## Generalization

A generalization is a subsumption relationship between a more general class and a more specific class. Every instance of the specific class is also an instance of the subsuming general class. Because of this subsumption relationship, the specific class inherits all of the necessary conditions of the more general classifier.

For a simple example, if we define "Futsal Team" as a subclass of "Soccer Team", then the set of individuals in "Futsal Team" must be a subset of the set of individuals in "Soccer Team".

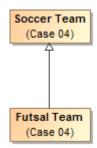


Figure 1: The relation between subclass 'Futsal Team' and class 'Soccer Team' represents generalization.

There are four variations on generalization described in the following subsections. The first variation corresponds to the example above: overlapping and incomplete subclasses. That variation is the default in both UML and concept modeling.

