**WEEK 2**

**NUnit and Moq**

**Project 1: BusinessLogic**

**ICustomerRepository.cs**

namespace BusinessLogic

{

public interface ICustomerRepository

{

string GetCustomerName(int id);

}

}

**CustomerService.cs**

namespace BusinessLogic

{

public class CustomerService

{

private readonly ICustomerRepository \_repository;

public CustomerService(ICustomerRepository repository)

{

\_repository = repository;

}

public string GetGreeting(int id)

{

string name = \_repository.GetCustomerName(id);

return $"Hello, {name}!";

}

}

}

**Project 2: Week2UnitTests**

**UnitTest1.cs**

using NUnit.Framework;

using Moq;

using BusinessLogic;

namespace Week2UnitTests

{

public class CustomerServiceTests

{

[Test]

public void GetGreeting\_ReturnsCorrectGreeting()

{

// Arrange

var mockRepo = new Mock<ICustomerRepository>();

mockRepo.Setup(x => x.GetCustomerName(1)).Returns("Alice");

var service = new CustomerService(mockRepo.Object);

// Act

string result = service.GetGreeting(1);

// Output to NUnit test runner

TestContext.WriteLine("Greeting Result: " + result);

// Assert

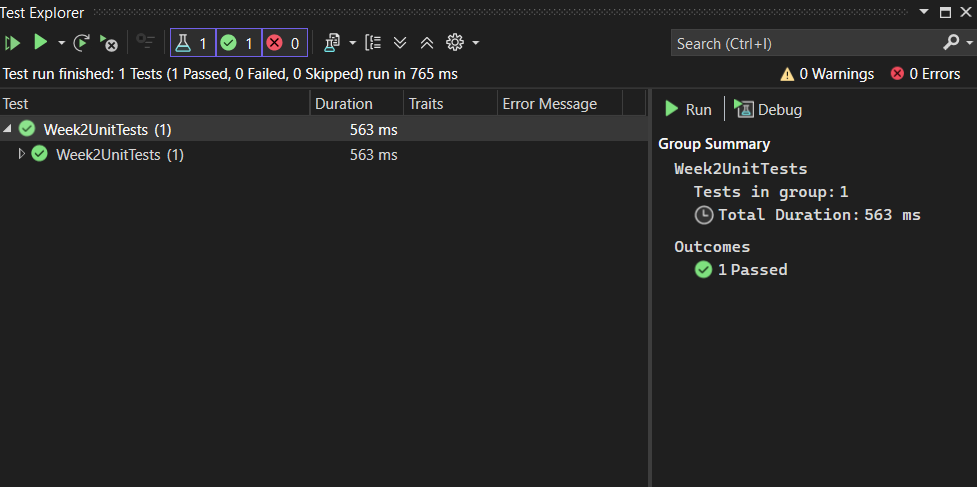
Assert.AreEqual("Hello, Alice!", result);

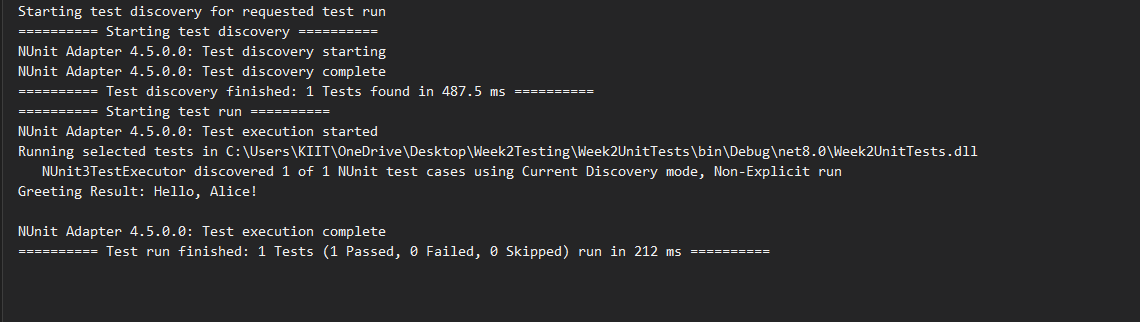
}

}

}

**OUTPUTS**

****

****