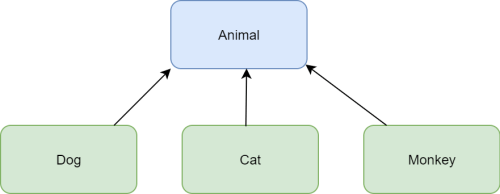
**Inheritance:**

Inheritance allows you to define a class in terms of another class, which makes it easier to create and maintain an application. To use inheritance, you start with a base (parent) class and then derive a child class from the base class. Inheritance works under the “is a” relationship model.

What is unique about an “is a” relation is that it works only in one direction, which is a child to parent. The following diagram demonstrates the “is a” relationship for some animals.

[](https://i2.wp.com/www.brightdevelopers.com/wp-content/uploads/2017/07/cpp_inheritance_basics.png?ssl=1)

The base class is Animal and the derived classes (children) are Dog, Cat, and Monkey. Translating one of the relationships into a statement, you would get along the lines of “A monkey is an animal”. Notice that the other way around doesn’t work. The phrase, “An animal is a monkey” is not a true statement.