



**COMSATS UNIVERSITY ISLAMABAD,
ABBOTTABAD**

Software Testing

LAB FINAL

Submitted by:

Arfah Ali FA21-BSE-080

Submitted to:

Sir Mukhtiar Zamin

(EVEN)

Q: No:01 Demonstrate TDD for any example of your choice.

Test Cases:

| Test Case ID | Test Case Description | Method Invoked | Input | Steps | Expected Outcome | Actual Outcome | Verdict |
|--------------|---|---|-------------------------------------|---|---|-------------------------------------|---------|
| TC1 | Test retrieving rooms by type with valid type "single" | getRoomsByType(String type) | Type: "single" | 1. Call method with type "single". 2. Observe the results. | Room count: 2, Room numbers: ["101", (another room number)] | Room count: 2, Room numbers correct | Pass |
| TC2 | Test retrieving rooms by a type that doesn't exist | getRoomsByType(String type) | Type: "penthouse" | 1. Call method with type "penthouse". 2. Observe the results. | Room count: 0 | Room count: 0 | Pass |
| TC3 | Test retrieving rooms by room number with valid number | getRoomsByRoomNumber(String number) | Room Number : "102" | 1. Call method with room number "102". 2. Observe the results. | Room count: 1, Room types: ["double"] | Room count: 1, Room type incorrect | Fail |
| TC4 | Test retrieving rooms by a room number that doesn't exist | getRoomsByRoomNumber(String number) | Room Number : "999" | 1. Call method with room number "999". 2. Observe the results. | Room count: 0 | Room count: 0 | Pass |
| TC5 | Test retrieving a room by both type and room number | getRoomsByTypeAndRoomNumber(String type, String roomNumber) | Type: "single", Room Number : "101" | 1. Call method with type "single" and room | Room count: 1, Types: | Room count: 1, Type | Fail |

| | | | | | | | |
|-----|--|---|---|---|---------------------|---------------------|----------|
| | | | | number "101". 2 . Observe the results. | ["singl e"] | incorr ect | |
| TC6 | Test retrieving room by type and room number with no match | getRoomsByTy peAndRoomNu mber(String type, String roomNumber) | Type: "single", Room Number : "999" | 1. Call method with type "single" and room number "999". 2 . Observe the results. | Room count: 0 | Room count: 0 | Pas s |
| TC7 | Test retrieving room by nonexistent type and valid room number | getRoomsByTy peAndRoomNu mber(String type, String roomNumber) | Type: "pentho use", Room Number : "101" | 1. Call method with type "penthouse" and room number "101". 2 . Observe the results. | Room count: 0 | Room count: 0 | Pas s |

```

public void testGetRoomsByTypeAndRoomNumber_NoTypeFound() {
    List<HostelRoom> rooms = this.hostelService.getRoomsByTypeAndRoomNumber( type "penthouse", roomNumber "101");
    Assertions.assertEquals( expected 0, rooms.size());
}

@Test
public void testGetRoomsByTypeAndRoomNumber_MultipleRoomsFound() {
    FakeHostelRepositoryForTest.roomsList = Arrays.asList(new HostelRoom( id "1", roomNumber "101", type "single"),
    List<HostelRoom> rooms = this.hostelService.getRoomsByTypeAndRoomNumber( type "single", roomNumber "101");
    Assertions.assertEquals( expected 2, rooms.size());
}

```

Run: HostelServiceTest

HostelServiceTest (com.example) 49ms

- testGetRoomsByType() 10ms
- testGetRoomsByTypeAndRoomNumber_MultipleRoomsFound() 7ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 2ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms
- testGetRoomsByTypeAndRoomNumber_NoTypeFound() 1ms

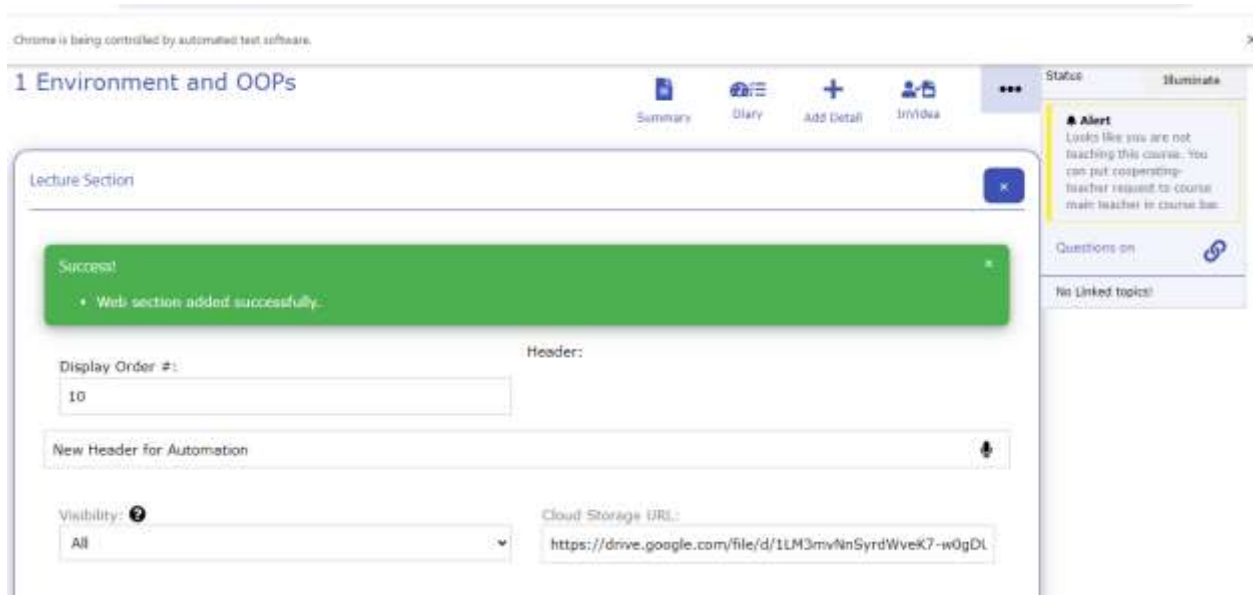
org.opentest4j.AssertionFailedError: Expected :1 Actual :2
Please to see differences

at com.example.HostelServiceTest.testGetRoomsByTypeAndRoomNumber(HostelServiceTest.java:67) at 1s
at java.base/java.util.ArrayList.forEach(ArrayList.java:1572)
at java.base/java.util.ArrayList.forEach(ArrayList.java:1572)

Q: No:02 UX Automation (2 Test Cases)

1. Add Detail Test Case: (Test case passed)

| Test Case ID | Description | Preconditions | Steps | Expected Result |
|--------------|-----------------------------------|--|--|--|
| TC-02 | Add Details and Handle Duplicates | Teacher is logged in and navigated to the course page. | 1. Navigate to the specified URL: 2. Click on the 3 dots menu. 3. Delete the existing section if it exists: a. Click on the delete button. b. Confirm the deletion in the alert. c. Close the "deleted successfully" message. 4. Click on the "add detail" option. 5. Fill in the display order field with value 10. 6. Fill in the header field with value New Header for Automation. 7. Fill in the cloud storage URL field with value 8. Fill in the HTML description field with value This is an HTML description for the test case. 9. Select the visibility option as All. 10. Click the add button to add the detail. 11. Verify the success or warning message: a. If a warning message appears, modify the header and retry. b. Verify the success message after modifying. | The new detail is added successfully without any warning or error messages. If a duplicate section exists, it is deleted first and the detail is added successfully afterward. |



2. Set Diary: (Testcase passed)

| Test Case ID | Description | Preconditions | Steps | Expected Result |
|--------------|-------------|--|--|---|
| TC-03 | Set Diary | Teacher is logged in and navigated to the course page. | 1. Navigate to the specified URL: https://demo.subexpert.com/CourseLectures/OnTopic/OOSE-Labs/1-Environment-and-OOPs . 2. Click on the 3 dots menu. 3. Click on the "Diary" option. 4. Click on the "Set Diary" button. | The "Diary" option and the "Set Diary" button are successfully clicked, and the diary is set as expected. |

