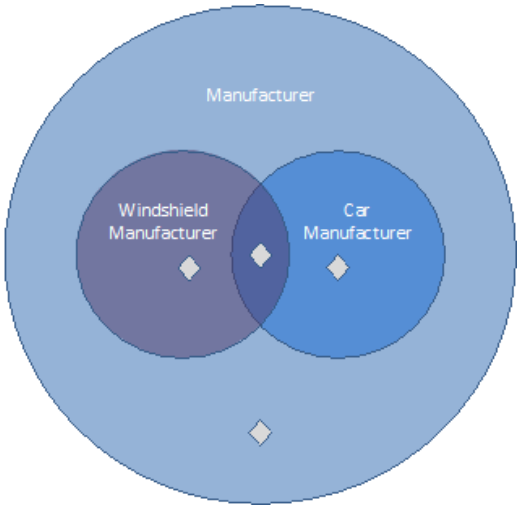
Incomplete and overlapping subclasses

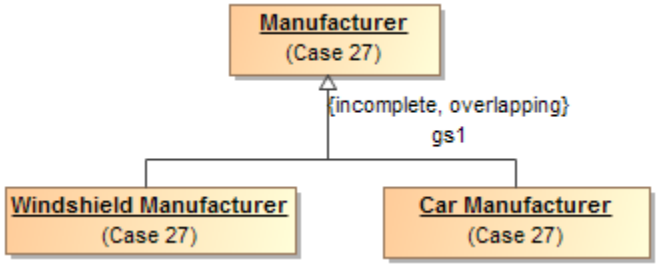
This variation is the default in both UML and in concept modeling. In this variation, an instance can be a member of the superclass and / or any number of subclasses. In this sense, the classification of instances is “incomplete”—sometimes there is a specific subclass, and sometimes there is not.

For example, the diagram below shows four instances. One is an instance of “Manufacturer”, one is an instance of “Windshield Manufacturer”, one is an instance of “Car Manufacturer”, and one is an instance of both “Windshield Manufacturer” and “Car Manufacturer”.



An example of incomplete instances.

In both standard UML and in concept modeling, incomplete and overlapping subclasses are shown with either no notation, or with the notation {incomplete, overlapping} near the generalization arrow.



Incomplete and overlapping subclasses in standard UML notation.

Related pages

- Concept Modeling Semantics
- Generalization
- Complete subclasses
- Disjoint and complete subclasses
- Disjoint subclasses