ASP.Net

Q. Explain the differences between Server-side and Client-side code?

A. Server-side code executes on the server. Client-side code executes in the context of the clients' browser.

Q. What are some ways to manage state in an ASP.Net application?

A. Session objects, Application objects, ViewState, cookies, hidden form fields.

Q. What does the "EnableViewState" property do? Why would I want it on or off?

A. It allows page objects to save their state in a Base64 encoded string in the page HTML. One should only have it enabled when needed because it adds to the page size and can get fairly large for complex pages with many controls. (It takes longer to download the page).

Q. What is the difference between Server. Transfer and Response. Redirect? Why would I choose one over the other?

A. Server.Transfer transfers excution directly to another page. Response.Redirect sends a response to the client and directs the client (the browser) to load the new page (it causes a roundtrip). If you don't need to execute code on the client, Transfer is more efficient.

Q. How can I maintain Session state in a Web Farm or Web Garden?

A. Use a State Server or SQL Server to store the session state.

Q. What base class do all Web Forms inherit from?

A. The Page class.

Q. What does WSDL stand for? What does it do?

A.(Web Services Description Language). It describes the interfaces and other information of a web service.

Q. Which WebForm Validator control would you use if you needed to make sure the values in two different WebForm controls matched?

A. CompareValidator Control

Q. 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?

A. You must set the DataSource property and call the DataBind method.

C# Questions

Q. Can you explain what inheritance is and an example of when you might use it?

A. Inheritance allows us to extend the functionality of a base class. It is an "Is a" type of relationship rather than a "Uses" type of relationship (a dalmation IS A dog which IS A canine which IS A mammal - dalmations inherist from dog which inherits from canine which inherits from mammal). All child classes retain the properties and methods of their parent classes but may override them. When you want to inherit (use the functionality of) another class. Base Class Employee. A Manager class could be derived from the Employee base class.

Q. Does C# support multiple-inheritance?

- A. No, use interfaces instead.
- Q. Can you prevent your class from being inherited by another class?
- A. Yes. The keyword "sealed" will prevent the class from being inherited.
- Q. What does the keyword "virtual" declare for a method or property?
- A. The method or property can be overridden.
- Q. What's the top .NET class that everything is derived from?
- A. System. Object.
- Q. What does it mean that a String is immutable?
- A. Strings cannot be altered. When you alter a string (by adding to it for example), you are actually creating a new string.
- Q. If I have to alter a string many times, such as multiple concatenations, what class should I use?
- A. StringBuilder. It is not immutable and is very efficient.
- Q. In a Try Catch Finally block, will the finally block execute if an exception has not occurred? If an Exception has occurred?
- A. Yes and yes.
- Q. What's MSIL, and why should developers need an appreciation of it, if at all?
- A. MSIL is the Microsoft Intermediate Language. All .NET compatible languages will get converted to MSIL.

Q. Explain the three tiers or n-Tier model.

A. Presentation (UI), business (logic and underlying code) and data (from storage or other sources).

Q. What is SOA?

A. Service Oriented Architecture. In SOA you create an abstract layer that your applications use to access various "services" and can aggregate the services. These services could be databases, web services, message queues or other sources. The Service Layer provides a way to access these services that the applications do not need to know how the access is done. For example, to get a full customer record, I might need to get data from a SGL Server database, a web service and a message queue. The Service layer hides this from the calling application. All the application knows is that it asked for a full customer record. It doesn't know what system or systems it came from or how it was retrieved.

Q. What is the role of the DataReader class in ADO.NET connections?

A. It returns a forward-only, read-only view of data from the data source when the command is executed.

Q. Is XML case-sensitive?

A. Yes.

Q. What is the CLR?

A. Common Language Runtime

Q. Can you explain some differences between an ADO.NET Dataset and an ADO Recordset? (Or describe some features of a Dataset).

A. A DataSet can represent an entire relational database in memory, complete with tables, relations, and views. A DataSet is designed to work without any continuing connection to the original data source. Data in a DataSet is bulk-loaded, rather than being loaded on demand. There's no concept of cursor types in a DataSet. DataSets have no current record pointer You can use For Each loops to move through the data. You can store many edits in a DataSet, and write them to the original data source in a single operation. Though the DataSet is universal, other objects in ADO.NET come in different versions for different data sources

Q. Name some of the Microsoft Application Blocks. Have you used any? Which ones?

A. Examples: Exception Management Logging Data Access User Interface Caching Application Block for .NET Asynchronous Invocation Application Block for .NET Configuration Management Application Block for .NET

