

COMP 3111: Software Engineering

Lab Activity: Unit Testing in ASP.NET Using NUnit Unit Test Currency Conversion Method for the *HKeInvest* Application



If you have not attended the tutorial or read the tutorial and lab notes for *Unit Testing in ASP.NET Using NUnit* you may not know how to complete this lab activity. Attending the tutorial will help ensure that you are able to complete the lab activity during the lab period.

LAB OBJECTIVE

The *HKeInvest* application requires that clients be able to show any total monetary value in any of the currently available currencies (requirement 5(b)). In this lab you will write a unit test for the currency conversion method in the "HKeInvestCode.cs" class in the "Code_File" folder.

LAB ACTIVITY TASKS

1. Make sure that your web application has the "NUnit" and "NUnitTestAdapter" NuGet packages installed (see Appendix B of the tutorial and lab notes).
2. Right-click the "HKeInvestWebApplication.Tests" test project node in the `Solution Explorer` and add a reference to "NUnitFramework.NET4.5".
3. Add a unit test for only the currency conversion method and write the code required to run the unit test.
Note: You should delete the default "UnitTest1.cs" file so that it's result does not appear in your test result.
4. Construct at least one test case for each of the currencies "EUR", "GBP", "HKD", "JPY" and "USD".
Note: You can determine the currently available currencies and their exchange rate by viewing the "ControlCenter.aspx" web form in the "ExternalSystems" folder in a browser and selecting "Manage Currency Conversion" from the navigation bar menu.

HOW TO GET THE CREDIT FOR THIS LAB

To get the full credit for this lab, show the unit test that you have constructed and demonstrate that it passes for at least the five test cases stated previously to a TA by the end of the lab period.