

Re: How does "new" work in a loop?

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<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.languages.csharp/2006-07/msg00819.html>

- *From:* Barry Kelly <barry.j.kelly@xxxxxxxxxx>
 - *Date:* Thu, 06 Jul 2006 22:45:46 +0100
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"Matt" <matttelles@xxxxxxxxxxxxx> wrote:

So what is happening here? Is the memory being reused, or am I piling up objects on the heap that will only go away when my program ends, or am I creating a huge memory leak?

Unlikely that you are creating a memory leak. C# uses garbage collection. When the object goes out of scope (in your case, the } marked // for int i) the object is destroyed. The next time through the loop, a new one is created.

It isn't freed immediately on every loop, or when it goes out of scope, unless it's a value type (struct in C#). The GC kicks in on an as-needed basis: memory pressure, repeated allocations, etc. That's one thing, and is easy.

The other half of the story is resources. The GC isn't a resource manager, so you shouldn't rely on it to manage things like file handles, since it won't release them in a timely manner. That's why it's important to use "using" with FileStream and other classes which implement IDisposable.

-- Barry

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<http://barrkel.blogspot.com/>

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