SSW-567 HW-01

What challenges did you encounter with this assignment, if any?

Answer: One of the most significant challenges I faced with this assignment was getting the logic of right-angled triangles correct. Simply doing a\*\*2+b\*\*2==c\*\*2 or a\*\*2 + c\*\*2==b\*\*2 or b\*\*2+c\*\*2==a\*\*2 didn’t work as it did not account for floating point precision numbers thereby a test case with (1,1,1.414) should yield an isosceles right-angled triangle was giving me only an isosceles, triangle. I also think that the assignment in general was tricky and difficult to conceptualize initially.

What did you think about the requirements specification for this assignment?

Answer: I don’t think the requirements are good nor are they proper for this assignment. Firstly, the requirements don’t cover all the possible types of triangles, nor do they give any information about special cases where two forms of triangle fit into the same category. For example, isosceles right-angled triangle. Secondly, I don’t think these requirements are complete as they do not state a function nor a requirement that would check for the triangle inequality theorem. It is something that had to be deduced by the person finishing the assignment. Thirdly, the requirements given weren’t clear if the user accessing the program had to manually input the sides of the triangle or whether they should be hard coded into the assignment which is a significant stakeholder requirement as it restricts the versatility of the overall program.

What challenges did you encounter with the tools?

Answer: I did encounter some challenges with pytest. Specifically importing pytest adequately. I wasn’t able to import classify\_trianges function in the testing part of the program as I was importing it as a module and not as a function at which point, I used ChatGPT which promptly pointed out the error to me and gave me the correct syntax which was from source.triangles import classify\_triangle.

Describe the criteria you used to determine that you had sufficient test cases, i.e. how did you know you were done?

Answer: I ran several test cases with different lengths of the triangle to determine if the program was working according to the requirements as specified by the assignment and to cross-check if certain sides of the triangle weren’t being grouped into an incorrect category of triangles. So a test was made for each type of triangle and those that did not form a triangle i.e. Invalid triangles. Also, the actual testing of the triangles helped me quite a bit if there was a certain category of a triangle that did not fit where it was supposed to, the test pointed that out to me and I was able to fix the issue.