

.NET CLI Cheat Sheet

Curated from years of hands-on .NET development

.NET SDK / Environment

- sdk info: `dotnet --info`
- list sdks: `dotnet --list-sdks`
- list runtimes: `dotnet --list-runtimes`

Create

- new console: `dotnet new console -n App`
- new webapi: `dotnet new webapi -n Api`
- templates: `dotnet new list`

Restore / Build / Run

- restore: `dotnet restore`
- build: `dotnet build [-c Release]`
- run: `dotnet run [--project src/Proj]`
- watch run: `dotnet watch run [--hot-reload]`

Testing

- test all: `dotnet test`
- filter: `dotnet test --filter Category=Integration`
- blame: `dotnet test --blame`

Formatting & Analyzers

- format code: `dotnet format`
- format style only: `dotnet format style`
- format analyzers: `dotnet format analyzers`

Publishing

- framework-dependent: `dotnet publish -c Release -o ./publish`
- self-contained (win-x64): `dotnet publish -c Release -r win-x64 --self-contained true`
- single file: `dotnet publish -p:PublishSingleFile=true`
- trim: `dotnet publish -p:PublishTrimmed=true`

NuGet

- add package: `dotnet add package <Name>`
- list outdated: `dotnet tool install -g dotnet-outdated && dotnet outdated`
- pack: `dotnet pack -c Release`
- nuget sources: `dotnet nuget list source`

Tools

- install global: `dotnet tool install -g <tool>`
- list global: `dotnet tool list -g`
- ef migrations: `dotnet-ef migrations add Init && dotnet-ef database update`
- serve folder: `dotnet-serve -o`

Misc

- user-secrets (dev): `dotnet user-secrets init && dotnet user-secrets set Key Value`
- dev certs: `dotnet dev-certs https --trust`
- clean: `dotnet clean`
- help: `dotnet --help` | `dotnet <cmd> --help`

Tip: Combine watch + hot reload for the fastest dev loop.