

.NET CLI Cheat Sheet

.NET

The .NET command-line interface (CLI) is a cross-platform toolchain for developing, building, running, and publishing .NET applications.

Displaying environment information

<code>dotnet --info</code>	Prints out detailed information about your .NET installation
<code>dotnet --version</code>	Prints out the version of the .NET SDK used by dotnet commands

Creating new projects

<code>dotnet new --list</code>	Lists available templates
<code>dotnet new webapi -n Play.Catalog -f net5.0</code>	Creates an ASP.NET Core 5 REST API in a new Play.Catalog directory
<code>dotnet new classlib -n Play.Common -f net5.0</code>	Creates a .NET 5 Class Library in a new Play.Common directory

Building projects

<code>dotnet build</code>	Builds the project in the current directory and its dependencies
<code>dotnet build -c Release</code>	Build a project using the Release configuration
<code>dotnet build --no-restore</code>	Builds a project without restoring its dependencies

Running projects

<code>dotnet run</code>	Runs the project in the current directory
<code>dotnet run --project src\Play.Catalog.Service</code>	Runs the project in the src\Play.Catalog.Service directory
<code>dotnet run --no-build</code>	Runs a project without first building it

Adding project/package references

<code>dotnet add reference ..\Play.Catalog.Contracts\Play.Catalog.Contracts.csproj</code>	Adds a Play.Catalog.Contracts.csproj project reference to the project in the current directory
<code>dotnet add package MassTransit</code>	Adds a MassTransit NuGet package reference to the project in the current directory
<code>dotnet add package MassTransit --version 8.0.3</code>	Specifies the version to use for the NuGet package reference

Creating NuGet packages for local usage	
dotnet pack	Packs the project in the current directory into a NuGet package
dotnet pack -o D:\projects\packages	Places the generated package in the D:\projects\packages directory
dotnet pack -p:PackageVersion=1.0.1	Assigns version 1.0.1 to the generated package
dotnet pack -c Release	Packs the project using the Release configuration
dotnet nuget add source D:\projects\packages -n PlayEconomy	Adds the D:\projects\packages directory as a new NuGet source named PlayEconomy

Creating NuGet packages for GitHub usage	
dotnet pack -p:RepositoryUrl=https://github.com/dotnetmicroservices/play.common	Sets the RepositoryUrl property for the generated package
dotnet nuget add source --username USERNAME --password <PAT> --store-password-in-clear-text --name github "https://nuget.pkg.github.com/dotnetmicroservices/index.json"	Adds a GitHub Packages NuGet source named github using the specified personal access token
dotnet nuget push Play.Common.1.0.1.nupkg --api-key <PAT> --source "github"	Publishes the specified package to GitHub Packages