

INTRODUCTION TO PROGRAMMING USING C#

Lecture 1: Intro. to the course

CONTENTS:

- **About the instructor.**
- **What this is.**
- **What this course is not.**
- **The goal of this course.**
- **Prerequisites.**
- **What is programming.**
- **What is the language computer can understand.**
- **Why C#.**
- **What is C#.**
- **About Microsoft Visual Studio.**
- **Installing Visual Studio.**
- **Projects and Solutions.**

ABOUT THE INSTRUCTOR

WHAT THIS COURSE ABOUT

- **Programming in general.**
- **C# and .Net framework.**

WHAT THIS COURSE IS NOT

**A step in the journey,
not the whole journey**

THE GOAL OF THIS COURSE

- To give you basic understanding of computer programming,
- Put you in the starting of the road.
- Give you the tools you need to learn more.

PREREQUISITES

Basic computer skills.
English language basics
Strong will.

WHAT IS PROGRAMMING

Computer programming

From Wikipedia, the free encyclopedia

Computer programming (often shortened to **programming**) is a process that leads from an original formulation of a [computing](#) problem to [executable computer programs](#). Programming involves activities such as analysis, developing understanding, generating [algorithms](#), verification of requirements of algorithms including their correctness and resources consumption, and implementation (commonly referred to as **coding**^{[1][2]}) of algorithms in a target [programming language](#). [Source code](#) is written in one or more programming languages. The purpose of programming is to find a sequence of instructions that will automate performing a specific task or solving a given problem. The process of programming thus often requires expertise in many different subjects, including knowledge of the [application domain](#), specialized algorithms, and formal [logic](#).

THE LANGUAGE COMPUTER CAN UNDERSTAND

- **Computer can understand/execute machine code only.**
- **It's hard to write programs in machine code.**
- **We use compilers or interpreters to translate programming language code into machine code.**

WHY C# SHARP

- **C# is simple.**
- **C# is modern.**
- **C# is object-oriented.**
- **C# is powerful and flexible.**
- **C# is a language of few words.**

WHAT IS C#

1999 - Starting the project Cool, The .Net language

2000 – Renamed to C#.

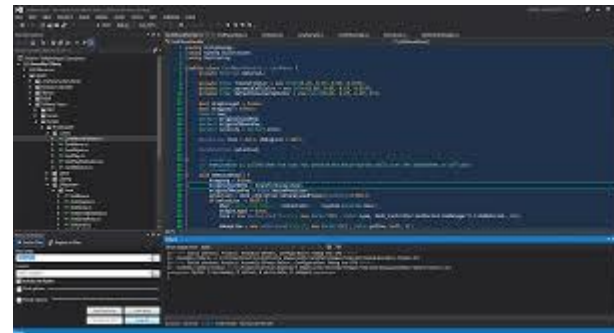
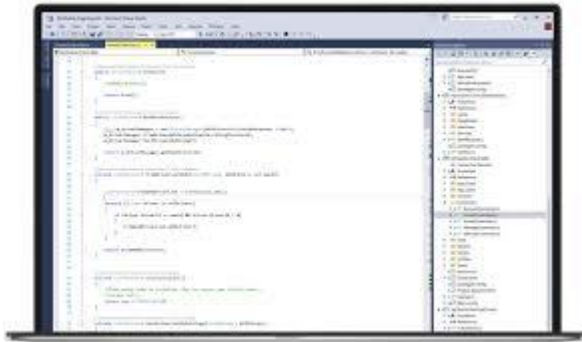
C-style syntax.

C# is compiled language.

C# is case sensitive.



MICROSOFT VISUAL STUDIO



<https://www.visualstudio.com/>

INSTALLING VISUAL STUDIO

- **Community edition is free.**
- **Download from <https://www.visualstudio.com/free-developer-offers/>**

PROJECTS AND SOLUTIONS

- **What's a project.**
- **What's a solution.**
- **Opening an existing project.**
- **Creating a new project.**

NEXT

- **Hello World, Our first project.**
- **Variables and data types.**
- **Inputs and outputs.**
- **C# syntax.**