

Selenium

Chrome Extension 사용 주의

: Chromedriver는 실행할 때 마다 임시 Profile을 사용하여 새로운 Instance로 Open됨. 이를 해결하기 위해 기존 사용중인 Chrome Profile을 사용하면 된다.

1. Chrome에서 특정 페이지로 이동하는 샘플 스크립트

```
# -*- coding: utf-8 -*-
import time
import sys
from selenium import webdriver
from selenium.webdriver.chrome.options import Options

# Chrome WebDriver를 이용해 Chrome을 실행합니다.
driver = webdriver.Chrome('D:\WAutoTest\Wchromedriver.exe')

# www.google.com으로 이동합니다.
driver.get("http://127.0.0.1:8003")
time.sleep(2)

continue_link = driver.find_element_by_partial_link_text('export_yk.html')
time.sleep(5)

# 해당 링크를 클릭합니다.
continue_link.click()
time.sleep(5)

# WebDriver를 종료합니다. (브라우저 닫기)
#driver.quit()
```

2. Chrome Extension 사용 자동화 테스트

Download the **Chrome Extension Source Viewer** from the Google Web Store.



홈 > 확장 프로그램 > Chrome extension source viewer

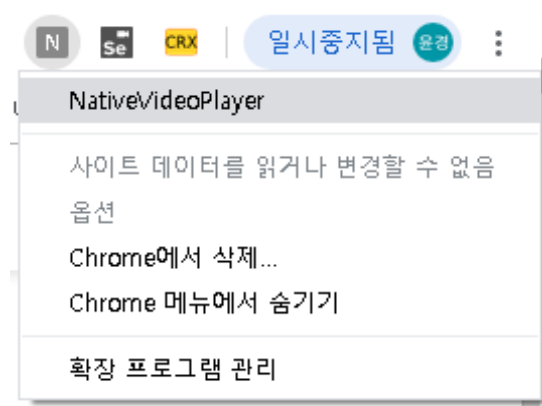


Chrome extension source viewer

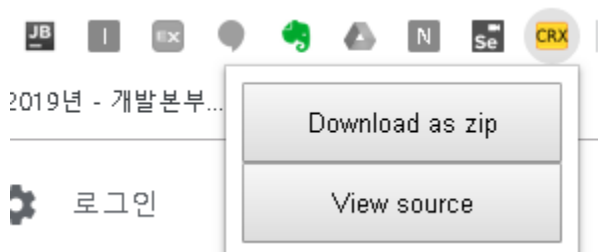
제공자: RobW

★★★★★ 339 | 개발자 도구 | 사용자 74,086명

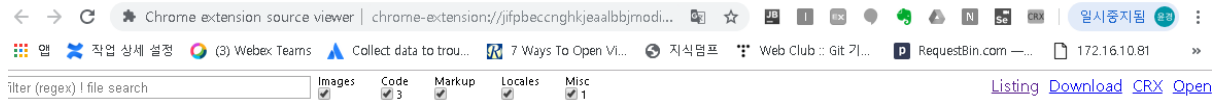
설치할 Chrome Extension 페이지로 이동한다



Chrome Extension Source Viewer 을 실행하여, View source 메뉴를 클릭한다.



설치한 Chrome Extension Source Viewer를 이용해 설치할 ChromeExtension의 .crx 파일을 다운로드 받는다.



Selenium 스크립트에서 아래와 같이 chromedriver 옵션에 다운로드한 .cyr Extension 파일을 추가한다.

.cyr Extension 파일 추가

```
# Chrome WebDriver를 이용해 Chrome을 실행합니다.
opt = webdriver.ChromeOptions()
opt.add_extension('D:/AutoTest/cmijipmellgcnlagimdoncdjidacklc.crx')
driver = webdriver.Chrome('D:\AutoTest\chromedriver.exe', options=opt)
```

전체스크립트

```
# -*- coding: utf-8 -*-
import time
import sys
from selenium import webdriver
from selenium.webdriver.chrome.options import Options

# Chrome WebDriver를 이용해 Chrome을 실행합니다.
opt = webdriver.ChromeOptions()
opt.add_extension('D:/AutoTest/cmijipmellgcnlagimdoncdjidacklc.crx')
driver = webdriver.Chrome('D:\AutoTest\chromedriver.exe', options=opt)

# www.google.com으로 이동합니다.
driver.get("http://127.0.0.1:8003")
time.sleep(2)

continue_link = driver.find_element_by_partial_link_text('export_yk.html')
time.sleep(5)

# 해당 링크를 클릭합니다.
continue_link.click()
time.sleep(5)

# WebDriver를 종료합니다. (브라우저 닫기)
driver.quit()
```

자동화 테스트 샘플 스크립트

```
# -*- coding: utf-8 -*-
import time
import sys
import os.path
import json

from selenium import webdriver
from selenium.webdriver.chrome.options import Options
from selenium.common.exceptions import NoSuchElementException
from selenium.common.exceptions import ElementClickInterceptedException

def CaptureTestCase(webdriver) :
    print('Testing Image Capture Start')

    try:
        CaptureFile=webdriver.find_element_by_id('StillImageFilePath').get_attribute('value')
        if os.path.isfile(CaptureFile):
            os.remove(CaptureFile)
    except NoSuchElementException:
        print('Failure! : NoSuchElementException - Capture', )
        CaptureFile="test.jpg"

    try:
        capture= webdriver.find_element_by_name('Capture')
        capture.click()
        time.sleep(2)

        data = json.loads(webdriver.find_element_by_id('message').text)
        # print (data["status"])

        if data["status"]=='success':
            if os.path.isfile(CaptureFile):
                print('Success Capture! :-)')
            else:
                print('Failure Save Capture File : ', CaptureFile)
        else:
            print('Fail Capture! => Response : ', data["status"])
    except NoSuchElementException:
        print('Failure! : NoSuchElementException - Capture', )
    print('Testing Image Capture End')

def ExportTestCase(webdriver) :
    print('Testing Image Export Video Start')

    try:
        ExportVideoFile=webdriver.find_element_by_id('VideoFilePath').get_attribute('value')
        if os.path.isfile(ExportVideoFile):
            os.remove(ExportVideoFile)
```

```

except NoSuchElementException:
    print('Failure! : NoSuchElementException - VideoFilePath', )
    ExportVideoFile="test.mov"

    try:
#Export 시작 시간 설정
        startTime= webdriver.find_element_by_name('Start')
        startTime.click()
        time.sleep(5)
#Export 시작 시간 Response code 확인
        startTimeRes = json.loads(webdriver.find_element_by_id('message').text)
        if
            startTimeRes["action"]=='backup_start_video'
            and
startTimeRes["status"]=='success':
#Export 종료 시간 설정
            endTime= webdriver.find_element_by_name('END')
            endTime.click()
            time.sleep(5)
#Export 종료 시간 Response code 확인
            endTimeRes = json.loads(webdriver.find_element_by_id('message').text)
            if
                endTimeRes["action"]=='backup_end_video'
                and
endTimeRes["status"]=='success':
                if os.path.isfile(ExportVideoFile):
                    print('Success Export Video! :-))')
                else:
                    print('Failure Save Video File : ', ExportVideoFile)
            else:
                print('Failure Set Export EndTime ')
                print('Fail Export Video! => Response : ', endTimeRes["status"])
        else:
            print('Failure Set Export StartTime ')
            print('Fail Export Video! => Response : ', startTimeRes["status"])

except NoSuchElementException:
    print('Failure! : NoSuchElementException - END')
    print('Testing Export Video End')

def LinkToExportPage(webdriver):
    print('Link Export Page Test Start')

    try:
        continue_link = webdriver.find_element_by_partial_link_text('export_yk.html')
        time.sleep(5)

        # 해당 링크를 클릭합니다.
        try:
            continue_link.click()
            time.sleep(5)
        except ElementClickInterceptedException:
            print('FAIL: Can not link to export_yk.html Page ')
            print('Link Export Page Test End')
            return

```

```

except NoSuchElementException:
    print('FAIL: NoSuchElementException (export_yk.html)')
    print('Link Export Page Test End')
    return

print('PASS: NoSuchElementException (export_yk.html)')
print('Link Export Page Test End')

def Capture_Export_TestSuit_Main():
    # Chrome WebDriver를 이용해 Chrome을 실행합니다.
    opt = webdriver.ChromeOptions()
    opt.add_extension('D:/AutoTest/cmijipmellgcnlaoгимdoncdjidacklc.crx')
    driver = webdriver.Chrome('D:\WAutoTestWchromedriver.exe', options=opt)

    # www.google.com으로 이동합니다.
    print('Link CKC Test WebSite')
    driver.get("http://127.0.0.1:8003")
    time.sleep(2)

    LinkToExportPage(driver)
    CaptureTestCase(driver)
    ExportTestCase(driver)

    driver.quit()

Capture_Export_TestSuit_Main()

```

API

https://selenium-python.readthedocs.io/api.html#selenium.webdriver.chrome.options.Options.add_experimental_option

문서 : https://www.seleniumhq.org/docs/03_webdriver.jsp#introducing-webdriver