**Introduction of Asp .NET**

**Exercise**

**Q-1) Explain asp .net life and page life cycle ?**

When an ASP.Net application is launched, there are a series of steps which are carried out.

1) **Application Start** - The life cycle of an ASP.NET application starts when a request is made by a user. This request is to the Web server for the ASP.Net Application.

2) **Object creation** - The next stage is the creation of the HttpContext, HttpRequest & HttpResponse by the web server. The HttpContext is just the container for the HttpRequest and HttpResponse objects.

3) **HttpApplication creation** - This object is created by the web server. It is this object that is used to process each subsequent request sent to the application.

4) **Dispose** - This event is called before the application instance is destroyed. During this time, one can use this method to manually release any unmanaged resources.

5) **Application End** - This is the final part of the application. In this part, the application is finally unloaded from memory.

As ASP.NET processes a page through its stages, various events are raised for the page and its related controls. You write code to handle these events and thus respond to various actions related to the processing of a page.

Here are the sequences of events that are raised whenever you request an ASP.NET page.

**PreInit:** This is the first real event you might handle for a page.

**Init:** This event fires after each control has been initialized. You can use this event to change initialization values for controls.

**InitComplete:** Raised once all initializations of the page and its controls have been completed.

**PreLoad:** This event fires before view state has been loaded for the page and its controls and before PostBack processing. This event is useful when you need to write code after the page is initialized but before the view state has been wired back up to the controls.

**Load:** The page is stable at this time; it has been initialized and its state has been reconstructed. Code inside the page load event typically checks for PostBack and then sets control properties appropriately.

**Control (PostBack) event(s):** ASP.NET now calls any events on the page or its controls that caused the PostBack to occur.

**LoadComplete:** At this point all controls are loaded. If you need to do additional processing at this time you can do so here.

**PreRender:** Allows final changes to the page or its control. This event takes place after all regular PostBack events have taken place. This event takes place before saving ViewState, so any changes made here are saved.

**SaveStateComplete:** Prior to this event the view state for the page and its controls is set. Any changes to the page’s controls at this point or beyond are ignored. This is useful if you need to write processing that requires the view state to be set.

**Render:** This is a method of the page object and its controls (and not an event). At this point, ASP.NET calls this method on each of the page’s controls to get its output.

**UnLoad:** This event is used for cleanup code. You use it to release any managed resources in this stage.

**Q-3) What are the different types of objects created in asp and explain all those.**

**Application:**

A group of ASP files that work together to perform some purpose is called an application. The Application object is used to tie these files together.

**Request:**

The Request object is used to get information from a visitor.

Send query information when a user clicks on a link

How to send query information to a page within a link, and retrieve that information on the destination page.

A queryString collection in its simplest use

Use the QueryString collection to retrieve the values from a form.

How to use information from forms

How to use the values retrieved from a form.

**Response:**

The ASP Response object is used to send output to the user from the server. Its collections, properties, and methods are described below:

### Collections:

Cookies:Sets a cookie value. If the cookie does not exist, it will be created, and take the value that is specified

### Properties:

Buffer: Specifies whether to buffer the page output or not

CacheControl: Sets whether a proxy server can cache the output generated by ASP or not.Etc.

### Methods:

Add Header:Adds a new HTTP header and a value to the HTTP response

Clear: Clears any buffered HTML output.

**Session**:

Allows management of an user connection with the server.

**Server:**

The asp server object is used to access properties and methods on the server.