Introduction to ASP.NET Core

What is ASP.NET CORE?

- The ASP.NET Core is a brand new cross-platform, high-performance, light-weight, open-source Framework which is used for developing modern, Internet-connected, cloud-based Web Applications, IoT, and Web APIs which can be developed and run on Windows, Linux, or Mac operating systems.

- ASP.NET Core Framework is completely rewritten of existing ASP.NET 4.x, with architectural changes which make it more modular, scalable, open-source, high-performance, light-weight, and a cross-platform web framework.

History?

▶ As we know, ASP.NET is the framework that has been used to develop data-driven web applications for many years. Since then, the ASP.NET Framework went through a steady evolutionary change and finally, the most decent evolution is ASP.NET Core.

▶ The ASP.NET Core is not a continuous part of ASP.NET 4.6. Instead, it is completely a new framework.

▶ This Framework is an actual re-write of the current ASP.NET 4.6 Framework, but with much smaller and a lot more modular.

▶ Some people think that many things remain the same, but that is not completely true. The ASP.NET Core is actually a big fundamental change to the ASP.NET Framework.

Benefits

▶ Open Source

▶ Cross-Platform

▶ Full Control over HTML and HTTP Requests

▶ Unified MVC and Web API Framework

▶ Extensible Framework

▶ Dependency Injection

▶ Testing made Maintainability

▶ Handling Request and Response Pipeline

- Open source:-Means download from git and create your own version because source code in available so you can create your own version and change the code.
- Cross Platform:-To target all OS.
- Unified MVC and Web Api Framework:-One controller handle mvc and webapi request(method).
- Extensible Framework:-you can extend the application in near future(create component,helpers,change in Routing).

- Dependency Injection:-More common design pattern using in application. In asp.net core it's a built in support.
- Testing :-X-unit ,MOQ can be easy added in the application for Testing.
- Handling Request and Response Pipeline:- Previous asp.net we are using handler and module to handle the request and response. But in asp.net core have inbuilt middle ware component and we also create your own middle ware component. And easily we can use.

What the ASP.NET Core doesn't have?

▸ If you are coming from ASP.NET 4.x, then you will not find the following things in ASP.NET Core

▸ **The Global.asax file**

▸ **Web.Config file**

▸ **HTTP Handlers and HTTP Modules**

▸ **ASP.NET Page Life-Cycle model**