Team Assignment #4: Software Tests

Benedikt, Bjarni, Inga og Þorvaldur
Team 4H

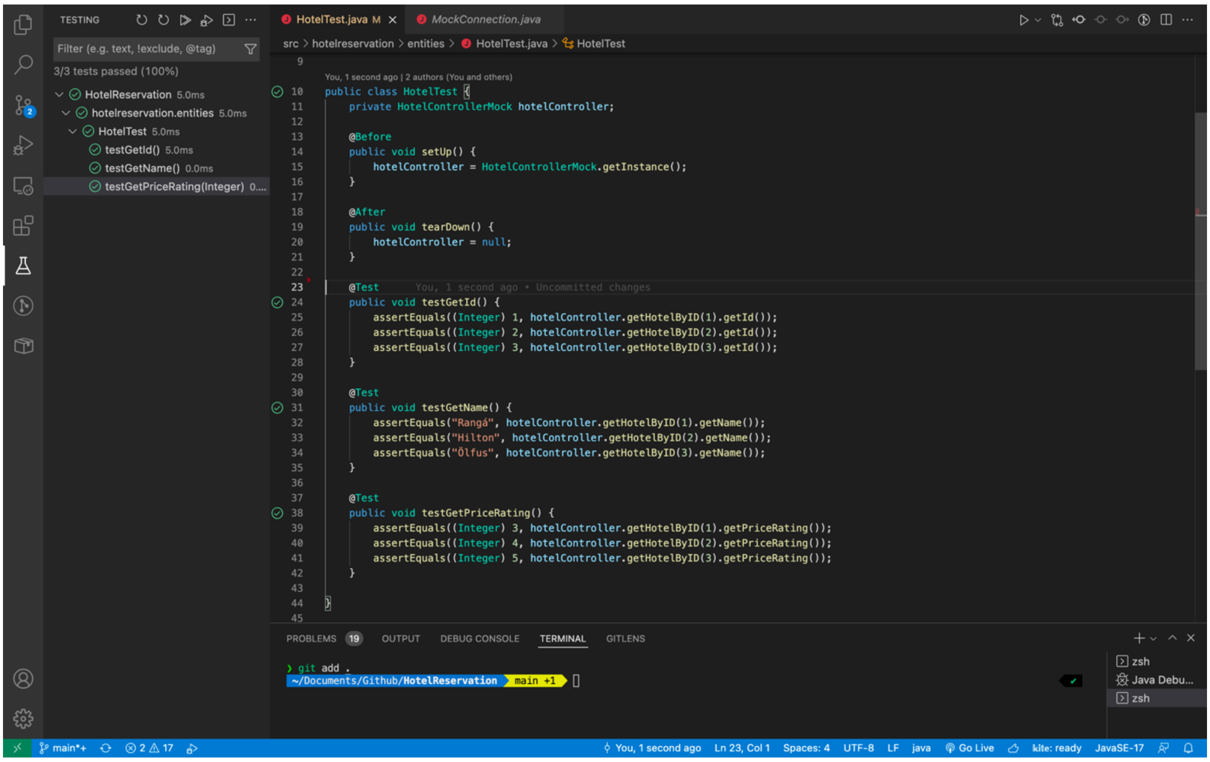
Test fixture:

```
package hotelreservation.entities;

import hotelreservation.controllers.*;

import org.junit.Before;
import org.junit.After;
import static org.junit.Assert.*;

public class HotelTest {
    private HotelControllerMock hotelController;

    @Before
    public void setUp() {
        hotelController = HotelControllerMock.getInstance();
    }

    @After
    public void tearDown() {
        hotelController = null;
    }

    @Test
    public void testGetId() {
        assertEquals((Integer) 1, hotelController.getHotelByID(1).getId());
        assertEquals((Integer) 2, hotelController.getHotelByID(2).getId());
        assertEquals((Integer) 3, hotelController.getHotelByID(3).getId());
    }

    @Test
    public void testGetName() {
        assertEquals("Rangá", hotelController.getHotelByID(1).getName());
        assertEquals("Hilton", hotelController.getHotelByID(2).getName());
        assertEquals("Ölfus", hotelController.getHotelByID(3).getName());
    }

    @Test
    public void testGetPriceRating() {
        assertEquals((Integer) 3,
hotelController.getHotelByID(1).getPriceRating());
        assertEquals((Integer) 4,
hotelController.getHotelByID(2).getPriceRating());
        assertEquals((Integer) 5,
hotelController.getHotelByID(3).getPriceRating());
    }
}
```

Team Assignment #4: Software Tests

Benedikt, Bjarni, Inga og Þorvaldur
Team 4H

Result of test fixture:



```
3/3 tests passed (100%)
HotelReservation 5.0ms
  hotelreservation.entities 5.0ms
    HotelTest 5.0ms
      testGetId() 5.0ms
      testGetName() 0.0ms
      testGetPriceRating(Integer) 0....
```

```java
You, 1 second ago | 2 authors (You and others)
public class HotelTest {
    private HotelControllerMock hotelController;

    @Before
    public void setUp() {
        hotelController = HotelControllerMock.getInstance();
    }

    @After
    public void tearDown() {
        hotelController = null;
    }

    @Test      You, 1 second ago • Uncommitted changes
    public void testGetId() {
        assertEquals((Integer) 1, hotelController.getHotelByID(1).getId());
        assertEquals((Integer) 2, hotelController.getHotelByID(2).getId());
        assertEquals((Integer) 3, hotelController.getHotelByID(3).getId());
    }

    @Test
    public void testGetName() {
        assertEquals("Rangá", hotelController.getHotelByID(1).getName());
        assertEquals("Hilton", hotelController.getHotelByID(2).getName());
        assertEquals("Ölfus", hotelController.getHotelByID(3).getName());
    }

    @Test
    public void testGetPriceRating() {
        assertEquals((Integer) 3, hotelController.getHotelByID(1).getPriceRating());
        assertEquals((Integer) 4, hotelController.getHotelByID(2).getPriceRating());
        assertEquals((Integer) 5, hotelController.getHotelByID(3).getPriceRating());
    }

}
```

```
❯ git add .
~/Documents/Github/HotelReservation  main +1
```

```
main*+   ⊗ 2 ⚠ 17   You, 1 second ago   Ln 23, Col 1   Spaces: 4   UTF-8   LF   java   Go Live   kite: ready   JavaSE-17
```

Team Assignment #4: Software Tests

Benedikt, Bjarni, Inga og Þorvaldur
Team 4H

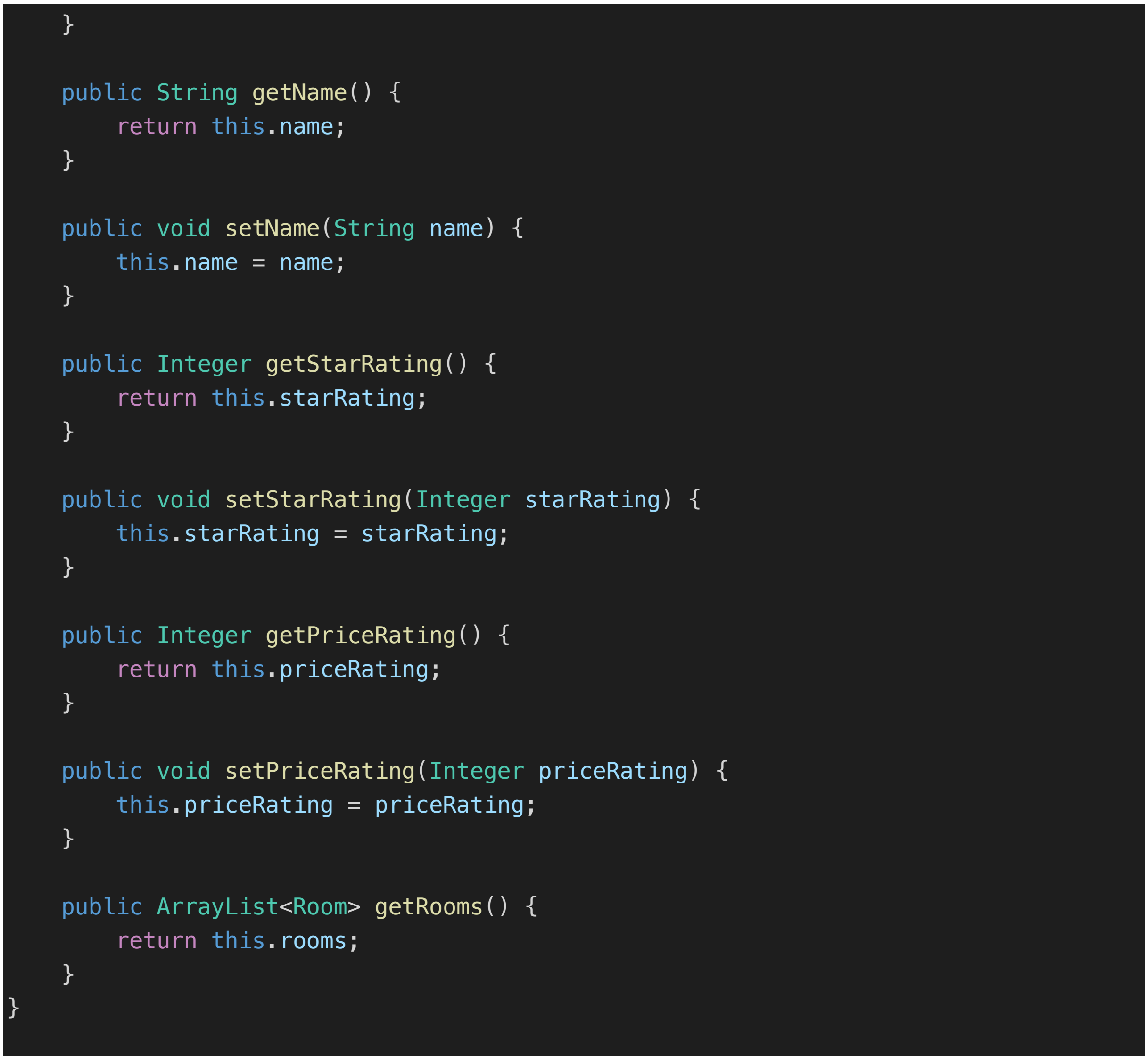
Mock object:

Mock SQL connection:

```java
package hotelreservation.data;

import java.util.HashMap;

import hotelreservation.entities.*;

/**
 * Simulates having a connection to our future SQL database
 */

public class MockConnection implements HotelDataConnection {

    private static MockConnection instance = null;
    private HashMap<Integer, Hotel> hotels = new HashMap<Integer, Hotel>();


    /**
     * private constructor that creates three mock hotels
     */
    private MockConnection(){
        hotels.put(1, new Hotel(1, "Rangá", 2, 3));
        hotels.put(2, new Hotel(2, "Hilton", 3, 4));
        hotels.put(3, new Hotel(3, "Ölfus", 4, 5));
    }

    /**
     * Returns the instance of the MockConnection
     * @return the MockConnection instance
     */
    public static MockConnection getInstance(){
        if(instance == null){
            instance = new MockConnection();
        }
        return instance;
    }

    /**
     * Returns the Hotel associated with the given ID
     * @param ID: the id
     * @return the MockConnection instance
     */
    public Hotel getHotelByID(Integer ID) {
        return hotels.get(ID);
    }


/**
     * Implemented later
     * @return null
     */
    public Room getRoomByID(Integer ID) {
        return null;
    }


}
```

Hotel object:

```
package hotelreservation.entities;

import java.util.ArrayList;

public class Hotel {

    private Integer id;
    private String name;
    private Integer starRating;
    private Integer priceRating;
    private ArrayList<Room> rooms;

    public Hotel(Integer id, String name, Integer starRating, Integer priceRating)
{
        this.id = id;
        this.name = name;
        this.starRating = starRating;
        this.priceRating = priceRating;
        this.rooms = null;
    }

    public void addRoom(Room newRoom) {
        rooms.add(newRoom);
    }

    public Integer getId() {
        return this.id;
    }

    public void setId(Integer id) {
        this.id = id;
```



```
    }

    public String getName() {
        return this.name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public Integer getStarRating() {
        return this.starRating;
    }

    public void setStarRating(Integer starRating) {
        this.starRating = starRating;
    }

    public Integer getPriceRating() {
        return this.priceRating;
    }

    public void setPriceRating(Integer priceRating) {
        this.priceRating = priceRating;
    }

    public ArrayList<Room> getRooms() {
        return this.rooms;
    }
}
```

For additional code please refer to github repository:
https://github.com/Bobbi11/HotelReservation

or contact us by email.