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CM 1411

Lab 3 – Unit Testing

1. The source code is found within the Expedia project while the test code is fount within the ExpediaTest project.
2. The project contains the following classes: AssemblyInfo, Booking, Car, Flight, Hotel, and User.
3. The Flight class provides the functionality to create and compare flights as well as implementing the functionality to get a base price as defined in the Booking class.
4. The project contains the following test classes: BookingTest, CarTest, FlightTest, HotelTest, and UserTest.
5. The UserTest class contains the following test methods: TestThatUserInitializes, TestThatUserHasZeroFrequentFlierMilesOnInit, TestThatUserCanBookEverything, TestThatUserHasFrequentFlierMilesAfterBooking, TestThatUserCanBookAFlight, TestThatUserCanBookAHotelAndACar, and TestThatUserHasCorrectNumberOfFrequentFlyerMilesAfterOneFlight.
6. Examples of Assert functions are AreEqual, AreNotEqual, GreaterOrEqual.
7. AreEqual returns true if the objects are equal to each other. AreNotEqual returns true when the objects are not equal to each other. GreaterOrEqual returns true when the first object is greater than or equal to the second object.
8. AreEqual checks that the objects are equal. AreSame checks that they are actually the same object.
9. TestThatHotelInitializes is testing the constructor to make sure that it correctly initializes the Hotel object.
10. The generic algorithm returns the number of nights that the room is being rented multiplied by 45.
11. The only case that is tested is the case with a positive number of nights being used (unless you count the fact that the number 10 has 2 digits, but this should be irrelevant). However, due to the way the constructor works, this should be the only case that arises.
12. The TestThatHotelInitializes test has already verified that the object will not be null.
13. The constructor throws an exception if the number of nights the room is to be rented is less than or equal to 0.
14. [Test()]
    [ExpectedException(typeof(OutOfMemoryException))]