When access is allowed to a member, it said to be accessible. Otherwise, it is inaccessible. Use the access modifiers, [public](https://msdn.microsoft.com/en-us/library/yzh058ae%28v=vs.71%29.aspx), [protected](https://msdn.microsoft.com/en-us/library/bcd5672a%28v=vs.71%29.aspx), [internal](https://msdn.microsoft.com/en-us/library/7c5ka91b%28v=vs.71%29.aspx), or [private](https://msdn.microsoft.com/en-us/library/st6sy9xe%28v=vs.71%29.aspx), to specify one of the following declared accessibilities for members.

|  |  |
| --- | --- |
| **Declared accessibility** | **Meaning** |
| **public** | Access is not restricted. |
| **protected** | Access is limited to the containing class or types derived from the containing class. |
| **internal** | Access is limited to the current assembly. |
| **protected internal** | Access is limited to the current assembly or types derived from the containing class. |
| **private** | Access is limited to the containing type. |

Only one access modifier is allowed for a member or type, except for the **protected** **internal** combination.

Access modifiers are not allowed on namespaces. Namespaces have no access restrictions.

Depending on the context in which a member declaration takes place, only certain declared accessibilities are permitted. If no access modifier is specified in a member declaration, a default accessibility is used.

Top-level types, which are not nested into other types, can only have **internal** or **public** accessibility. The default accessibility for these types is **internal**.

Nested types, which are members of other types, can have declared accessibilities as indicated in the following table.

|  |  |  |
| --- | --- | --- |
| **Members of** | **Default member accessibility** | **Allowed declared accessibility of the member** |
| **enum** | **public** | None |
| **class** | **private** | **public**  **protected**  **internal**  **private**  **protected internal** |
| **interface** | **public** | None |
| **struct** | **private** | **public**  **internal**  **private** |