TASK 4:

**Cross-Browser Testing with Browser Stack**

Run automated tests across multiple browsers and devices using BrowserStack  
to ensure compatibility.

Requirements:

* Use BrowserStack’s Selenium Grid to run your test scripts across different browsers and devices.
* Test a login or form submission page across Chrome, Firefox, Safari, and Edge.
* Document any issues or inconsistencies across browsers.

import pytest

from selenium import webdriver

from selenium.webdriver.common.by import By

from selenium.webdriver.common.keys import Keys

@pytest.fixture(scope="class")

def browserstack\_driver(request):

"""

Fixture to initialize a BrowserStack session.

"""

desired\_cap = {

'browser': request.param['browser'],

'browser\_version': request.param['browser\_version'],

'os': request.param['os'],

'os\_version': request.param['os\_version'],

'resolution': request.param['resolution'],

'name': request.node.name,

'build': 'BrowserStack Build',

'project': 'BrowserStack Project',

'browserstack.user': "YOUR\_BROWSERSTACK\_USERNAME",

'browserstack.key': "YOUR\_BROWSERSTACK\_ACCESS\_KEY"

}

driver = webdriver.Remote(

command\_executor="https://hub-cloud.browserstack.com/wd/hub",

desired\_capabilities=desired\_cap

)

yield driver

driver.quit()

@pytest.mark.parametrize('browserstack', [

{'browser': 'Chrome', 'browser\_version': 'latest', 'os': 'Windows', 'os\_version': '11', 'resolution': '1024x768'},

{'browser': 'Firefox', 'browser\_version': 'latest', 'os': 'Windows', 'os\_version': '11', 'resolution': '1024x768'},

{'browser': 'Safari', 'browser\_version': 'latest', 'os': 'macOS', 'os\_version': 'Ventura', 'resolution': '1280x800'},

{'browser': 'Edge', 'browser\_version': 'latest', 'os': 'Windows', 'os\_version': '11', 'resolution': '1024x768'}

], indirect=True)

def test\_login(browserstack\_driver):

"""

Test login functionality.

"""

driver = browserstack\_driver

driver.get("YOUR\_TEST\_PAGE\_URL")

# --- Login Logic ---

# 1. Locate username/email field

# 2. Enter username/email

# 3. Locate password field

# 4. Enter password

# 5. Click login button

# ---

# Assert successful login (e.g., check for a welcome message)

assert "Welcome" in driver.page\_source

if \_\_name\_\_ == "\_\_main\_\_":

pytest.main()