

Chapter 1: C# Syntax and Visual Studio 2015

Lesson 1: Introduction

C# (pronounced "C sharp") is a programming language that is designed for building a variety of applications that run on the .NET Framework. C# is simple, powerful, type-safe, and object-oriented. The many innovations in C# enable rapid application development while retaining the expressiveness and elegance of C-style languages.

Visual C# is an implementation of the C# language by Microsoft. Visual Studio supports Visual C# with a full-featured code editor, compiler, project templates, designers, code wizards, a powerful and easy-to-use debugger, and other tools. The .NET Framework class library provides access to many operating system services and other useful, well-designed classes that speed up the development cycle significantly.

Visual Studio 2015 is a rich, integrated development environment for creating stunning applications for Windows, Android, and iOS, as well as modern web applications and cloud services.

Use the Visual Studio 2015 development tool for all of your C# programming, from simple command-line applications to more complex project types. A development tool, or integrated development environment (IDE), such as Visual Studio isn't essential for developing C# applications, but it makes things much easier. You can (if you want to) manipulate C# source code files in a basic text editor, such as the ubiquitous Notepad application, and compile code into assemblies using the command-line compiler that is part of the .NET Framework.