.XPATH, xpath_dict["metro_distance2"]
326                      ).get_attribute("innerText")
327                  except:
328                      try:
329                          metro_distance = driver.find_element(
330                              By.XPATH, xpath_dict["metro_distance3"]
331                          ).get_attribute("innerText")
332                      except:
333                          try:
334                              metro_distance = driver.find_element(
335                                  By.XPATH, xpath_dict["metro_distance4"]
336                              ).get_attribute("innerText")
337                          except:
338                              metro_distance = ""
339
340          try:
341              city = driver.find_element(By.XPATH, xpath_dict["city"]).get_attribute(
342                  "innerText"
343              )
344          except:
345              try:
346                  city = driver.find_element(By.XPATH, xpath_dict["city2"]).get_attribute(
347                      "innerText"
348                  )
349              except:
350                  city = ""
351
352          try:
353              district = driver.find_element(
354                  By.XPATH, xpath_dict["district"]
355              ).get_attribute("innerText")
356          except:
357              try:
358                  district = driver.find_element(
359                      By.XPATH, xpath_dict["district2"]
360                  ).get_attribute("innerText")
361              except:
362                  district = ""
363
364          try:
365              area = driver.find_element(By.XPATH, xpath_dict["area"]).get_attribute(
366                  "innerText"
367              )
368          except:
369              try:
370                  area = driver.find_element(By.XPATH, xpath_dict["area2"]).get_attribute(
371                      "innerText"
372                  )
373              except:
374                  area = ""
375
376          try:
377              street = driver.find_element(By.XPATH, xpath_dict["street"]).get_attribute(
378                  "innerText"
379              )
380          except:
381              try:
382                  street = driver.find_element(
383                      By.XPATH, xpath_dict["street2"]
384                  ).get_attribute("innerText")
385              except:
386                  street = ""
387
388          try:
389              house = driver.find_element(By.XPATH, xpath_dict["house"]).get_attribute(
390                  "innerText"
391              )
392          except:
393              try:
394                  house = driver.find_element(
395                      By.XPATH, xpath_dict["house2"]
396                  ).get_attribute("innerText")
397              except:
398                  house = ""
399
400          try:
401              full_square = driver.find_element(
402                  By.XPATH, xpath_dict["full_square"]
403              ).get_attribute("innerText")
404          except:
405              try:
406                  full_square = driver.find_element(
407                      By.XPATH, xpath_dict["full_square2"]
408                  ).get_attribute("innerText")
409              except:
410                  try:
411                      full_square = driver.find_element(
412                          By.XPATH, xpath_dict["full_square3"]
413                      ).get_attribute("innerText")
414                  except:
415                      full_square = ""
416
417          try:
418              living_square = driver.find_element(
419                  By.XPATH, xpath_dict["living_square"]
420              ).get_attribute("innerText")
421          except:
422              try:
423                  living_square = driver.find_element(
424                      By.XPATH, xpath_dict["living_square2"]
425                  ).get_attribute("innerText")
426              except:
427                  try:
428                      living_square = driver.find_element(
```

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                    By.XPATH, xpath_dict["living_square3"]
                ).get_attribute("innerText")
            except:
                living_square = ""

    try:
        kitchen_square = driver.find_element(
            By.XPATH, xpath_dict["kitchen_square"]
        ).get_attribute("innerText")
    except:
        try:
            kitchen_square = driver.find_element(
                By.XPATH, xpath_dict["kitchen_square2"]
            ).get_attribute("innerText")
        except:
            try:
                kitchen_square = driver.find_element(
                    By.XPATH, xpath_dict["kitchen_square3"]
                ).get_attribute("innerText")
            except:
                kitchen_square = ""

    try:
        floor = driver.find_element(By.XPATH, xpath_dict["floor"]).get_attribute(
            "innerText"
        )
    except:
        try:
            floor = driver.find_element(
                By.XPATH, xpath_dict["floor2"]
            ).get_attribute("innerText")
        except:
            try:
                floor = driver.find_element(
                    By.XPATH, xpath_dict["floor3"]
                ).get_attribute("innerText")
            except:
                floor = ""

    try:
        finishing = driver.find_element(
            By.XPATH, xpath_dict["finishing"]
        ).get_attribute("innerText")
    except:
        try:
            finishing = driver.find_element(
                By.XPATH, xpath_dict["finishing2"]
            ).get_attribute("innerText")
        except:
            try:
                finishing = driver.find_element(
                    By.XPATH, xpath_dict["finishing3"]
                ).get_attribute("innerText")
            except:
                try:
                    finishing = driver.find_element(
                        By.XPATH, xpath_dict["finishing4"]
                    ).get_attribute("innerText")
                except:
                    finishing = ""

    try:
        developer = driver.find_element(
            By.XPATH, xpath_dict["developer"]
        ).get_attribute("innerText")
    except:
        try:
            developer = driver.find_element(
                By.XPATH, xpath_dict["developer2"]
            ).get_attribute("innerText")
        except:
            try:
                developer = driver.find_element(
                    By.XPATH, xpath_dict["developer3"]
                ).get_attribute("innerText")
            except:
                developer = ""

    try:
        info_about_flat_1 = driver.find_element(
            By.XPATH, xpath_dict["info about flat_1"]
        ).get_attribute("innerText")
    except:
        try:
            info_about_flat_1 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_11"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_1 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_12"]
                ).get_attribute("innerText")
            except:
                info_about_flat_1 = ""

    try:
        info_about_flat_2 = driver.find_element(
            By.XPATH, xpath_dict["info about flat_2"]
        ).get_attribute("innerText")
    except:
        try:
            info_about_flat_2 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_21"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_2 = driver.find_element(
```

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                                By.XPATH, xpath_dict["info about flat_22"]
                            ).get_attribute("innerText")
                    except:
                        info_about_flat_2 = ""

        try:
            info_about_flat_3 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_3"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_3 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_31"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_3 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_32"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_3 = ""

        try:
            info_about_flat_4 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_4"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_4 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_41"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_4 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_42"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_4 = ""

        try:
            info_about_flat_5 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_5"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_5 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_51"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_5 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_52"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_5 = ""

        try:
            info_about_flat_6 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_6"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_6 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_61"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_6 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_62"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_6 = ""

        try:
            info_about_flat_7 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_7"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_7 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_71"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_7 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_72"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_7 = ""

        try:
            info_about_flat_8 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_8"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_8 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_81"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_8 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_82"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_8 = ""
```

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        try:
            info_about_flat_9 = driver.find_element(
                By.XPATH, xpath_dict["info about flat_9"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_flat_9 = driver.find_element(
                    By.XPATH, xpath_dict["info about flat_91"]
                ).get_attribute("innerText")
            except:
                try:
                    info_about_flat_9 = driver.find_element(
                        By.XPATH, xpath_dict["info about flat_92"]
                    ).get_attribute("innerText")
                except:
                    info_about_flat_9 = ""

        try:
            info_about_house_1 = driver.find_element(
                By.XPATH, xpath_dict["info about house_1"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_house_1 = driver.find_element(
                    By.XPATH, xpath_dict["info about house_11"]
                ).get_attribute("innerText")
            except:
                info_about_house_1 = ""

        try:
            info_about_house_2 = driver.find_element(
                By.XPATH, xpath_dict["info about house_2"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_house_2 = driver.find_element(
                    By.XPATH, xpath_dict["info about house_21"]
                ).get_attribute("innerText")
            except:
                info_about_house_2 = ""

        try:
            info_about_house_3 = driver.find_element(
                By.XPATH, xpath_dict["info about house_3"]
            ).get_attribute("innerText")
        except:
            try:
                info_about_house_3 = driver.find_element(
                    By.XPATH, xpath_dict["info about house_31"]
                ).get_attribute("innerText")
            except:
                info_about_house_3 = ""

        try:
            elem_wait = WebDriverWait(driver, 5).until(
                EC.presence_of_element_located(
                    (By.XPATH, xpath_dict["start price button"])
                )
            )
            action = ActionChains(driver, duration=500)
            move = driver.find_element(By.XPATH, xpath_dict["start price button"])
            action.move_to_element(move).perform()
            elem_wait = WebDriverWait(driver, 6, 3).until(
                EC.presence_of_element_located((By.XPATH, xpath_dict["start price"]))
            )
            start_price = driver.find_element(
                By.XPATH, xpath_dict["start price"]
            ).get_attribute("innerText")
        except:
            try:
                elem_wait = WebDriverWait(driver, 5).until(
                    EC.presence_of_element_located(
                        (By.XPATH, xpath_dict["start price button2"])
                    )
                )
                action = ActionChains(driver, duration=500)
                move = driver.find_element(By.XPATH, xpath_dict["start price button2"])
                action.move_to_element(move).perform()
                elem_wait = WebDriverWait(driver, 6, 3).until(
                    EC.presence_of_element_located(
                        (By.XPATH, xpath_dict["start price2"])
                    )
                )
                start_price = driver.find_element(
                    By.XPATH, xpath_dict["start price2"]
                ).get_attribute("innerText")
            except:
                start_price = ""

        try:
            start_date = driver.find_element(
                By.XPATH, xpath_dict["start date"]
            ).get_attribute("innerText")
        except:
            try:
                start_date = driver.find_element(
                    By.XPATH, xpath_dict["start date2"]
                ).get_attribute("innerText")
            except:
                start_date = ""

        try:
            driver.find_elements(By.XPATH, xpath_dict["button_date_creation"])[
                -1
            ].click()
            elem = WebDriverWait(driver, 9, 3).until(
                EC.visibility_of_element_located(
                    (By.XPATH, xpath_dict["date_creation"])
```

```
750                    (By.XPATH, xpath_dict["date creation"])
751                )
752            )
753            date_creation = driver.find_element(
754                By.XPATH, xpath_dict["date creation"]
755            ).get_attribute("innerText")
756        except:
757            try:
758                driver.find_elements(By.XPATH, xpath_dict["button_date_creation2"])[
759                    -1
760                ].click()
761                elem = WebDriverWait(driver, 9, 3).until(
762                    EC.visibility_of_element_located(
763                        (By.XPATH, xpath_dict["date creation"])
764                    )
765                )
766                date_creation = driver.find_element(
767                    By.XPATH, xpath_dict["date creation"]
768                ).get_attribute("innerText")
769            except:
770                date_creation = ""
771
772        flat_data = (
773            full_url,
774            from_date,
775            title,
776            JK,
777            start_price,
778            start_date,
779            building,
780            date_readiness,
781            full_price,
782            price_sq,
783            metro_station,
784            metro_distance,
785            city,
786            district,
787            area,
788            street,
789            house,
790            full_square,
791            living_square,
792            kitchen_square,
793            floor,
794            finishing,
795            developer,
796            date_creation,
797            info_about_flat_1,
798            info_about_flat_2,
799            info_about_flat_3,
800            info_about_flat_4,
801            info_about_flat_5,
802            info_about_flat_6,
803            info_about_flat_7,
804            info_about_flat_8,
805            info_about_flat_9,
806            info_about_house_1,
807            info_about_house_2,
808            info_about_house_3,
809        )
810
811        try:
812            unpublished = driver.find_element(By.XPATH, xpath_dict["unpublished"])
813            if unpublished.get_attribute("innerText").__contains__(" "):
814                flat_data = tuple(
815                    [full_url, "unpublished"] + [""] * (len(flat_data) - 2)
816                )
817        except:
818            try:
819                unpublished = driver.find_element(By.XPATH, xpath_dict["unpublished2"])
820                if unpublished.get_attribute("innerText").__contains__(" "):
821                    flat_data = tuple(
822                        [full_url, "unpublished"] + [""] * (len(flat_data) - 2)
823                    )
824            except:
825                pass
826
827        with open(rf"{my_path}\raw_data.csv", "a", encoding="utf-8", newline="") as ouf:
828            writer = csv.writer(
829                ouf,
830                delimiter="$",
831                quotechar="|",
832                quoting=csv.QUOTE_MINIMAL,
833            )
834            writer.writerow(flat_data)
835
836        print(
837            f"{full_url[-15:]}, {(time.time()-start_time)//60:.0f}min {(time.time()-start_time)%60:.2f}s; "
838            f"in total {(time.time()-whole_time)//3600:.0f}h {((time.time()-whole_time)%3600)//60:.0f}min {(time.time()-whole_time)%60:.2f}s"
839        )
840
841    except Exception as ex:
842        print(ex)
843        print(f"Error with -> {full_url}")
844
845
846 if __name__ == "__main__":
847     p = Pool(processes=2)
848     p.map(get_urls, url_list)
```