

Introduction to ASP.NET 4.5

Q. 1	What is ASP.Net?
Ans:	It is a framework developed by Microsoft on which we can develop new generation web sites using web forms(aspx), MVC, HTML, Javascript, CSS etc. Its successor of Microsoft Active Server Pages(ASP)
Q. 2	Describe the role of inetinfo.exe, aspnet_isapi.dll and aspnet_wp.exe in the page loading process.
Ans:	inetinfo.exe is the Microsoft IIS server running, handling ASP.NET requests among other things. When an ASP.NET request is received (usually a file with .aspx extension), the ISAPI filter aspnet_isapi.dll takes care of it by passing the request to the actual worker process aspnet_wp.exe.
Q. 3	Explain the differences between server-side and client-side code?
Ans:	Server side scripting means that all the script will be executed by the server and interpreted as needed. Client side scripting means that the script will be executed immediately in the browser such as form field validation, clock, email validation, etc. Client side scripting is usually done in VBScript or JavaScript. Since the code is included in the HTML page, anyone can see the code by viewing the page source. It also poses as a possible security hazard for the client computer.
Q. 4	Enumerate the types of Directives.
Ans:	@ Page directive @ Import directive @ Implements directive @ Register directive @ Assembly directive @ OutputCache directive @ Reference directive
Q. 5	What is Code-Behind?
Ans:	Code-Behind is a concept where the contents of a page are in one file and the server-side code is in another. This allows different people to work on the same page at the same time and also allows either part of the page to be easily redesigned, with no changes required in the other. An Inherits attribute is added to the @ Page directive to specify the location of the Code-Behind file to the ASP.NET page.
Q. 6	When during the page processing cycle is ViewState available?
Ans:	The view state is available after the Init() and before the Render() methods are called during Page load.
Q. 7	What is Postback?
Ans:	When an action occurs (like button click), the page containing all the controls within the <FORM... > tag performs an HTTP POST, while having itself as the target URL. This is called Postback.
Q. 8	List the various stages of Page-Load lifecycle

Ans:	Init() Load() PreRender() Unload()
Q. 9	List the events in page life cycle.
Ans:	1) Page_PreInit 2) Page_Init 3) Page_InitComplete 4) Page_PreLoad 5) Page_Load 6) Page_LoadComplete 7) Page_PreRender 8) Render
Q. 10	What base class do all Web Forms inherit from?
Ans:	The Page class.

Validation in ASP.NET 4.5

Q. 1	List the ASP.NET validation controls?
Ans:	RequiredFieldValidator RangeValidator CompareValidator RegularExpressionValidator CustomValidator ValidationSummary
Q. 2	Which validator control you use if you need to make sure the values in two different controls matched?
Ans:	Compare Validator control.
Q. 3	What is the good practice to implement validations in aspx page?
Ans:	Client-side validation (HTML-5) is the best way to validate data of a web page. It reduces the network traffic and saves server resources.
Q. 4	How we can force all the validation controls to run?
Ans:	The Page.Validate() method is used to force all the validation controls to run and to perform validation
Q. 5	Which data type does the RangeValidator control support?
Ans:	The data types supported by the RangeValidator control are Integer, Double, String, Currency, and Date.
Q. 6	Which three properties are common in every validation control?
Ans:	ControlToValidate, Text & ErrorMessage

Q. 7	How to create a validation group if there are multiple parts on same page to be validation ?you want to group
Ans:	Setting the ValidationGroup property to the same name (a string) for all the controls to be a part of the group.
Q. 8	Which validation control enables you to check the user's input based on a pattern defined by a regular expression?
Ans:	RegularExpressionValidator
Q. 9	What is the use of ClientValidationFunction of CustomValidator?
Ans:	It is used to gets or sets the name of the custom client-side script function used for validation.

Master Pages, Themes, and Skins

Q. 1	_____ in ASP.NET allow you to control the layout, design, and common controls of all pages in a website/web application.
Ans:	Master Pages
Q. 2	Complete the following code for the Master Page which is the first line inside the Master-Page: <code><% _____ Language="C#" AutoEventWireup="true" CodeFile="MasterPage.master.cs" Inherits="MasterPage" %></code>
Ans:	@ Master
Q. 3	What type of files are used in ASP.NET to apply the styles to server controls?
Ans:	We can use a skin file to apply styles to server controls.
Q. 4	What can be included inside the Themes in ASP.NET application?
Ans:	The theme consists of the skin files and cascading stylesheets.
Q. 5	Which page life cycle event will be used to apply MasterPage programmatically?
Ans:	Page's PreInit Event.
Q. 6	Complete the following code to set theme programmatically? <pre>protected void Page_PreInit(object sender, EventArgs e) { string thm = string.Empty; if (Request.QueryString["theme"] == "Blue") { thm = "BlueTheme"; } else if (Request.QueryString["theme"] == "Pink") { thm = "PinkTheme"; } }</pre>

Ans:	Page.Theme = thm;

Site Navigation

Q. 1	Which navigation control help user to display the current page location and displays links as a path back to the home page?
Ans:	SiteMapPath
Q. 2	When to use TreeView navigation control in ASP.NET?
Ans:	When you need to displays a tree structure, or menu, that users can traverse to get to different pages in your site. A node that contains child nodes can be expanded or collapsed by clicking it.
Q. 3	What is the job of SiteMapDataSource?
Ans:	The SiteMapDataSource binds to site map data and presents its view based on a specified starting node in the site map hierarchy.
Q. 4	What is the name of the file which describes the hierarchy of your Web site by using ASP.NET site navigation?
Ans:	web.sitemap

Data Driven Pages

Q. 1	What is Data Binding?
Ans:	Data binding is a way used to connect values from a collection of data (e.g. DataSet) to the controls on a web form. The values from the dataset are automatically displayed in the controls without having to write separate code to display them.
Q. 2	Describe Paging in ASP.NET.
Ans:	The DataGrid control in ASP.NET enables easy paging of the data. The AllowPaging property of the DataGrid can be set to True to perform paging. ASP.NET automatically performs paging and provides the hyperlinks to the other pages in different styles, based on the property that has been set for PagerStyle.Mode.
Q. 3	Can you edit data in the Repeater control?
Ans:	No, it just reads the information from its data source
Q. 4	What property must you set, and what method must you call in your code, in order to bind the data from some data source to the Repeater control?
Ans:	You must set the DataSource property and call the DataBind method.
Q. 5	Which property on a Combo Box do you set with a column name, prior to setting the DataSource, to display data in the combo box?
Ans:	DataTextField property

Q. 6	List all templates of the Repeater control.
Ans:	ItemTemplate AlternatingItemTemplate SeparatorTemplate HeaderTemplate FooterTemplate
Q. 7	What is the purpose of SqlConnection's OpenAsync method?
Ans:	OpenAsync method is used to open a connection asynchronously.
Q. 8	Which property is used to specify the SQL database authentication credentials outside of connection string?
Ans:	SqlConnection object supports the Credential property
Q. 9	Which version of ASP.NET adds ItemType property, which has ability to declare the data type of the data that a control is bound to?
Ans:	ASP.NET 4.5
Q. 10	What is the use of Chart Control in ASP.NET?
Ans:	The Chart controls enable you to create ASP.NET pages or Windows Forms applications with simple, intuitive, and visually compelling charts for complex statistical or financial analysis

State Management

Q. 1	Session state vs. View state:
Ans:	In some cases, using view state is not feasible. The alternative for view state is session state. Session state is employed under the following situations: <ul style="list-style-type: none"> • Large amounts of data - View state tends to increase the size of both the HTML page sent to the browser and the size of form posted back. Hence session state is used. • Secure data - Though the view state data is encoded and may be encrypted, it is better and secure if no sensitive data is sent to the client. Thus, session state is a more secure option. • Problems in serializing of objects into view state - View state is efficient for a small set of data. Other types like DataSet are slower and can generate a very large view state.
Q. 2	List the event handlers that can be included in Global.asax?
Ans:	Application start and end event handlers Session start and end event handlers Per-request event handlers Non-deterministic event handlers
Q. 3	What is ViewState?
Ans:	ViewState is used to retain the state of server-side objects between page post backs.
Q. 4	Where the viewstate is stored after the page postback?

Ans:	ViewState is stored in a hidden field on the page at client side. ViewState is transported to the client and back to the server, and is not stored on the server or any other external source.
Q. 5	What are the different Session state management options available in ASP.NET?
Ans:	In-Process Out-of-Process.
Q. 6	What are the different types of cookies in ASP.NET?
Ans:	Session Cookie – Resides on the client machine for a single session until the user does not log out. Persistent Cookie – Resides on a user's machine for a period specified for its expiry, such as 10 days, one month, and never.
Q. 7	The ASP.NET framework uses the _____ property to automatically save the values of the Web page and each control on the Web page prior to rendering the page
Ans:	ViewState
Q. 8	State the statement is True or False? Use ViewState when you need to store an extremely large amount of information and you do not want to slow down page transmission times.
Ans:	False.
Q. 9	_____ variables are stored in memory until they are either removed or replaced.
Ans:	Session state
Q. 10	What is the event name used which perform any actions when a session ends?
Ans:	Session_End

ASP.NET Authentication and Authorization

Q. 1	List the types of Authentication supported by ASP.NET.
Ans:	Windows (default) Forms Passport
Q. 2	Explain role based security
Ans:	Role Based Security used to implement security based on roles assigned to user groups in the organization. Then we can allow or deny users based on their role in the organization. Windows defines several built-in groups, including Administrators, Users, and Guests.
Q. 3	Explain asp.net Security Controls?
Ans:	<asp:Login>: Provides a standard login capability that allows the users to enter their credentials <asp:LoginName>: Allows you to display the name of the logged-in user <asp:LoginStatus>: Displays whether the user is authenticated or not <asp:LoginView>: Provides various login views depending on the selected template <asp:PasswordRecovery>: email the users their lost password
Q. 4	Which Login controls is useful for managing the content displayed for authenticated vs non-authenticated users?
Ans:	Login View

Q. 5	Which tools allows you to view and manage the Web site configuration through a simple Web interface
Ans:	Web Site Configuration Tool
Q. 6	What is the one which serves as interface between ASP.NET's role management service (role manager) and role data sources?
Ans:	ASP.Net Role Provider.
Q. 7	Which login control can be useful to displays whether or not the current user is logged on?
Ans:	LoginStatus
Q. 8	What is the purpose of using login control - CreateUserWizard?
Ans:	The CreateUserWizard control collects information from users so it can set up an ASP.NET membership account for each user.
Q. 9	What is the system used to validate a user when we make a use of ASP.NET's built in login controls?
Ans:	Membership Service.
Q. 10	What is the option if we wish to store membership information in a data source that is not supported by the membership providers included with the .NET Framework?
Ans:	Write your own custom membership provider.

Introduction to ASP.NET AJAX

Q. 1	What is the use of UpdateProgress control in ASP.NET AJAX?
Ans:	It is used to provide status information about partial-page updates in UpdatePanel controls.
Q. 2	Which control manages client script for Microsoft ASP.NET AJAX pages
Ans:	Script-Manager
Q. 3	Complete the following statement. When the ____ property is true, the UpdateProgress control initially occupies no space in the page display
Ans:	DynamicLayout
Q. 4	Which property we need to set when you want to explicitly call the UpdatePanel control's Update() method?
Ans:	UpdateMode property, set to "Conditional",
Q. 5	Which control you can use to refresh selected parts of the page instead of refreshing the whole page with a postback?
Ans:	Update-Panel