**.Net Framework:**

1. **What are the advantages of .Net?**

* Good Design
* Object-Oriented Programming – Using C# and .NET which are based on object-oriented Concepts.
* Language Independence – All the languages which are supported by .Net (VB.NET, C#, J#, and managed C++) are compiled into common Intermediate Language (IL). So IL makes sure that languages are interoperable.
* Efficient Data Access – ADO.NET provides fast and efficient way to access RDBMS, file system etc.
* Code Sharing – To share code between applications, a new concept called assembly is introduced. Assemblies supports versioning.
* Improved Security
* Support Dynamic Web Pages – Using ASP.NET
* Support for Web Services

1. **What is .Net Framework ?**

* The .NET framework is a programming framework from Microsoft. Developers can use .Net Framework to develop applications, install and run the application on Windows operating systems.

1. **What is MS-IL (Microsoft Intermediate Language)?**

* When a program is complied in .Net, the source code will be converted into an intermediate language called Microsoft Intermediate Language (MS-IL). This is done by Just-In time Compiler (JIT). The dot net framework is built in such a way that the code is Just-In time complied, which means that it get complied when it is called rather than compiling entire code at the start up. A portion of the code will get complied only once and it will exist till the application exit. This will have a significant improvement in performance since the entire section of the code won't get executed in most cases.

1. **What is Common Language Runtime (CLR) ?**
   * Common Language Runtime or CLR is the run-time execution environment of .Net Framework. Converting MS-IL into platform or OS specific code is done by the CLR. Currently, .Net programs will run only on windows.

**View State:**

1. **What is View State in Asp.net?**

* View state is nothing but a method that the ASP.NET use to preserve page and control values between postbacks. When the HTML markup for the page is rendered, the current state of the page and values that must be retained during postback are serialized into base64-encoded strings. This information is then put into the view state hidden field.

1. **View state is client-side or server side state management technique?**
   * View state is client-side state management technique.
2. **What are the client-side state management technique supported by ASP.NET?**

* Ans: View state
* Control state
* Hidden fields
* Cookies
* Query strings

1. **View state is used by Asp.net page aromatically or we need to apply it manually?**

* View state is used automatically by the ASP.NET page framework to persist information that must be preserved between postbacks.

1. **When you can use(take advantage of vs) view state?**

* Keep values between postbacks without storing them in session state or in a user profile.
* Store the values of page or control properties that you define.
* Create a custom view state provider that lets you store view state information in a SQL Server database or in another data store.

1. **What are the advantages of using view state?**

* No server resources are required : The view state is contained in a structure within the page code.
* Simple implementation : View state does not require any custom programming to use. It is on by default to maintain state data on controls.
* Enhanced security features : The values in view state are hashed, compressed, and encoded for Unicode implementations, which provides more security than using hidden fields.

1. **What are the limitations of view state?**

* Limitations:

Because view state is stored in the page, it results in a larger total page size.

ASP.NET uses view state only with page and control properties.

View state isn't a good place to store sensitive information that the client shouldn't be allowed to see. click on the below link to keep continue for same type of questions with answers.

**Web.Config :**

1. **What is web.config file in asp.net?**

* Web.config is the main settings and configuration file for an ASP.NET web application. The file is an xml document that defines configuration information regarding the web application.This file stores the information about how the web application will act.

1. **Does web.config file case-sensitive?**

* Yes

1. **Web.config file is stored in which form?**

* Web.config files are stored in XML format.

1. **Can one directory contain multiple web.config files?**

* No. One directory can contain only one file.

1. **Can you tell the location of the root web.confit file from which all web.config file inherit ?**

* All the Web.config files inherit the root Web.config file available at the following location systemroot\Microsoft.NET\Framework\versionNumber\CONFIG\Web.config

1. **What is the root tag of web.config file?**

* <configuration> tag is the root element of the Web.config file under which it has all the remaining sub elements.

1. **What is the use of customErrors tag in web.config file ?**

* CustomErrors tag provides information about custom error messages for an ASP.NET application. The customErrors element can be defined at any level in the application file hierarchy.

<customErrors mode="Off" defaultRedirect="ErrorPage.aspx">

<error statusCode="401" redirect="Unauthorised.aspx"/>

<error statusCode="403" redirect="ErrorPage.aspx"/>

<error statusCode="404" redirect="ErrorPage.aspx"/>

</customErrors>

* The customErrors section consists of defaultRedirect and mode attributes which specify the default redirect page and the on/off mode respectively.
* The subsection of customErrors section allows redirecting to specified page depending on the error status code.
  + 401 Unauthorized
  + 404 Not Found
  + 408 Request Timeout

1. **Can you describe the funcnalitity of <httpHandlers> tab in web.config?**

* HttpHandler is a code that executes when an http request for a specific resource is made to the server. For example, request an .aspx page the ASP.NET page handler is executed, similarly if an .asmx file is requested, the ASP.NET service handler is executed. An HTTP Handler is a component that handles the ASP.NET requests at a lower level than ASP.NET is capable of handling.

1. **What is authentication tag/section in web.config?**

* ASP.NET implements additional authentication schemes using authentication providers, which are separate from and apply only after the IIS authentication schemes. ASP.NET supports the following authentication providers:
* Windows (default)
* Forms
* Passport
* None
* To enable an authentication provider for an ASP.NET application, use the authentication element in either machine.config or Web.config as follows:

<authentication mode="Windows"> </authentication>

1. **For which purpose you use <appSettings> tag?**

* AppSettings tag helps us to store the application settings information like connection strings, file paths, URLs, port numbers, custom key value pairs, etc.

**Ex:-**

<appSettings>

<add key="ConnectionString" value="data source=20.0.0.22; initial catalog=employ\_dev; User Id=sa; Password=nan@1234; Connect Timeout=600000; Max Pool Size=80"/>

</appSettings>

1. **What is the use of connectionStrings tag?**

* <connectionStrings> is the most common section of web.config file which allows you to store multiple connection strings that are used in the application.

Code:

<ConnectionString>

<add name="ConnectionString" connectionString="data source=20.0.0.22; initial catalog=employee\_DEV; User Id=sa; Password=nan@1234; Connect Timeout=600000; Max Pool Size=80"/>

</ ConnectionString >

1. **Can you write down the C# code for reading connection string which is defined in web.config?**

* String cnn = ConfigurationManager.ConnectionStrings["ConString" ].ConnectionString;