Skilaverkefni 4

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```java
import controller.SearchController;
import java.util.ArrayList;
import org.junit.After;
import org.junit.Before;
import org.junit.Test;
import static org.junit.Assert.*;
import vinnsla.leit;

public class SearchControllerTest {

    private String startDate;
    private String endDate;
    private int adultGuests;
    private int childrenGuests;
    private String searchString;

    leit nyLeit = new leit();
    private SearchController sController = new SearchController();

    @Before
    public void setUp() {
        startDate = "2019-04-04";
        endDate = "2019-04-12";
        adultGuests = 2;
        childrenGuests = 2;
        searchString = "Hotel Borg";
    }

    @After
    public void tearDown() {
        startDate = null;
        endDate = null;
        adultGuests = null;
        childrenGuests = null;
        searchString = null;
    }

    // Prófað med réttum gögnum
    @Test
    public void testCorrect() {
        setUp();
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();
    }

    // leitarstrengur passar engan veginn vid hotel
    @Test
    public void testSearchString() {
        setUp();
        searchString = "lfkdjgnis";
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();

        setUp();
```

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```java
        searchString = "Ö$%FDS123&&&&&";
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();

        setUp();
        searchString = "Shanghai";
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();

    }

    // fjoldi meiri en 24 eða minna en 1
    @Test
    public void testPersons() {
        setUp();
        adultGuests = 15;
        childrenGuests = 20;
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();

        setUp();
        adultGuests = 0;
        childrenGuests = 0;
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();
    }

    // Dagsetning fyrir 01.01.2019
    @Test
    public void testEarlyStartDate() {
        setUp();
        startDate = "2018-04-04";
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();
    }

    // Dagsetning eftir 31.12.2019
    @Test
    public void testLateEndDate() {
        setUp();
        endDate = "2020-04-04";
        nyLeit.newSearch(searchString, startDate, endDate, adultGuests, childrenGuests);
        sController.searchHotels(nyLeit);
        tearDown();
    }

}
```

```java
import java.util.ArrayList;

public class DatabaseConnectionMock {

    private String searchString;
    private String startDate;
    private String endDate;
    private int adultGuests;
    private int childrenGuests;
    private int persons;
    private ArrayList<String> results = new ArrayList<>();

    public ArrayList<String> DatabaseConnectionMock(String searchString, String startDate,
            String endDate, int adultGuests, int childrenGuests) {
        this.searchString = searchString;
        this.startDate = startDate;
        this.endDate = endDate;
        this.adultGuests = adultGuests;
        this.childrenGuests = childrenGuests;
        this.persons = this.adultGuests + this.childrenGuests;

        //Test 1:
        if (this.persons <= 0) {
            this.results.add("Number of guests must be greater than zero.");
            return this.results;
        }

        if (this.persons > 24) {
            this.results.add("Number of guests exceeds hotel capacity.");
            return this.results;
        }

        //Test 2:
        if (this.startDate == "2018-04-04") {
            this.results.add("This date has passed.");
            return this.results;
        }

        if (this.endDate == "2020-04-04") {
            this.results.add("This date has not been opened for booking yet.");
            return this.results;
        }

        //Test 3:
        if (this.searchString == "lfkdjgnis" || this.searchString == "Ö$%FDS123&&&&&"
        || this.searchString == "Shanghai") {
            this.results.add("No hotel found with this name or similar.");
            return this.results;
        }

        if (this.searchString == "Hotel Borg" && this.persons == 4 && this.startDate
            == "2019-04-04" && this.endDate == "2019-04-12") {
            this.results.add("Hotel Borg 1");
            this.results.add("Hotel Borg 2");
            this.results.add("Hotel Borg 3");
        }
```

```
        return this.results;
    }
}
```