

.NET Series



What is .NET? .NET Foundational Concepts



Microsoft



Manoj Kumar Sharma

- Freelance Consultant / Corporate Trainer
- 29+ years of Experience in the Software Industry
 - 21+ years as a Software Architect / Systems Analyst / Project Lead
 - Last Designation held: *Chief Software Architect* for ADP India.
- 14+ years of Corporate Training Experience.
 - Delivered over 1600 in-person trainings across India, US, Oman and Thailand, and over 200 remote trainings
 - Microsoft Certified Trainer since 2012

www.manojkumarsharma.com



About This Course

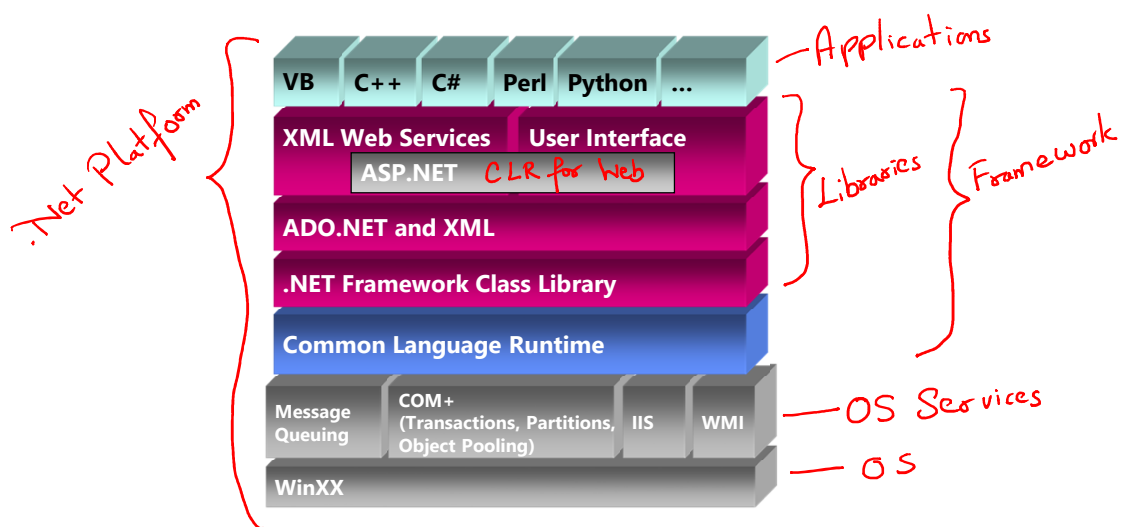
- Audience
- Course Prerequisites
- Course Objectives

MOC Course 20483:

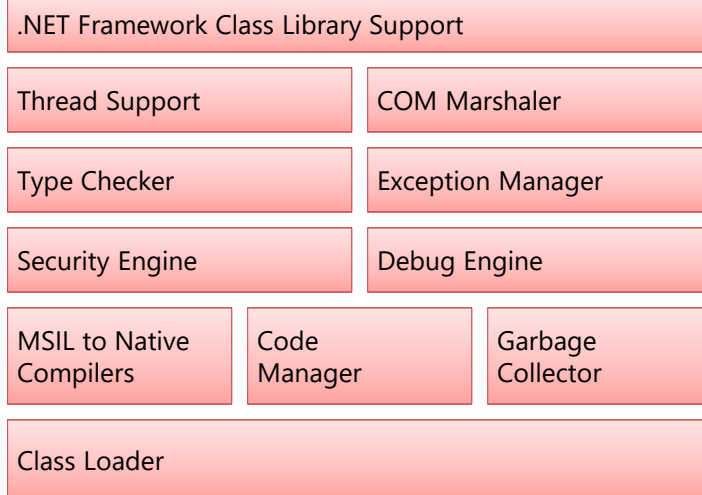
Programming in C#

<https://docs.microsoft.com/en-us/learn/certifications/courses/20483>

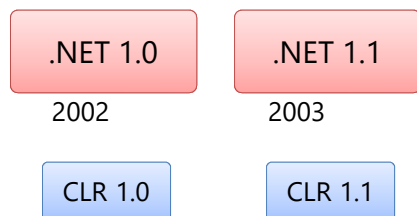
.NET Framework Components



CLR Components



A Look Back...



A Look Back...

.NET Framework 3.5

LINQ

ASP.NET 3.5

CLR Add-in
Framework

Additional
Enhancements

.NET Framework 3.0 + SP1

Windows
Presentation
Foundation

Windows
Communication
Foundation

Windows
Workflow
Foundation

Windows
CardSpace

.NET Framework 2.0 + SP1

A Look Back...

.NET Framework 3.5 + SP1

ADO.NET
Entity
Framework

ADO.NET
Data
Services

ASP.NET
Dynamic
Data

ASP.NET
Routing
Engine

WPF & WCF
Enhancements

.NET Framework 3.5

LINQ

WF & WCF
Enhancements

Add-in
Framework

Additional
Enhancements

.NET Framework 3.0 + SP2

WPF

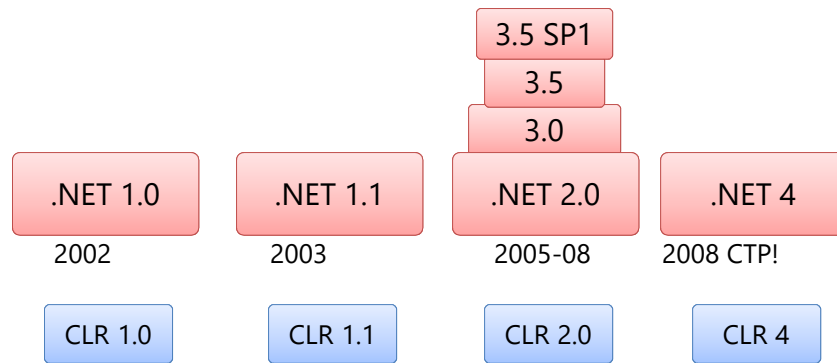
WCF

WF

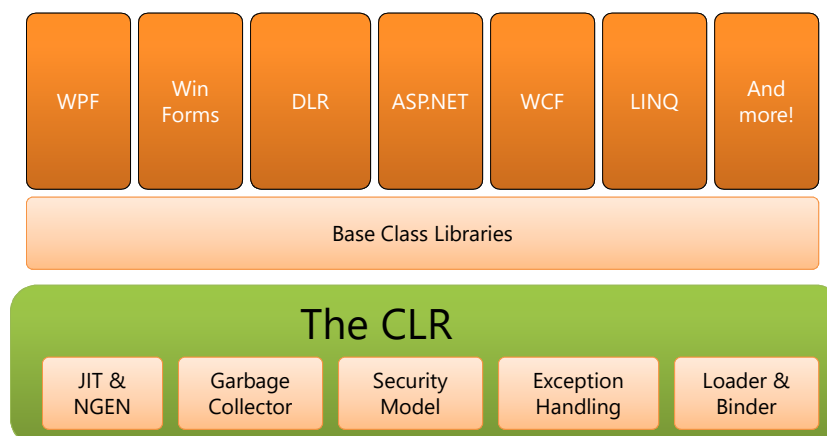
Windows
CardSpace

.NET Framework 2.0 + SP2

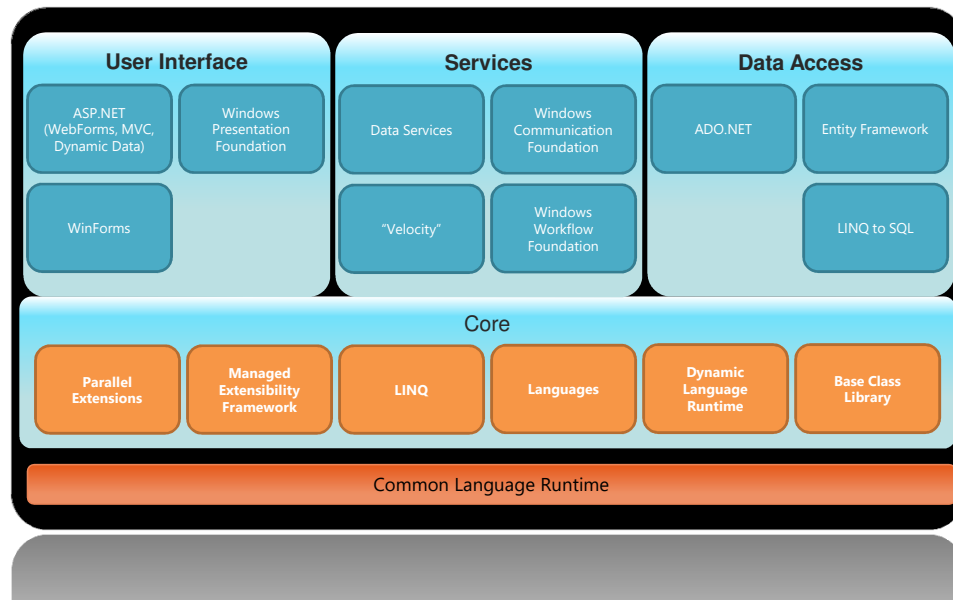
A Look Back...



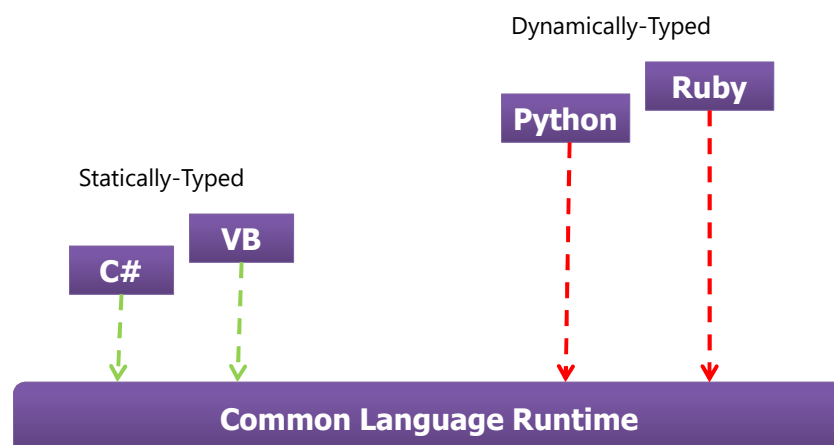
What Is The .NET Framework?



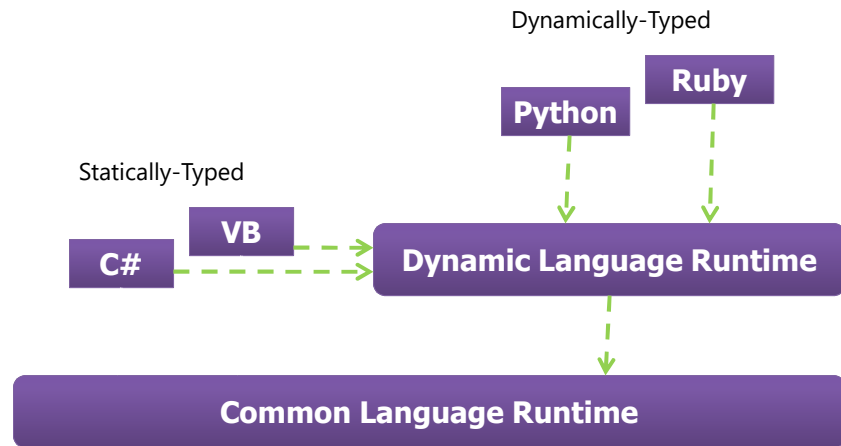
.NET Framework 4.0



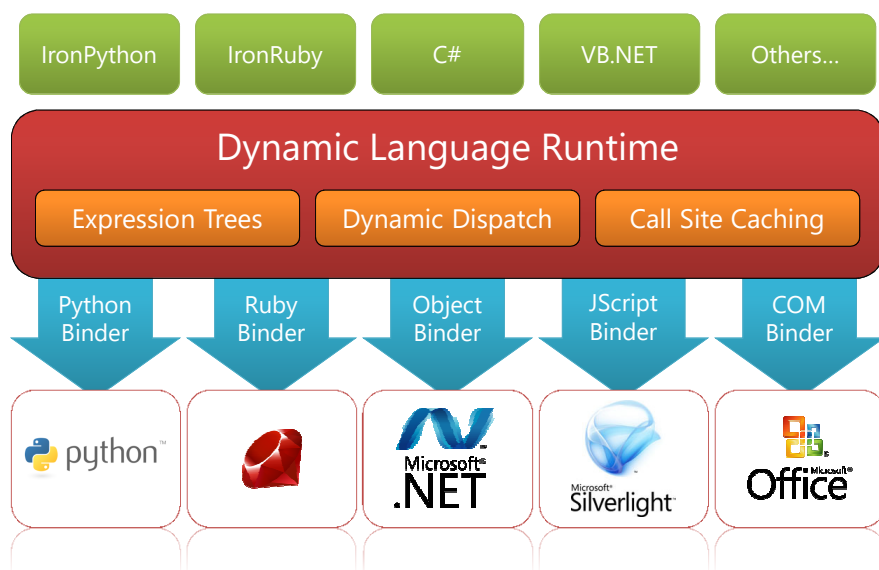
Why a "Dynamic Language Runtime"?



Why a “Dynamic Language Runtime”?



.NET Dynamic Programming



C# Language

- C#1 Jan 2002
- C#2 Generics, Nullables, Iterators Nov 2005
- C#3 LINQ Nov 2007
- C#4 Dynamic Apr 2010
- C#5 Async/await Aug 2012
- C#6 Roslyn, String Interpolation, Property Initializers Jul 2015
- C# 7 Out, Tuples, Pattern Matching, Local Functions Mar 2017
- C# 8 .NET CORE, Readonly, Null-coalescing, Ranges Sep 2019
- C# 9 .NET 5, Top Level Statements, Record Nov 2020
- C# 10 Global Using, Const Interpolation, Record struct Nov 2021
- C# 11 Generic Math, Raw String Literals, UTF8 Nov 2022

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