import selenium and unittest library

new option for web driver

In [ ]:
```
import time
import unittest
from selenium import webdriver
from selenium.webdriver.chrome.options import Options
from selenium.webdriver.chrome.service import Service
from selenium.webdriver.common.keys import Keys
from webdriver_manager.chrome import ChromeDriverManager

options = Options()
options.add_argument('--no-sandbox')
options.add_argument('--disable-dev-shm-usage')
```

in first method (setUp) create chrome web driver

in test_add method, at first we test plus icon with find element by its XPath

after that we test minus icon , next , test remove icon and after test reset icon

in the last method (tearDown) , close the connction (web driver)

In [ ]:
```
class react(unittest.TestCase):
    def setUp(self) -> None:
        self.driver = webdriver.Chrome(service=Service(ChromeDriverManager().install()
        self.counter = 0

    def test_add(self):
        driver = self.driver
        driver.get("http://localhost:3000/counter-app")
        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[2]/div/div[
        self.counter+=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"frist plus icon is broken")
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/div/div[2]/di
        self.assertEqual(int(elem.text),self.counter,"frist plus icon is broken")
        time.sleep(2)
        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[3]/div/div[
        self.counter+=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"second plus icon is broken")
        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[4]/div/div[
        self.counter+=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"third plus icon is broken")
        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[5]/div/div[
        self.counter+=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
```

```
        self.assertEqual(int(elem.text),self.counter,"fourth plus icon is broken")
        print("plus icon test passed!\n\n")
        time.sleep(5)




        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[2]/div/div[
        self.counter-=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"frist minus icon is broken")
        time.sleep(2)
        print("minus icon test passed!\n\n")
        time.sleep(5)

        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[5]/div/div[
        self.counter-=1
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"frist minus icon is broken")
        time.sleep(2)
        print("remove icon test passed!\n\n")
        time.sleep(5)


        driver.find_element("xpath", '//*[@id="root"]/div/main/div/div/div[1]/div/butt
        self.counter = 0
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/nav/div/span'
        self.assertEqual(int(elem.text),self.counter,"frist minus icon is broken")
        elem = driver.find_element("xpath",'//*[@id="root"]/div/main/div/div/div[3]/di
        self.assertEqual(elem.text,"Zero")
        time.sleep(2)
        print("reset icon test passed!\n\n")
        time.sleep(5)



    def tearDown(self) -> None:
         self.driver.close()
```

In [ ]:

```
#if __name__ == '__main__':
a = react()
a.setUp()
a.test_add()
a.tearDown()
```

plus icon test passed!

minus icon test passed!

remove icon test passed!

reset icon test passed!