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CM #749

Lab3

1. In what project is the source code found? In what project is the test code found?
   Expedia, and ExpediaTest

2. What classes exist in the project?
   AssemblyInfo, Booking, Car, Flight, Hotel, and User

3. Explain, in your own words, the functionality that is supported by the Flight class.
   The flight class allows you to book a flight that leaves on a specified day and returns on a specific day and travels a specified amount of miles.

4. What are the test classes in the project?
   BookingTest, CarTest, FlightTest, HotelTest, and UserTest
5. Identify the various test methods in the UserTest class.

   TestThatUserInitializes, TestThatUserHasZeroFrequentFlierMilesOnInit, TestThatUserCanBookEverything, TestThatUserHasFrequentFlierMilesAfterBooking, TestThatUserCanBookAFlight, TestThatUserCanBookAHotelAndACar, and TestThatUserHasCorrectNumberOfFrequentFlyerMilesAfterOneFlight

6. Identify at least three different functions that are supported by the Assert class. (Hint: type in \Assert" followed by a period in one of the test classes in the \ExpediaTest" project and use the documentation).
   AreEqual, AreSame, IsFalse

7. Please explain the functions that you identified briefly.
   AreEqual tests to see if the values of the two things being compared are the same value.
   AreSame tests to see if the two objects being compared are exactly the same down to where they point at.
   IsFalse tests whether a certain object is false

8. You may have noticed that there are two methods on the assert class named AreEqual and AreSame. These methods may seem identical, but there is a critical difference between them. Please explain the difference.

AreEqual tests to see if the values of the two things being compared are the same value.
AreSame tests to see if the two objects being compared are exactly the same down to where they point at.

9. What is the unit test TestThatHotelInitializes verifying?
   That you can create a new Hotel object.

10. What is the generic algorithm for calculating getBasePrice? (You may look at Hotel.cs.)

    45 * n (n = numberOfNightsToRent)

11. What cases are tested with these new tests?
    If the algorithm for getting hotel price works for one, two, and ten days.

12. Why don't we have to include Assert.IsNotNull(target) in each of these tests?
    Because we are testing if the method returns the right value, and it will fail if the value is null.

13. Why does this test expect an exception? (Please look at Hotel.cs.)
    Because we are giving an invalid amount of time to stay in the hotel (negative hours).

14. Please provide the attribute declaration to accompany a test case that expects an OutOfMemoryException.
    [ExpectedException(typeof(OutOfMemoryException))