SE:: Resolving Potential Specification Ambiguities

Often students encounter what they believe are ambiguities in the specification for an assignment. Sometimes these are, in fact, ambiguities. Often, however, the answer is in the specification and can be found by simply reading the specification more carefully.

One of the goals of this course is to give you some practice in teasing out requirements and details from specifications written in a natural language. In the real world you can't always just call the customer and ask them to clarify something, and even if you can, you might not get a useful or correct answer. The answer to your question can be reasonably inferred by just reading the spec a little more carefully.

When asking questions about the specification it's a good idea to try to think about what the rest of the spec says and then they to draw a reasonable conclusion on your own. Try to find other places in the spec where the is discussed. Try to think about the context of the project. What makes sense, why? When you've gathered all of this, and you still think that there's ambiguity, that might be a good time to ask questions in the appropriate discussion forum.

Your first questions in that forum should primarily be addressed to other students. That way you can discuss the specification with your classmates and debate the different alternatives. This is closer to how things work in the real world. You get together with your colleagues and do your best to tease out the details. That way, when you do ask the customer a question, you're asking them a well prepared question that they will hopefully be able to answer in a way that resolves the ambiguity. Often customers don't understand how to adequately resolve this ambiguity themselves, they're often not programmers. That's why it's incumbent on you to think carefully about the spec. If the instructor just gives you the answer, then they are robbing you of the opportunity to improve your software engineering skills.

Therefore, in this course, the following approach is required to resolve potential ambiguities in project specifications.

Process to Resolve Potential Specification Ambiguities

To make this approach work, you have to present your alternatives and why you think it is one way or the other.

So, I recommend that you begin your reply with a tight descriptive line s this is what will show up in the short form of the discussion replies on Canvas. For example:

SPEC AMBIGUITY: How much of game should be reinitialized when a player dies?

In your next few lines you will want to elaborate on the post to explain what you think the ambiguity is in more detail.

List **one or more** alternative explanations that you think are possible and **WHY** you think that each one is possible by citing text from the specification. If you don't believe that it is a true missing portion of the spec, then you are still obligated to perform the next part.

Describe **WHAT** you think is the correct approach. You must cite the spec, discuss the application in general and why your alternative makes sense.

This process should either yield one of two outcomes. Either you realize that the answer that you were seeking is in the spec, or, you have described the problem reasonably well such that you can have a discussion with classmates as to what the correct resolution might be.

Since your discussion grade is based on your participation, it will only help your classmates to join in on this conversation. Please try to avoid responses like "I agree." If you agree, give sufficient detail to justify why, if you disagree, do the same. Glad handing and perfunctory responses devoid of information will be deleted as off topic.

If deemed necessary and appropriate for the assignment, the instructor (customer) will join the conversation to assist. Be prepared for that assistance to come in the form of more questions for you explore.