

33. Handling Pagination Table and Table with div tags

StaleElementReferenceException

- **StaleElementReferenceException** occurs in Selenium when we try to interact with a web element that is no longer attached to the DOM (Document Object Model).
- This can happen if
 - ◆ The page has been refreshed or navigated to a new page.
 - ◆ The element was removed or updated in the DOM after it was located.
- In simple terms, element we are trying to use is **"stale"** or **"outdated"**, and we need to find it again to interact with it.
- Apart from lot ways simply we can handle this by using **explicit wait**

[StaleElementReferenceException.py](#)

```
from selenium import webdriver
from selenium.webdriver.common.by import By
opt = webdriver.ChromeOptions()
opt.add_argument("--start-maximized")
opt.add_experimental_option("detach", True)
driver = webdriver.Chrome(options=opt)
driver.implicitly_wait(10)
driver.get("https://datatables.net/examples/basic_init/zero_configuration.html")

Check if the "Next" button is enabled

status = driver.find_element(By.XPATH, "///button[contains(text(),'>')]").is_enabled()
print(status) # Expected output: True
```

Click on page number "3"

```
driver.find_element(By.XPATH, "///button[normalize-space()='3']").click()

Check the status of the "Next" button again if no find again we will get exception

status = driver.find_element(By.XPATH, "///button[contains(text(),'>')]").is_enabled()
print(status) # Expected output: True
driver.quit()
```

Pagination Table

- Pagination table splits data into smaller chunks across multiple pages, allowing users to navigate through the data page by page.

10 entries per page

Search:

Name	Position	Office	Age	Start date	Salary
Airi Satou	Accountant	Tokyo	33	2008-11-28	\$162,700
Angelica Ramos	Chief Executive Officer (CEO)	London	47	2009-10-09	\$1,200,000
Ashton Cox	Junior Technical Author	San Francisco	66	2009-01-12	\$86,000
Bradley Greer	Software Engineer	London	41	2012-10-13	\$132,000
Brenden Wagner	Software Engineer	San Francisco	28	2011-06-07	\$206,850
Brielle Williamson	Integration Specialist	New York	61	2012-12-02	\$372,000
Bruno Nash	Software Engineer	London	38	2011-05-03	\$163,500
Caesar Vance	Pre-Sales Support	New York	21	2011-12-12	\$106,450
Cara Stevens	Sales Assistant	New York	46	2011-12-06	\$145,600
Cedric Kelly	Senior Javascript Developer	Edinburgh	22	2012-03-29	\$433,060
Name	Position	Office	Age	Start date	Salary

Showing 1 to 10 of 57 entries

123456

PaginationTableDemo.py

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.support.ui import WebDriverWait
from selenium.webdriver.support import expected_conditions as EC
opt = webdriver.ChromeOptions()
opt.add_experimental_option("detach", True)
opt.add_argument("--start-maximized")
driver = webdriver.Chrome(options=opt)
driver.implicitly_wait(10)
driver.get("https://datatables.net/examples/basic_init/zero_configuration.html")
has_more_pages = True
while has_more_pages:

    Get all rows in the table

    rows = driver.find_elements(By.XPATH, "//*[@id='example']/tbody/tr")

    Print the text of each row

    for row in rows:
        print(row.text)

    Find the "Next" button

    next_button = driver.find_element(By.XPATH, "//*[@aria-label='Next']")
    if "disabled" not in next_button.get_attribute("class"):
        next_button.click()

    Wait until the rows are stale (page changes)

    WebDriverWait(driver, 10).until(EC.staleness_of(rows[0]))
else:
    has_more_pages = False
driver.quit()
```

FilteringRowsinTableDemo.py

```
from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.support.ui import Select
opt = webdriver.ChromeOptions()
opt.add_argument("--start-maximized")
opt.add_experimental_option("detach", True)
driver = webdriver.Chrome(options=opt)
driver.implicitly_wait(10)
driver.get("https://datatables.net/examples/basic_init/zero_configuration.html")

Select "25" from the dropdown to filter the number of rows

filter_dropdown_element = driver.find_element(By.XPATH, "//*[@id='dt-length-0']")
filter_dropdown = Select(filter_dropdown_element)
filter_dropdown.select_by_visible_text("25") # Filter number of rows
```

Check the number of rows

```
no_of_rows = len(driver.find_elements(By.XPATH, "//*[@id='example']/tbody//tr"))
```

Validate the row count

```
if no_of_rows == 25:  
    print("Number of Rows are Equal...")  
else:  
    print("Number of rows are Not equal...")  
driver.quit()
```

SearchingDataFromTheTableDemo.py

```
from selenium import webdriver  
from selenium.webdriver.common.by import By  
opt = webdriver.ChromeOptions()  
opt.add_argument("--start-maximized")  
opt.add_experimental_option("detach", True)  
driver = webdriver.Chrome(options=opt)  
driver.implicitly_wait(10)  
driver.get("https://datatables.net/examples/basic_init/zero_configuration.html")
```

Enter search term in the search box

```
search_input = driver.find_element(By.XPATH, "//*[@id='dt-search-0']")  
search_input.send_keys("abcd") # Try "Cara Stevens" or "Cara" for different results
```

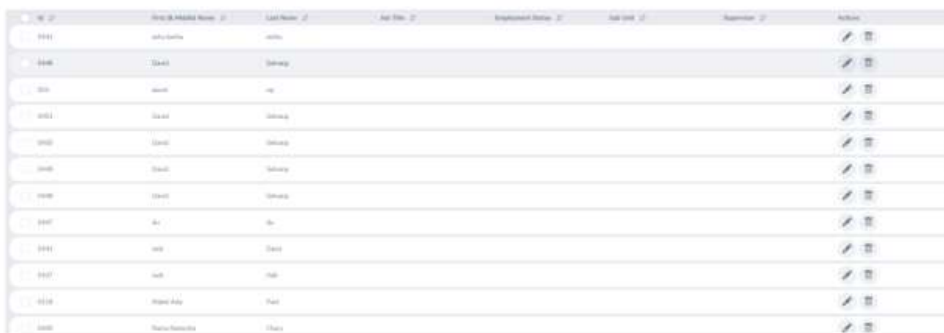
Get rows in the table after filtering

```
rows = driver.find_elements(By.XPATH, "//*[@id='example']/tbody//tr")
```

Check if any rows are found, and print each row's text if they exist

```
if len(rows) == 1 and rows[0].text.strip() == "No matching records found":  
    print("No rows found in the table...")  
else:  
    for row in rows:  
        print(row.text)  
driver.quit()
```

Bootstrap Table (Table with div tags)



ID	First Name	Last Name	Employment Status	Date Birth	Department	Action
1001	John	Doe	Active	1980-01-01	IT	Edit Delete
1002	Jane	Smith	Active	1985-02-02	Marketing	Edit Delete
1003	Mike	Johnson	Active	1978-03-03	Finance	Edit Delete
1004	Sarah	Williams	Active	1990-04-04	HR	Edit Delete
1005	David	Brown	Active	1982-05-05	Operations	Edit Delete
1006	Emily	White	Active	1988-06-06	IT	Edit Delete
1007	Robert	Black	Active	1975-07-07	Marketing	Edit Delete
1008	Lisa	Green	Active	1992-08-08	Finance	Edit Delete
1009	James	Miller	Active	1987-09-09	HR	Edit Delete
1010	Maria	Robinson	Active	1983-10-10	Operations	Edit Delete

head1	head2	head3
ABC	DEF	GHI
QWE	RTY	UIO
MNB	VCX	ASD
foot1	foot2	foot3

Common Code

```
from selenium import webdriver  
from selenium.webdriver.common.by import By
```

```

opt = webdriver.ChromeOptions()
opt.add_argument("--start-maximized")
opt.add_experimental_option("detach", True)
driver.implicitly_wait(10)
driver = webdriver.Chrome(options=opt)

```

[TablewithDivTagsDemo1.py](#)

```

driver.get("https://opensource-demo.orangehrmlive.com/web/index.php")
driver.find_element(By.NAME, "username").send_keys("Admin")
driver.find_element(By.NAME, "password").send_keys("admin123")
driver.find_element(By.XPATH, "//button[normalize-space()='Login']").click()

```

Click on Admin

```

driver.find_element(By.XPATH, "//a[contains(@href,'viewAdminModule')]").click()

```

Find the rows in the table

```

rows = driver.find_elements(By.XPATH, "//div[@class='oxd-table-body']/div")

```

Iterate over rows and extract username, role, and status

```

for r in range(1, len(rows) + 1):
    username = driver.find_element(By.XPATH,
f'//div[@class='oxd-table-body']/div[{r}]/div/div[2]/div').text
    role = driver.find_element(By.XPATH, f'//div[@class='oxd-table-body']/div[{r}]/div/div[3]/div').text
    status = driver.find_element(By.XPATH,
f'//div[@class='oxd-table-body']/div[{r}]/div/div[5]/div').text
    print(f"{username}\t{role}\t{status}")
driver.quit()

```

[TablewithDivTagsDemo2.py](#)

```

driver.get("https://htmltable.com/div-table/")

```

Find the rows in the table

```

rows = driver.find_elements(By.XPATH, "//div[@class='divTable
blueDemoTable']/div[@class='divTableBody']/div")

```

Iterate over rows and extract head1, head2, and head3

```

for r in range(1, len(rows) + 1):
    head1 = driver.find_element(By.XPATH,
f'//div[@class='divTable blueDemoTable']/div[@class='divTableBody']/div[{r}]/div[1]').text
    head2 = driver.find_element(By.XPATH,
f'//div[@class='divTable blueDemoTable']/div[@class='divTableBody']/div[{r}]/div[2]').text
    head3 = driver.find_element(By.XPATH,
f'//div[@class='divTable blueDemoTable']/div[@class='divTableBody']/div[{r}]/div[3]').text
    print(f"{head1}\t{head2}\t{head3}")
driver.quit()

```