# Generics

Generics are a feature that allows for the creation of reusable code by creating parameterized types. In simple terms, it enables us to create classes, interfaces, and methods that work with different data types without having to define the data type explicitly.

Generics introduces the concept of **type parameters** to .NET, which make it possible to design classes and methods that defer the specification of one or more types until the class or method is declared and instantiated by client code. For example, by using a generic type parameter T, you can write a single class that other client code can use without incurring the cost or risk of runtime casts or boxing operations.

Generics are most frequently used with collections and the methods that operate on them. The System.Collections.Generic namespace contains several generic-based collection classes. The non-generic collections, such as ArrayList are not recommended and are maintained for compatibility purposes.