

1. what is .NET and why we need to use .NET ?

Ans :

.NET is an open source framework. It is developed by Microsoft to build desktop, web and mobile applications. It support 70+ languages like C++, C#, Java, Python, F#, Visual Basic etc.

2. How many versions are there in .NET framework as of today ?

Ans :

- .NET Framework 2.0: Released in 2005.**
- .NET Framework 3.0: Released in 2006.**
- .NET Framework 3.5: Released in 2007.**
- .NET Framework 4.0: Released in 2010.**
- .NET Framework 4.5: Released in 2012.**
- .NET Framework 4.5.1, 4.5.2: Released in subsequent years.**
- .NET Framework 4.6: Released in 2015.**
- .NET Framework 4.6.1, 4.6.2, 4.7, 4.7.1, 4.7.2: Released in subsequent years.**
- .NET Core 1.0: Released in 2016.**
- .NET Core 1.1: Released in 2016.**
- .NET Core 2.0: Released in 2017.**
- .NET Core 2.1: Released in 2018.**
- .NET Core 2.2: Released in 2018.**
- .NET Core 3.0: Released in 2019.**
- .NET Core 3.1: Released in 2019.**
- .NET 5: Released in 2020 (this version marked the convergence of .NET Core and .NET Framework).**
- .NET 6: Released in 2021.**
- .NET 7: 8 November 2022**
- .NET 8: 14 November 2023**

3. What is Base class libraries and use of them ?

Ans :

Base Class Libraries is the subpart of the framework that provide the library support to the Common Language runtime. It is a

collection of classes, interfaces, and value types that provide a wide range of functionalities essential for building various types of applications.

4. What are the namespaces ?

Ans :

A namespace is a way to organize and encapsulate related classes, structures, interfaces etc. It helps in avoiding naming conflicts. Namespaces are used to group logically related code and to prevent naming collisions between different parts of a program or between different libraries.

It provide hierarchical procedure of accessing any class or method.

For example :

System.Console.WriteLine();

Here,

System is Namespace

Console is Class

WriteLine is Method

5. What type of applications we can develop using .NET ?

Ans :

With the help of .NET we can develop various types of applications like Desktop Applications, Web Applications, Mobile Applications, Games, Cloud Applications, Command Line Application etc.

6. What is front-end, back-end ?

Ans :

Front-end and back-end are two components of application.

Frontend is known as client-side application that provide direct interaction between user and application. In the web application frontend uses HTML, CSS and JavaScript.

Backend is known as the server-side application. This is the part of application where user can't interact directly. In the backend basically involves database and servers.

7. What are constructors ?

Ans :

In object oriented programming constructors are the special types of method which have not any return type and it will be called automatically when we create an object of the class. Constructors have the same name as the class name. The purpose of a constructor is to initialize the object's state, set initial values for its properties, and perform any necessary setup tasks.