**PHASE 4 – Customer Support Logger**

**Section 1. [ Use NUnit and Moq to Test an OOP Based System for Storing School Data ]**

DESCRIPTION

Use NUnit to do unit testing for an existing OOP backend prototype application for storing school data.

**Background of the problem statement:**

Rainbow School is developing a simple OOP based system for storing information about teachers, students, and subjects. This system is based on C#. It has developed the prototype classes in .NET and wants to put unit testing in place to test the validity of these classes.

The objective is to build a Windows Class Library project for the existing OOP classes first, and then create another project which will do unit testing for those classes.

**Setup Environment :**

**Visual Studio Windows:** An IDE to code the application

**NUnit:**To write and run tests in Microsoft .NET programming languages

**Moq:**Framework used in unit testing

**Application Git:** To connect and push files from the local system to GitHub

**GitHub:** To store the code and track its versions

**Theses following tasks we have to perform:**

Setup NUnit and Moq to test the existing project.

Use Assertions to check valid functioning of the storage classes.

Use Moq where mocking is required.

Steps 1: Firstly we need to create 2 Library Project Applications

Steps 2: Need to install Frameworks like NUnit and Moq

Steps 3: We need to write code for execution

Steps 4: In one library we need to create property according their classes like student,subjects,teacher

Steps 5: Another library, for implement test case for each classes