

✓ Task 2: Test Automation Submission

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This submission covers the automated testing of the search functionality as described in the assignment. The automation script was implemented using **Python** and **Selenium**.

Overview

The script performs the following steps:

1. Opens the browser and navigates to the photo/album listing page.
2. Enters a search term into the search box.
3. Validates that the correct results appear based on the search term.

Tools and Libraries Used

- **Python:** For writing the automation script.
- **Selenium WebDriver:** To automate browser actions and validate the search functionality.

```
!pip install selenium
```

```

Requirement already satisfied: selenium in /usr/local/lib/python3.10/dist-packages (4.25.0)
Requirement already satisfied: urllib3<3,>=1.26 in /usr/local/lib/python3.10/dist-packages (from url
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Requirement already satisfied: wsproto>=0.14 in /usr/local/lib/python3.10/dist-packages (from trio-w
Requirement already satisfied: pysocks!=1.5.7,<2.0,>=1.5.6 in /usr/local/lib/python3.10/dist-package
Requirement already satisfied: h11<1,>=0.9.0 in /usr/local/lib/python3.10/dist-packages (from wsprot

```

```

from selenium import webdriver
from selenium.webdriver.common.by import By
from selenium.webdriver.common.keys import Keys
import time

```

```
# 4 the Web Driver
```

```
driver = webdriver.Chrome()
```

```

# URL of the photo/album listing page
url = "http://localhost:3000/photo"

```

```
# Test Data
```

```
search_term = "sample photo title"
```

```
try:
```

```
    # Step 1: Open the browser and navigate to the photo/album listing page
```

```
    driver.get(url)
```

```
    driver.maximize_window()
```

```
    # Step 2: Locate the search box element and enter the search term
```

```
    search_box = driver.find_element(By.ID, "searchBox")
```

```
    search_box.send_keys(search_term)
```

```
    search_box.send_keys(Keys.RETURN)
```

```
    # Pause to allow search results to load
```

```
    time.sleep(3)
```

```
    # Step 3: Validate that the correct results appear
```

```
    results = driver.find_elements(By.CLASS_NAME, "photo-title")
```

```
    # Check if any result contains the search term
```

```
    search_results_valid = any(search_term.lower() in result.text.lower() for result in results)
```

```
    # Print results based on validation
```

```
    if search_results_valid:
```

```
        print("Test Passed: Search results correctly displayed.")
```

```
    else:
```

```
        print("Test Failed: Search results do not match the search term.")
```

```
finally:
```

```
    # Step 4: Close the browser
```

```
    driver.quit()
```

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