

C# Advanced Roadmap

Tools

- 1 .NET CLI
- 2 Visual Studio
- Visual Studio Code
- Rider

Collections

- IEnumerable
- IEnumerator
- List
- Dictionary
- HashSet
- Queue
- Stack
- Custom

Generic Types

- Generic Class
- Generic Interface
- Generic Method

Extension Method

Anonymous Method

- Delegates
- Events
- Lambda Expression
- Func/Action

Anonymous Types

var

Method chaining

Fluent Api

Reflection

- Metadata
- Get/Set Value
- Attribute
- Activator
- PlugIn

Threading

- Thread
- ThreadPool

Asynchronous programming

- Task
- async-await
- Cancellation
- Progress

Synchronization

- Monitor
- lock
- Semaphore
- SemaphoreSlim
- Mutex

Thread-safe collection

- ConcurrentBag
- ConcurrentDictionary
- ConcurrentQueue
- ConcurrentStack
- BlockingCollection