**NUnit to Test an OOP Based System for Storing School Data**

**Practice Project**

**Source code:**

**Student\_unit.cs:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace UnitTest

{

public class student\_unit

{

public int rollno { get; set; }

public string name { get; set; }

public int std { get; set; }

}

}

**Subject.cs:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace UnitTest

{

public class subject

{

public int sub\_id { get; set; }

public string subject\_name { get; set; }

public int subject\_mark { get; set; }

}

}

**Teacher.cs:**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace UnitTest

{

public class Teacher

{

public int teacher\_id { get; set; }

public string teacher\_name { get; set; }

}

}

**Student.cs:**

using NUnit.Framework;

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using UnitTest;

namespace student.Test

{

[TestFixture]

public class student

{

[TestCase]

public void Validate\_student()

{

student\_unit s = new student\_unit();

s.rollno = 1;

s.name = "Sukirtha Lakshmanan";

s.std = 1;

Assert.AreEqual(s.rollno, 1);

Console.WriteLine("Student details are successfully validated...");

Console.WriteLine("Student rollno:"+s.rollno);

Console.WriteLine("Name:"+s.name);

Console.WriteLine("Standard :"+s.std);

}

[TestCase(11)]

[TestCase(10)]

public void Validate\_teacher(int id)

{

Teacher t=new Teacher();

t.teacher\_id = id;

t.teacher\_name = "sri";

Assert.AreEqual(t.teacher\_id, 11);

Console.WriteLine("Validation success !!");

Console.WriteLine("Teacher id:"+t.teacher\_id);

Console.WriteLine("Teacher name:"+t.teacher\_name);

}

[TestCase(150)]

public void Validate\_subject(int m)

{

subject ss = new subject();

ss.sub\_id= 101;

ss.subject\_name = "Maths";

ss.subject\_mark = m;

Assert.AreEqual(ss.subject\_mark, 150);

Console.WriteLine("subject id:"+ss.sub\_id);

Console.WriteLine("subject name:"+ss.subject\_name);

Console.WriteLine("subject mark"+ss.subject\_mark);

Console.WriteLine("Validation success !!");

}

}

}