

## Dependency Injection in .NET with C#

Application will handle initializing services behind the scenes  
ServiceCollection

- An `IEnumerable` of Service Descriptors

### Dependency Lifetimes

Transient!

Every time it is requested a new one will be created

Singleton!

Single instance of class across lifetime of program

Scoped:

In ASP.NET a scope lifetime is the duration of a request/response

### Resolving Dependencies

Constructor - Most basic, just needs to be registered  
Method - Parameter with `[FromServices]` parameter

Console App - need to do it manually

- Create `ServiceCollection` and register services
- Call `GetRequiredService`

`TryAdd` will not add duplicate services

You can create a custom scope with a `using` statement with the `ServiceScopeFactory`

Scrutor is a third party library to extend dependency injection