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**SECTION: B** 

**ASSIGNMENT: SOFTWARE TESTING** 

Write UI automated tests for the following test scenarios. You can use the programming language and tools that you prefer.

The purpose of writing this tests is to show your automation craftsmanship. Try to come up with solid solutions and present something that you are proud of. You can take the time you need, it's not about speed of execution or cutting corners, it's about the quality of the work.

#### Test: Verify that the results match the search criteria

Open www.airbnb.com.

Select Rome, Italy as a location.

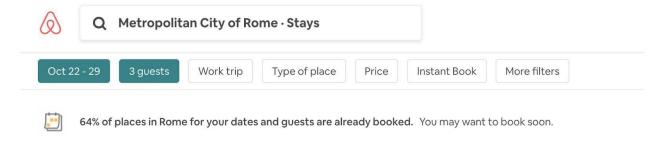
Pick a Check-In date one week after the current date.

Pick a Check-Out date one week after the Check-In date.

Select the number of guests as 2 adults and 1 child.

Search for properties.

Verify that the applied filters are correct.



Verify that the properties displayed on the first page can accommodate at least the selected number of guests.

```
from selenium import webdriver
from selenium.webdriver.chrome.service import Service
from webdriver_manager.chrome import ChromeDriverManager
from selenium.webdriver.common.by import By
from selenium.webdriver.support.wait import WebDriverWait
from selenium.webdriver.support import expected conditions as EC
from selenium.webdriver.common.keys import Keys
import time
options = webdriver.ChromeOptions()
options.add experimental option("detach", True)
driver = webdriver.Chrome(options=options, service=Service(
    ChromeDriverManager().install()))
driver.get("https://www.airbnb.com/")
try:
    time.sleep(3)
    popUpButton = driver.find element(By.CLASS NAME, "czcfm7x")
    popUpButton.click()
except:
    print("No Pop Up")
finally:
    # def human_clicker_click(driver_arg, xpath):
          element = WebDriverWait(driver arg, 10).until(
          EC.element to be clickable((By.XPATH, xpath)))
          element.click()
    # def human_clicker_click_by_id(driver_arg, id):
          element = WebDriverWait(driver arg, 10).until(
          EC.presence_of_element_located((By.ID, id)))
          element.click()
    time.sleep(5)
    mainSearchButton = driver.find_element(By.CLASS_NAME, "f19g2zq0")
    mainSearchButton.click()
    time.sleep(5)
    destinationSearch = driver.find_element(By.CLASS_NAME, "ivycze5")
    destinationSearch.send keys("Rome, Italy")
    time.sleep(5)
```

```
for i in range(2):
                              adultButtonSelector.click()
               time.sleep(2)
               childButtonSelector = driver.find_element(
                              By.XPATH,
 "/html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/d
iv[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/header[1]/div[1]/div[2]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1
[1]/div[1]/div[1]/div[2]/div[1]/div[1]/form[1]/div[2]/div[1]/div[5]/div[2]/
\label{eq:div_1} \begin{split} \text{div}[1]/\text{div}[1]/\text{div}[1]/\text{div}[1]/\text{div}[1]/\text{div}[1]/\text{div}[2]/\text{div}[2]/\text{div}[1]/\text{button}[2] \end{split}
]/span[1]")
               childButtonSelector.click()
               time.sleep(2)
               searchButtonSelector = driver.find element(
                              By.XPATH,
  //html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]
iv[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/header[1]/div[1]/div[2]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1
[1]/div[1]/div[1]/div[2]/div[1]/div[1]/form[1]/div[2]/div[1]/div[5]/div[1]/
div[3]/button[1]")
               searchButtonSelector.click()
               time.sleep(5)
               ResultButtonSelector1 = driver.find element(By.CLASS NAME, "f1xx50dm")
              time.sleep(5)
               ResultButtonSelector2 = driver.find element(
                              By.XPATH,
 "/html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/d
iv[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/header[1]/div[1]/div[2]/div
[1]/div[1]/div[1]/div[1]/button[2]/div[1]")
               time.sleep(5)
               ResultButtonSelector3 = driver.find element(
                              By.XPATH,
 "/html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/d
iv[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/header[1]/div[1]/div[2]/div
[1]/div[1]/div[1]/div[1]/div[1]/button[3]/div[1]")
```

```
# VERIFYING CODE
print(ResultButtonSelector2.text)
print(ResultButtonSelector3.text)

# and ResultButtonSelector2.text=="Jan 3 - 13(±7)":
    if ResultButtonSelector1.text == "Rome" and ResultButtonSelector2.text == "Jan 8 - 17(±7)" and ResultButtonSelector3.text == "3 guests":
        print("Verfied")
    else:
        print("Unverified")
```

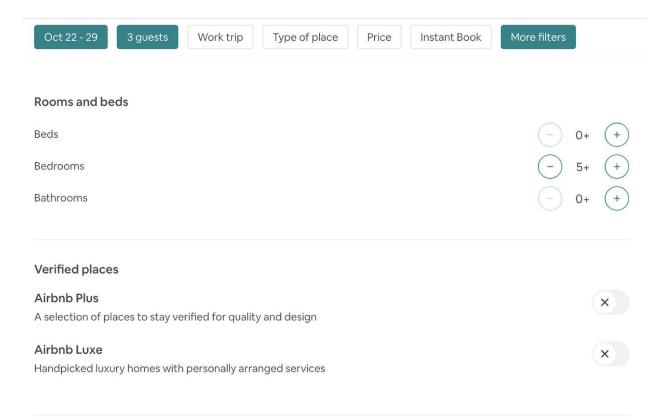
#### Test: Verify that the results and details page match the extra filters

Search for properties that match the same filters as the first test.

Click More filters.

Select the number of bedrooms as 5.

Select Pool from the Facilities section.



#### Click Show Stays.

Verify that the properties displayed on the first page have at least the number of selected bedroom.

Open the details of the first property.

Check that in the Amenities popup Pool is displayed under Facilities category.

## **Facilities**

Free parking on premises

Hot tub

Pool

Private or Shared

# **Dining**

Coffee maker

```
time.sleep(5)
moreFilterButton = driver.find_element(
     By.XPATH,
    "/html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/moreFilterButton.click()

time.sleep(5)
driver.execute_script(
     "document.querySelector('#menuItemButton-5 button').click()")

time.sleep(5)
driver.execute_script("document.querySelector('._1ku51f04').click()")

time.sleep(5)
```

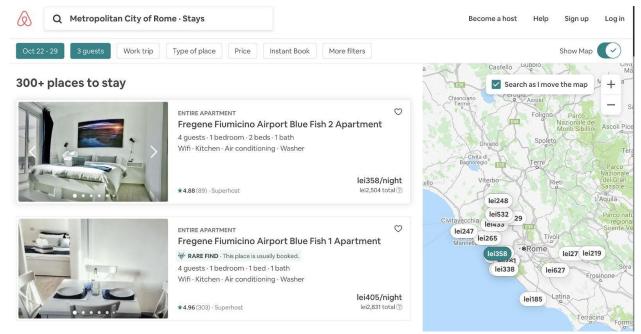
```
verifyBedRooms = driver.find_element(
    By.XPATH,
"/html[1]/body[1]/div[5]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[1]/div[
```

### Test: Verify that a property is displayed on the map correctly

Search for properties that match the same filters as the first test.

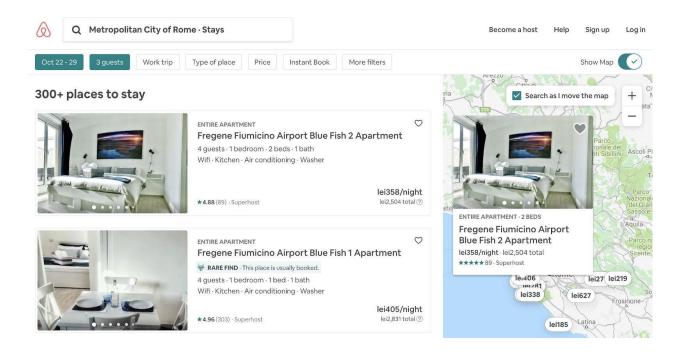
Hover over the first property.

Check that the property is displayed on the map and the color changes to indicate the selection.



After identifying the property on the map, click it.

Verify that the details shown in the map popup are the same as the ones shown in the search results.



```
import unittest
from selenium import webdriver
class TestPropertyMapDisplay(unittest.TestCase):
   def setUp(self):
       # Set up webdriver
        self.driver = webdriver.Chrome()
        self.driver.get("http://www.example.com/property-search")
        # Set search filters
        self.driver.find_element_by_id("filter-price-min").send_keys("5000000")
        self.driver.find element by id("filter-price-max").send keys("1000000")
        self.driver.find_element_by_id("filter-bedrooms").send_keys("3")
   def test property display on map(self):
        # Hover over first property in search results
        first_property = self.driver.find_element_by_css_selector("#search-results")
li:first-child")
        self.driver.actions.move_to_element(first_property).perform()
        # Get property location on map
        property_location_on_map = self.driver.find_element_by_css_selector("#map
path[data-id='PROPERTY-ID']")
        # Check that property is displayed on map and color changes to indicate
selection
        self.assertTrue(property_location_on_map.is_displayed())
        self.assertEqual(property location on map.get attribute("fill"),
"#FF0000")
        # Click property on map
        property_location_on_map.click()
        # Get property details from map popup
```