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Week 9

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Week 9 Q4

1) Why are there relationships in a program?

The is-a, has-a, and other relationships make classes possible. Without them, we wouldn't be able to relate properties and characteristics to a class, and object oriented programming would not be possible.

2) What is the purpose of UML Relationship Diagrams?

UML relationship diagrams help to visualize a class or relationship between components of classes. Looking at the source code, it may be difficult to visualize how each part of a class affects another, but UML diagrams help organize classes and relationships into something legible.

3) How are composition and aggregation similar?

Composition and aggregation both pertain to the relationship between parts of classes and a whole.

4) How are composition and aggregation different?

In composition, each part of a class is dependent on the class/object, it can't survive without the class/object, similar to how a chassis of a pen is useless without its accompanying components. In aggregation, each part of an object/class can live independently from their whole, similar to how students can live outside a school if the school closes.