

Day 38/60 - Difference Between Finalize and Dispose in C#

Proper resource management is crucial in .NET. Finalize and Dispose help clean up unmanaged resources, but they work differently.

Finalize

- Called by the Garbage Collector (GC) automatically.
- Used for unmanaged resources like file handles or database connections.
- Cannot be called explicitly.

```
~MyClass() { /* Cleanup logic */ }
```

Dispose (IDisposable)

- Called manually to free resources immediately.
- Implemented via the IDisposable interface.
- Recommended for deterministic cleanup.

```
public void Dispose() { /* Cleanup logic */ }
```

Use Dispose() when you need immediate resource cleanup.

Use Finalize() as a backup if Dispose() isn't called.

#dotnet #csharp #garbagecollection #dispose #finalize