C# - Encapsulation

Encapsulation is defined 'as the process of enclosing one or more items within a physical or logical package'. Encapsulation, in object oriented programming methodology, prevents access to implementation details.

Abstraction and encapsulation are related features in object oriented programming. Abstraction allows making relevant information visible and encapsulation enables a programmer to *implement the desired level of abstraction*.

Encapsulation is implemented by using **access specifiers**. An **access specifier** defines the scope and visibility of a class member. C# supports the following access specifiers −

- Public
- Private
- Protected
- Internal
- Protected internal

Access Modifier	Description (who can access)
public	Any code. No inheritance, external type, or external assembly restrictions.
private	Only members within the same type. (default for type members)
protected	Only derived types or members of the same type.
internal	Only code within the same assembly. Can also be code external to object as long as it is in the same assembly. (default for types)
protected internal	Either code from derived type or code in the same assembly. Combination of protected OR internal.