




What's new and improved in C# 13



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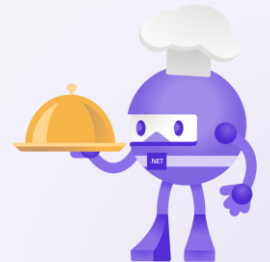
What's new in C# 13

- Params Collection
- New Lock type and semantics
- Implicit indexer access in object initializers
- Overload resolution priority
- Field keyword in properties
- Method group natural type improvements
- New escape sequence - `\e`.
- Partial properties and indexers
- Allow ref struct types
- Allow ref struct types to implement interfaces
- Enable ref locals and unsafe context in iterators and async methods



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About Moaid Hathot



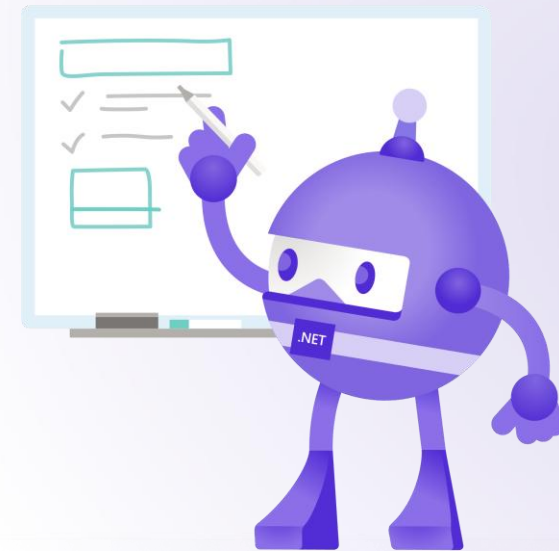
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Moaid Hathot

- Senior software Engineer @  Microsoft
- Ex-Azure MVP
- Co-Founder of `Code.Digest();`
 - meetup.com/Code-Digest
- Co-Founder of ILDC's `.NET Bond`
 - aka.ms/dotnetbond
- Author of `Dumpify`
 - github.com/MoaidHathot/Dumpify
- Author of `dotnet.nvim`
 - github.com/MoaidHathot/dotnet.nvim
- Admin of `Israeli .NET Developers`
 - facebook.com/groups/DotNetIL



Name	Value
Name	"Dumpify"
Description	"Dump any object to Console"



Running .NET 9 and C# 13

Install .NET 9

<https://aka.ms/get-dotnet-9>

Visual Studio 2022

<https://visualstudio.microsoft.com/downloads>

RoslynPad

<https://roslynpad.net>

Neovim

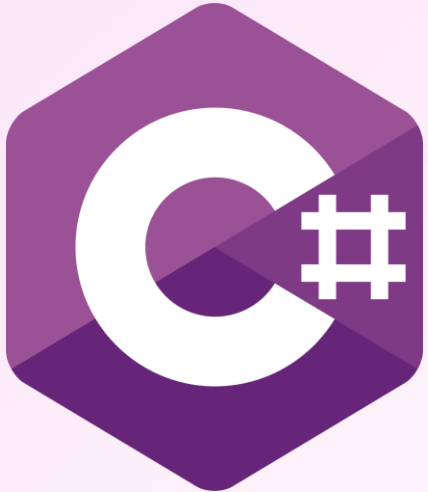
<https://github.com/MoaidHathot/Neovim-Moaid>

Sample Code

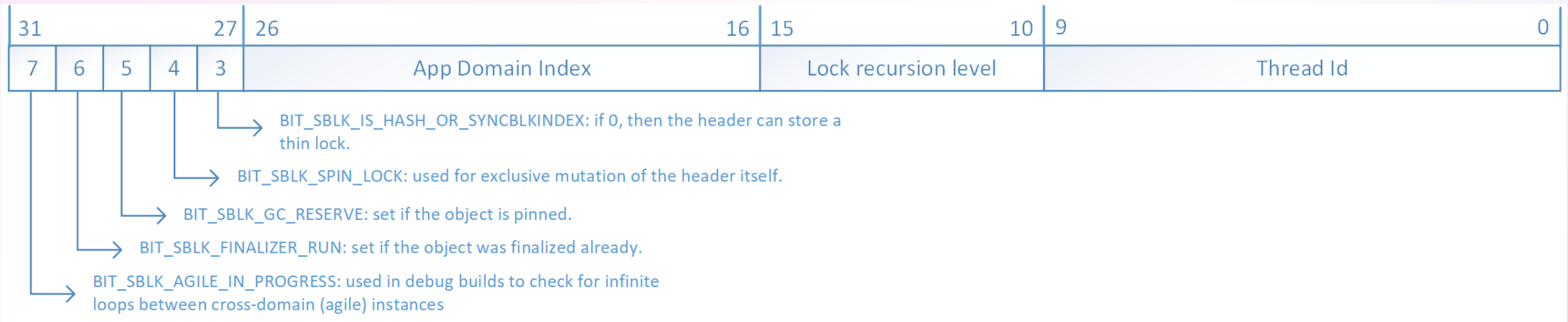
<https://aka.ms/csharp-13-demo>



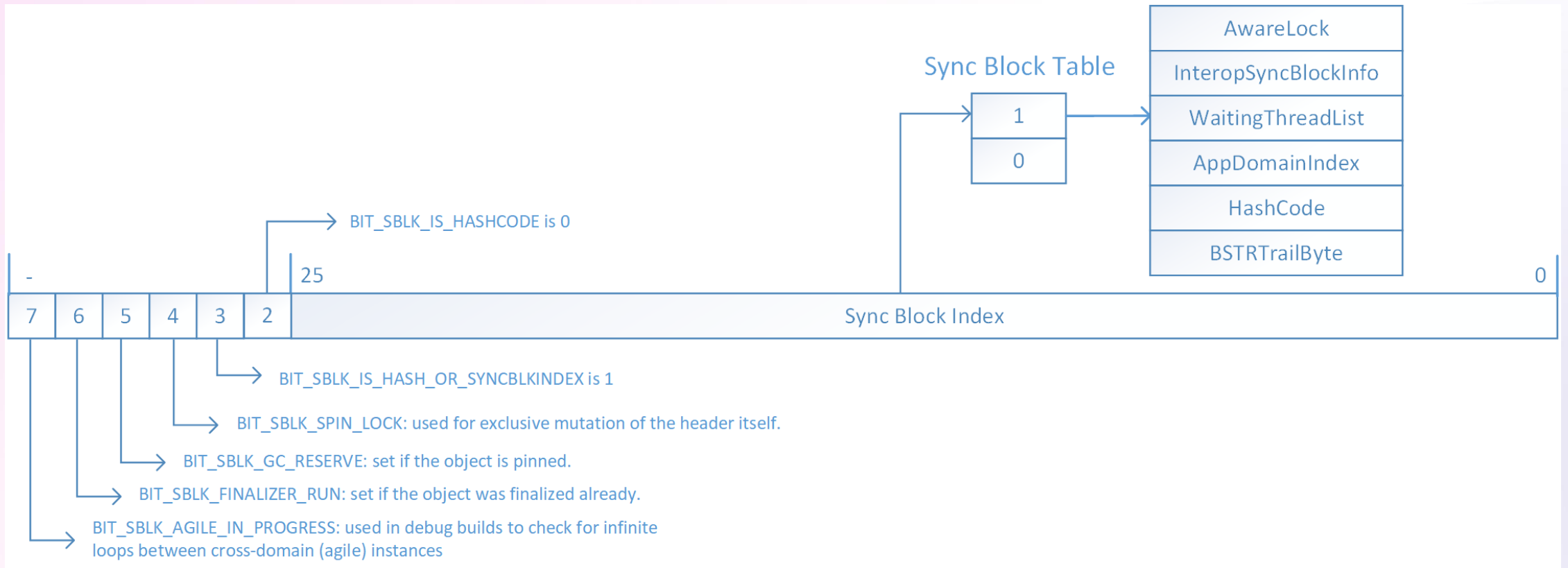
Lock type



Syncblock



Syncblock



Syncblock

- [Book of the runtime](#)
- [Managed object internals, Part 2. Object header layout and the cost of locking](#)
- [Github: Add first class System.Threading.Lock type](#)
- [Github: Lock statement pattern](#)
- [Performance improvements in .NET 9](#)
- [The lock statement](#)
- [Github: Runtime async](#)

Params Collections



Questions?



Sample Code

<https://aka.ms/csharp-13-demo>



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