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CM 451
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CSSE376
Lab 6

1. In this project, a mock is used so that we can test calls to the getRoomOccupant(int roomNumber) of the Hotel class. The mock substitutes for the database behind the Hotel object, with only the information for the cases that we will be testing, so that we do not have to create an entire real database and instance of Hotel. We record that we expect “Whale Rider” to be returned as the occupant of room 24 and “Raptor Wrangler” the occupant of room 1025, so that when we call the method getRoomOccupant(24) and getRoomOccupant(1025) later in the test method, we can check (with Assert.AreEqual) that those expected outputs are correctly returned.
2. Rather than using LastCall.Returns(Object), you can use the mock to throw an exception by using LastCall.Throw(new Exception(“Exception message”)).
3. If the mocked object did not need to return a value for the call, we could use a DynamicMock instead of a (strict) stub, since we wouldn’t need to pre-specify what values we expected from the call. To test the getRoomOccupant(int roomNumber) method, however, we could not use a Dynamic Mock, since the test is based on comparing the returned values against our expectations and making sure they match.
4. A mock is used for the database behind a Hotel object, and gives that mock a 100-element list Rooms. Unlike the mock used for the test addressed in question 1, this does not use the Record-Replay method, it uses Arrange-Act-Assert. It initializes a Hotel object, and sets its database to the mock database with the list Rooms for rooms, then asserts that count returned from the database for availableRooms is the number of elements in that list.
5. Two cars are initially added to the service locator, and one is checked out. To check that it has been removed, the Assert.AreSame() (not Assert.AreEqual) is used to make sure that the remaining car has been moved to the first element of the service locator, and Assert.AreEqual() is used to make sure that there are no other cars in the service locator (that there is exactly one).