Module

Introduction

Introduction

Introduction

```
using System;

namespace HelloWorld
{
  class Hello
  {
    public static void Main()
    {
      Console.WriteLine("Hello World!");
      Console.Readline();
    }
  }
}
```

What is C#?

Introduction

General

Statically typed

Imperative, declarative, functional

Objectoriented

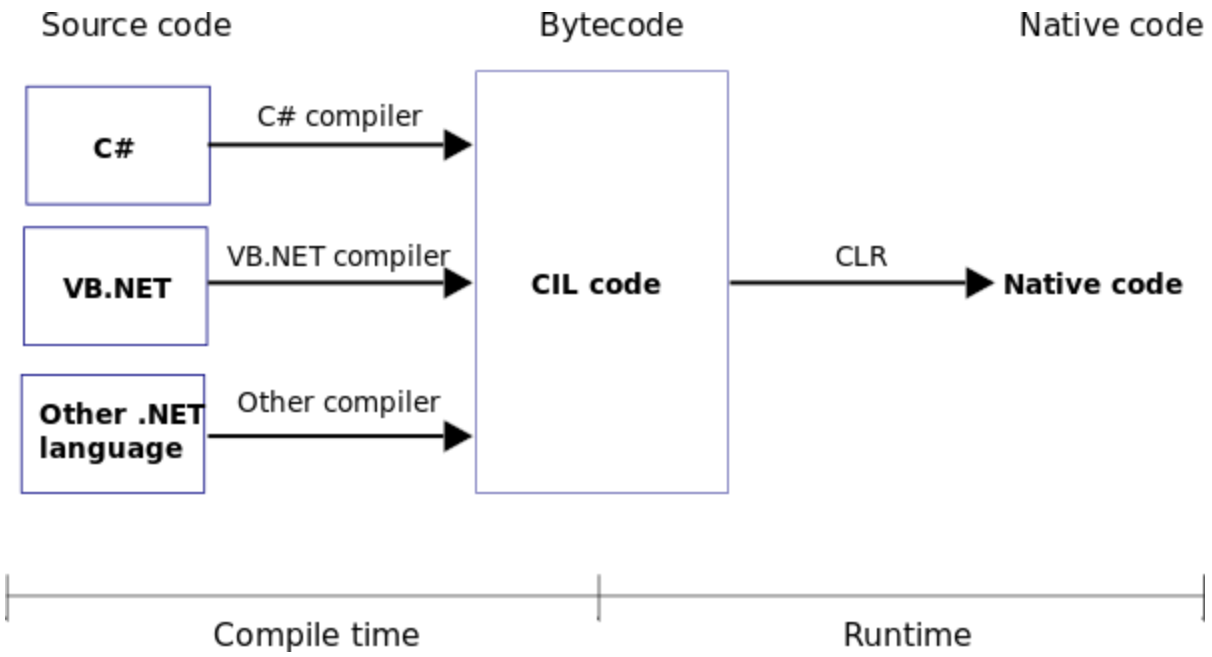
Introduction

Common

Language

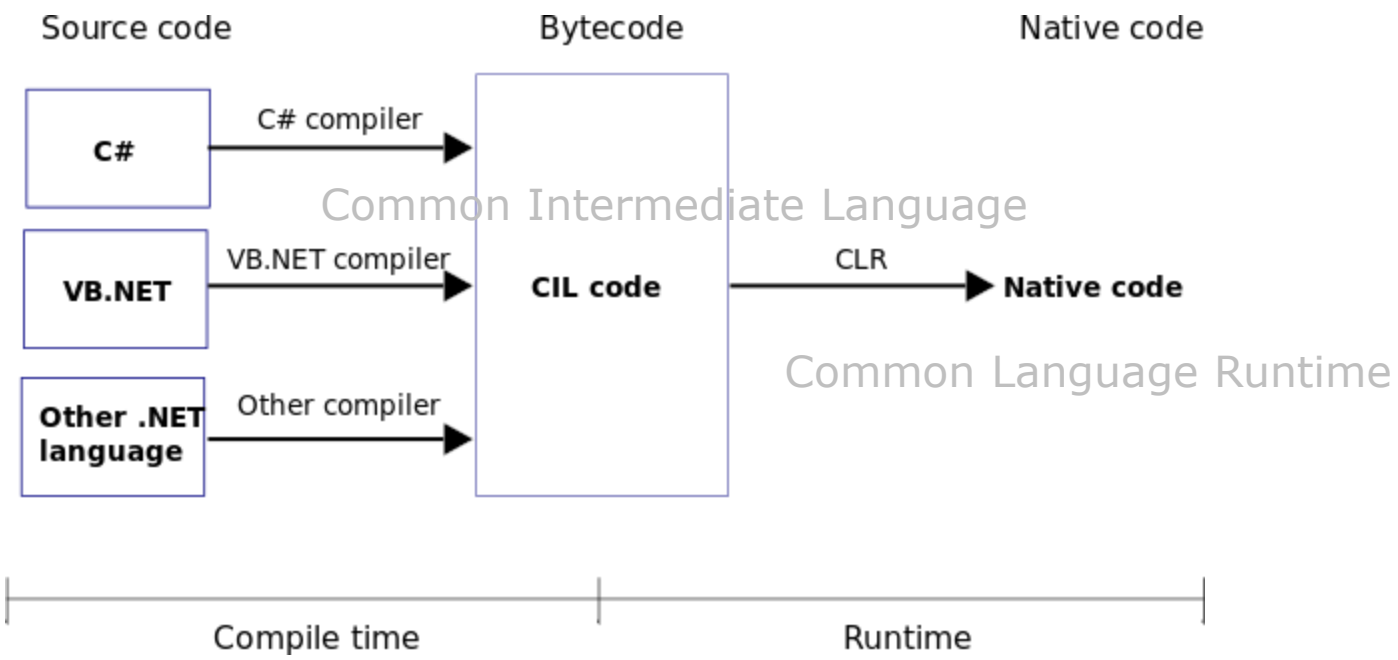
Infrastructure

Introduction



Introduction

Common Language Infrastructure



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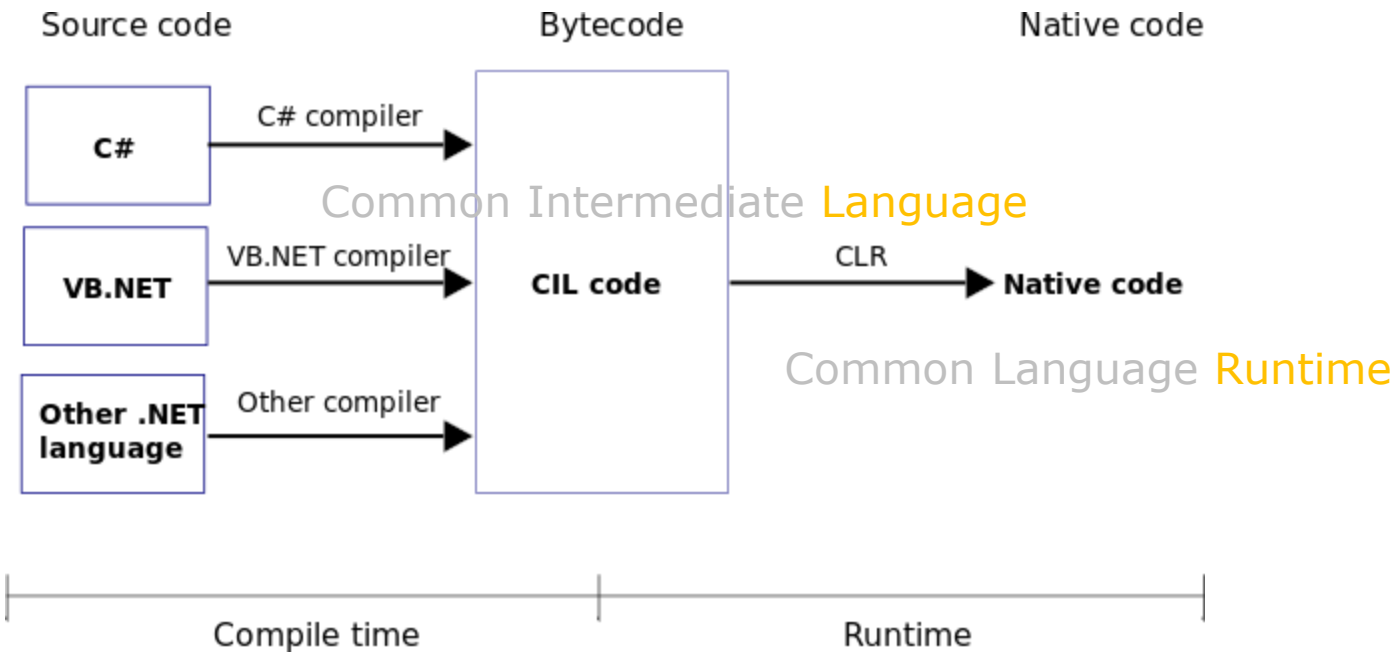
Common Language Infrastructure



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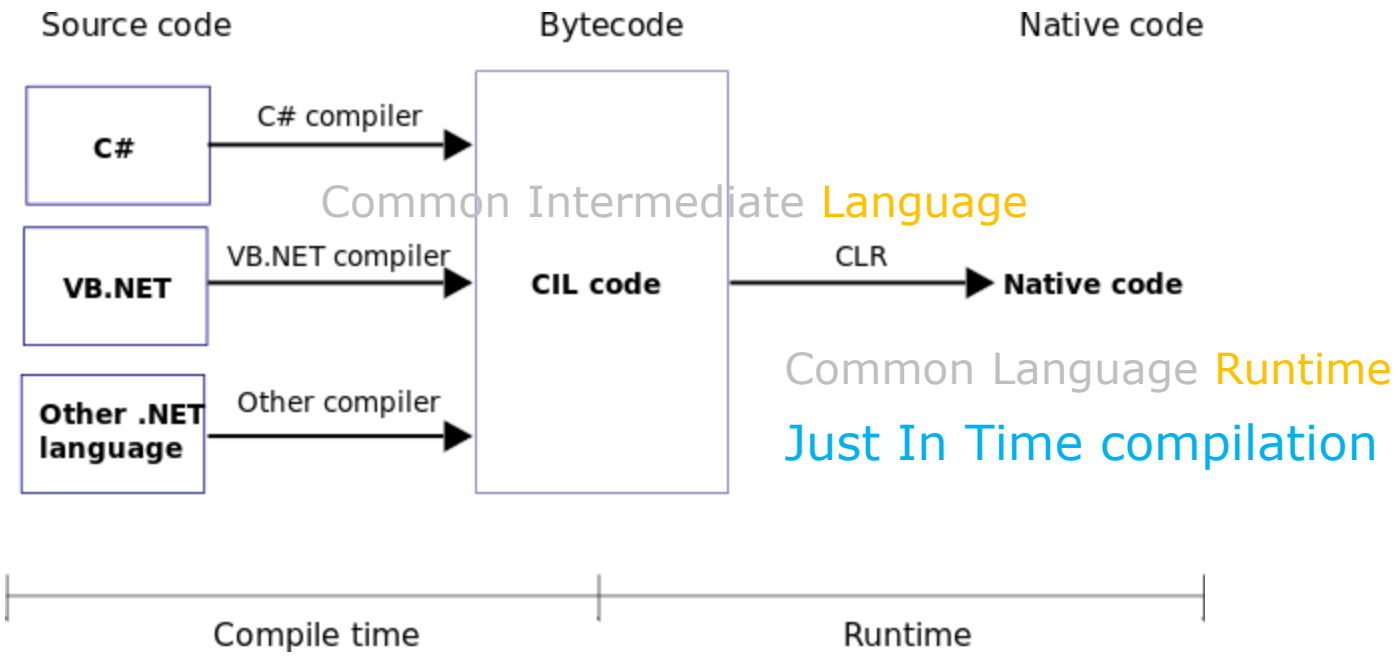
Common Language Infrastructure



Introduction

```
static void Main(string[] args)
{
    for (int i = 2; i < 1000; i++)
    {
        for (int j = 2; j < i; j++)
        {
            if (i % j == 0)
                goto outer;
        }
        Console.WriteLine(i);
        outer:;
    }
}
```

Introduction

```
.method private hidebysig static void Main(string[] args) cil managed
{
    .entrypoint
    .maxstack  2
    .locals init (int32 V_0,
                  int32 V_1)

              ldc.i4.2
              stloc.0
              br.s       IL_001f
    IL_0004:  ldc.i4.2
              stloc.1
              br.s       IL_0011
    IL_0008:  ldloc.0
              ldloc.1
              rem
              brfalse.s  IL_001b
              ldloc.1
              ldc.i4.1
              add
              stloc.1
    IL_0011:  ldloc.1
              ldloc.0
              blt.s      IL_0008
              ldloc.0
              call       void [mscorlib]System.Console::WriteLine(int32)
    IL_001b:  ldloc.0
              ldc.i4.1
              add
              stloc.0
    IL_001f:  ldloc.0
              ldc.i4     0x3e8
              blt.s      IL_0004
              ret
}
```

Introduction

Why?

Introduction

General

Mobile

Desktop

Services

Console

Web

Game

When? Who?

Introduction

2000

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C# 11

Introduction

Version	Date	.NET	Visual Studio
C# 6	2015	.NET Core 1	VS 2015
C# 7	2017	.NET Core 2	VS 2017
C# 8	2019	.NET Core 3	VS 2019
C# 9	2020	.NET 5	VS 2019
C# 10	2021	.NET 6	VS 2022
C# 11	2022	.NET 7	VS 2022

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