# .NET SDK and VS Code

How can I create C# based applications ?

How can I get started ?

Which tool can I use to edit C# code ?

# What to install ?

SDK + Code editor

# .NET SDK

SDK = Runtime + Framework librairies + Tooling (.NET CLI)

# How to edit C# code ?

## IDE

Code editing
Compiling
Debugging
Testing
Code completion
Code analysis

## Code editor

Code editing
Used with the command line

# How to edit C# code ?

Visual Studio Code
(Windows, macOS, Linux)

Visual Studio
(Windows)

Visual Studio for Mac
(macOS)

Rider
(Windows, macOS, Linux)

Agenda

SDK Installation

.NET CLI overview

VS Code installation

VS Code first look

VS Code Extensions

VS Code Customization

# .NET5 SDK Installation

.NET SDK and VS Code

# .NET SDK

SDK = Software Development Kit

.NET SDK consists of :
- Libraries
- The .NET runtime
- Compilers
- Tooling (CLI, ...)

.NET SDK is versioned

.NET SDK can be downloaded at :
https://dotnet.microsoft.com/download

# Demo

Get the SDK installer

# .NET CLI

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

# Get information

```
dotnet –h / dotnet --help

dotnet --version

dotnet --info

dotnet --list-runtimes

dotnet --list-sdks
```

# Run a command

```
dotnet new
dotnet build
dotnet run
dotnet test
dotnet publish
```

# Demo

Get information with the CLI

# VS Code installation

# What is VS Code ?

A code editor …

… but not just a code editor

Created by Erich Gamma (Eclipse, Gang Of Four)

Cross platform

Supports hundreds of programming languages

Extensible

# Download VS Code

[https://code.visualstudio.com/](https://code.visualstudio.com/)

# Demo

Download installer

# VS Code first look

# Demo

Create a console app

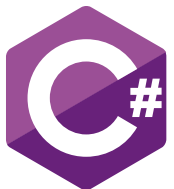Command palette

Vs code interface overview

Explorer view

Quick open

Open view

Auto save

# VS Code extensions

.NET SDK and VS Code

# Demo

Extensions view

Search or filter extensions

Install extensions for this course

# VS Code customization

# Demo

Settings configuration overview
Shortcuts

# Summary

Install .NET SDK and a code editor or IDE

Vs code is a powerful and popular C# editor

Vs code is customizable

Vs code is extensible (countless extensions)