**Whitireia Staff Management System Test Plan**

**Automated Test**

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| **Test Name:** | WSMS - Automated Test |
| **Responsible Tester:** | Yuxi Wang |
| **Tester ID:** | 22001587 |
| **Executed Date:** | 20/AUG/2020 |
| **Test Objective:** | Automated test is the use of [software](https://en.wikipedia.org/wiki/Software" \o "Software) separate from the software being tested to control the execution of tests and the comparison of actual outcomes with predicted outcomes. Test automation can automate some repetitive but necessary tasks in a formalized testing process already in place, or perform additional testing that would be difficult to do manually. Under this test, we will use MS Visual Studio Coded UI Test to do automated testing to the D201BenchmarkApp. |
| **Test Process (Explanation):** | 1. New a project, choose Coded UI Test Project and name it as CodedUITestProject\_D201BenchmarkApp.      1. Run the program of D201BenchmarkApp   2   1. Test Add function. Click Coded UI Test Builder - Start Recording which locates at the lower right corner. Then start inputting data in the input box, after finishing the operation, then click Add and Load. Finally click Start Recording to finish the operation recording.   3   1. Click Show Recorded Steps to check the recorded steps, delete redundant operation and then click right side button: Generate Code, then the test codes will automatically generated by the system.   4  5   1. Insert the language of “Assertion” to judge if the result is correct or what we expect it to be. Click the button Add Assertion, then drag it to the end of the list, the result we expect is that when we add a staff, then the staff will be appended to be the end of the list. So we drag the Add Assertion button the end of the list, and then choose the item. Then check the comparison value, what we want to compare is that the value. Finally click Generate Code. Then the Assertion code will Automatically generated by system.   6  7  8   1. Next we can start to test the section we just set up. Find the CodeUITestMethod, and then click the right mouse button, click Run Tests.   1   1. Then the automated test will start to run. The program will automatically run and input data to the input box and test if the result is equal to what we expected. If the result is correct, then the Test Explorer will give remind that the test passed.   2  3   1. Enter the codes, we can check the expected result, we try to change the expected result name from “Test Lee” to “Test Wang”, to see if the program can judge the result.   1   1. Back to CodeUITestMethod, and then click the right mouse button, click Run Tests. Then the program will start again to test. Finally the Test Explorer gave the result of failure, which means the result is not as what we expected.   2   1. Apply this logic, we can build more tests to test other parts, especially those repetitive data input, such as ID, Name, Salary, DOB, Email input box, etc. Through automated tests, we can use codes to help us test the program, which saves us more time. For more tests, I have operated them in codes since the logic and operation is similar.   1  2 |
| **Test Demonstration:** | See codes attached in this folder. |