**SSW-567 Software Testing, QA and Maintenance**

**HW-02A**

**Aruneshwar Nalluri**

*“I pledge on my honor that I have not given or received any unauthorized assistance on this assignment/examination. I further pledge that I have not copied any material from a book, article, the Internet or any other source except where I have expressly cited the source“*

1. Assignment Description:

We learn from this assignment that we don’t always get to start code from scratch and we inherit code from other people and some times its not perfectly working code that we need to work on.

We need to add new test cases to them to see if the found defects are the only once existing or there are additional defects hiding in the code that need to be found out.

Once more bugs are found by adding additional testcases we can then go check the code and then fix the bugs found in the code by changing it.

2. Author: Arun Nalluri

3. Summary:

GitHub URL: <https://github.com/NAruneshwar/Testing>

Test Driven debugging and development are a very effective way of developing bug free code, when we have inherited a buggy project as demonstrated with this assignment first writing test cases and then going on to fix code is an efficient and effective way of resolving issues.

4. Detailed Result:

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| --- | --- | --- | --- | --- |
| **Test ID** | **Input** | **Expected Results** | **Actual Results** | **Pass or Fail** |
| testRightTriangleA | (3,4,5) | Right | InvalidInput | Fail |
| testRightTriangleB | (5,4,3) | Right | InvalidInput | Fail |
| testEquilateralTriangleA | (111,111,111) | Equilateral | InvalidInput | Fail |
| testIsoscelesTrianleA | (3,3,2) | Isosceles | InvalidInput | Fail |
| testScaleneTriangleA | (10,15,12) | Scalene | InvalidInput | Fail |
| testInvalidInputA | (-1,-1,-1) | InvalidInput | InvalidInput | Pass |
| testNotATriangleA | (5,1,1) | NotATriangle | InvalidInput | Fail |
| testNotATriangleB | (1,5,18) | NotATriangle | InvalidInput | Fail |
|  |  |  |  |  |

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| --- | --- | --- | --- |
|  | **Test Run 1** | **Test Run 2** | **Test Run 3** |
| Tests Planned | 8 | 8 | 8 |
| Tests Executed | 8 | 8 | 8 |
| Tests Passed | 1 | 4 | 8 |
| Defects Found | 3 | 2 | 0 |
| Defects Fixed | 0 | 3 | 3 |

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| --- | --- | --- | --- | --- |
| **Test ID** | **Input** | **Expected Results** | **Actual Results** | **Pass or Fail** |
| testRightTriangleA | (3,4,5) | Right | Right | Pass |
| testRightTriangleB | (5,3,4) | Right | Right | Pass |
| testEquilateralTriangleA | (111,111,111) | Equilateral | Equilateral | Pass |
| testIsoscelesTrianleA | (3,3,2) | Isosceles | Isosceles | Pass |
| testScaleneTriangleA | (10,15,12) | Scalene | Scalene | Pass |
| testInvalidInputA | (-1,-1,-1) | InvalidInput | InvalidInput | Pass |
| testNotATriangleA | (5,1,1) | NotATriangle | NotATriangle | Pass |
| testNotATriangleB | (1,5,18) | NotATriangle | NotATriangle | Pass |
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