**COS 20007**

**Task 2.4**

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1. **Swin – Adventure Code**
2. IdentifiableObject.cs

using System;

namespace Swin\_Adventure

{

public class IdentifiableObject

{

private List<string> \_identifiers;

public IdentifiableObject(string[] idents)

{

\_identifiers = new List<string>(idents);

\_identifiers.AddRange(idents);

}

public bool AreYou(string id)

{

return \_identifiers.Contains(id.ToLower());

}

public string FirstId

{

get

{

if (\_identifiers.Count == 0)

{

return "";

}

return \_identifiers[0];

}

}

public void AddIdentifier(string id)

{

\_identifiers.Add(id.ToLower());

}

}

}

1. Program.cs

namespace Swin\_Adventure;

class Program

{

static void Main(string[] args)

{

Console.WriteLine("Duc Thuan Tran - 104330455");

}

}

1. **Swin – Adventure Test Code**
2. IdentifiableObjectTest.cs

using NUnit.Framework;

using Swin\_Adventure;

namespace IdentifiableObjectTest

{

internal class Tests

{

private IdentifiableObject \_test1;

private IdentifiableObject \_test2;

private IdentifiableObject \_test3;

private IdentifiableObject \_test4;

private IdentifiableObject \_test5;

private IdentifiableObject \_test6;

[SetUp]

public void Setup()

{

\_test1 = new IdentifiableObject(new string[] { "fred", "bob" });

\_test2 = new IdentifiableObject(new string[] { "fred", "bob" });

\_test3 = new IdentifiableObject(new string[] { "fred", "bob" });

\_test4 = new IdentifiableObject(new string[] { "fred", "bob" });

\_test5 = new IdentifiableObject(new string[] { });

\_test6 = new IdentifiableObject(new string[] { "fred", "bob" });

}

[Test]

public void TestAreYou()

{

Assert.IsTrue(\_test1.AreYou("fred"));

Assert.IsTrue(\_test1.AreYou("bob"));

}

[Test]

public void TestNotAreYou()

{

Assert.IsFalse(\_test2.AreYou("wilma"));

Assert.IsFalse(\_test2.AreYou("boby"));

}

[Test]

public void TestCaseSensitive()

{

Assert.IsTrue(\_test3.AreYou("FRED"));

Assert.IsTrue(\_test3.AreYou("bOB"));

}

[Test]

public void TestFirstID()

{

Assert.AreEqual("fred", \_test4.FirstId);

}

[Test]

public void TestFirstIdWithNoIDs()

{

Assert.AreEqual("", \_test5.FirstId);

}

[Test]

public void TestAddID()

{

\_test6.AddIdentifier("wilma");

Assert.IsTrue(\_test6.AreYou("fred"));

Assert.IsTrue(\_test6.AreYou("bob"));

Assert.IsTrue(\_test6.AreYou("wilma"));

}

}

}

1. **Image**
2. NUnit test passing

A screenshot of a computer

Description automatically generated