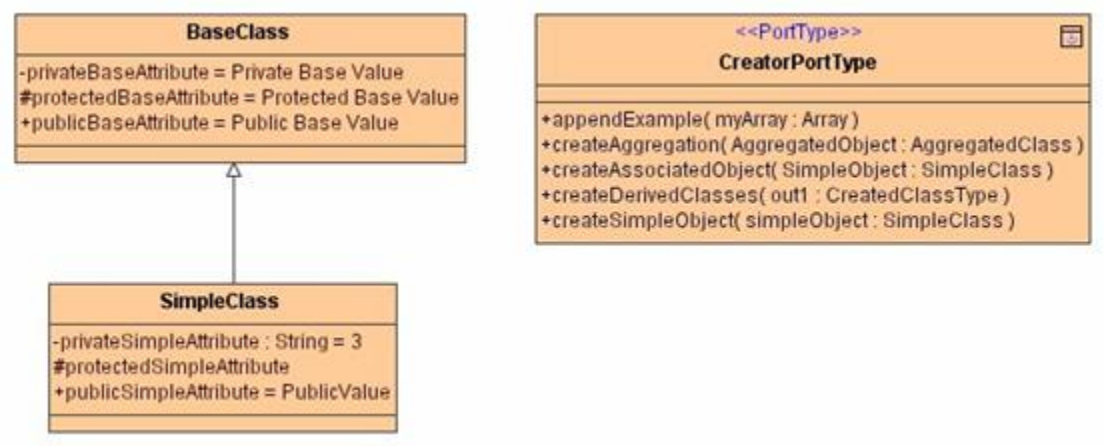
Generalizations

Generalizations can be used to define that one class inherits operations and attributes from another class. A generalization is the relationship from the child element (the more specific element, such as a subclass) to the parent element (the more general element, such as a super class) that is fully consistent with the first element and that provides additional information. In the example in figure Inheritance Using Generalizations, a generalization is drawn from class **SimpleClass** to class **BaseClass**.

Figure: Inheritance Using Generalizations



Private attributes are not inherited.

Thus, the class **SimpleClass** as modeled above has the following attributes:

Attributes of Class SimpleClass	Definition
• privateSimpleAttribute • protectedSimpleAttribute • publicSimpleAttribute	defined in class **SimpleClass**
• protectedBaseAttribute • publicBaseAttribute	inherited from class **BaseClass**

In figure Inheritance Using Generalizations, consider the output object **simpleObject** that is returned by the operation **createSimpleObject** of port type **CreatorPortType**. It will contain all attributes listed in the table above. You will not find the attribute **privateBaseAttribute** as it is declared **private** in class **BaseClass** and thus has not been inherited to class **SimpleClass**.