ASP.net level 1 course content (5-day)

Course Description

ASP.NET is a Web Application Framework. Web applications are typically written in C# or VB.NET. Any language that compiles to the CIL can in fact be used. This short course will enable you to write practical and interactive web applications that make use of database back ends.

Target Audience

Present and aspiring: Programmers, Wed designers and developers

Pre-Requisites

Thorough knowledge of HTML and JavaScript. Previous experience with an Object orientation language like C++, C, Java or VB will be a big advantage.

Course Outline

Getting Started with ASP.NET

Shows you how to obtain and install Visual Web Developer 2010. You'll get instructions for downloading and installing the free edition of Visual Web Developer 2010, called the Express edition. You are also introduced to HTML, the language behind every web page. The chapter closes with an overview of the customization options that Visual Web Developer gives you.

Building an ASP.NET Web Site

Shows you how to create a new web site and how to add new elements like pages to it. Besides learning how to create a well-structured site, you also see how to use the numerous tools in Visual Web Developer to create HTML and ASP.NET pages.

Designing Your Web Pages

Visual Web Developer comes with a host of tools that allow you to create well-designed and attractive web pages. In this chapter, you see how to make good use of these tools. Additionally, you learn about CSS, the language that is used to format web pages.

Working with ASP.NET Server Controls

ASP.NET Server Controls are one of the most important concepts in ASP.NET. They allow you to create complex and feature-rich web sites with very little code. This chapter introduces you to the large number of server controls that are available, explains what they are used for, and shows you how to use them.

Programming Your ASP.NET Web Pages

Although the built-in CSS tools and the ASP.NET Server Controls can get you a long way in creating web pages, you are likely to use a programming language to enhance your pages. This chapter serves as an introduction to programming with a strong focus on programming web pages. Best of all: all the examples you see in this chapter (and the rest of the book) are in both Visual Basic and C#, so you can choose the language you like best.

Creating Consistent Looking Web Sites

ASP.NET helps you create consistent-looking pages through the use of master pages, which allow you to define the global look and feel of a page. Skins and themes help you to centralize the looks of controls and other visual elements in your site. You also see how to create a base page that helps to centralize programming code that you need on all pages in your site.

Navigation

To help your visitors find their way around your site, ASP.NET comes with a number of navigation controls. These controls are used to build the navigation structure of your site. They can be connected to your site's central site map that defines the pages in your web site. You also learn how to programmatically send users from one page to another.

User Controls

User controls are reusable page fragments that can be used in multiple web pages. As such, they are great for repeating content such as menus, banners, and so on. In this chapter, you learn how to create and use user controls and enhance them with some programmatic intelligence.

Validating User Input

A large part of interactivity in your site is defined by the input of your users. This chapter shows you how to accept, validate, and process user input using ASP.NET Server Controls. Additionally, you see how to send e-mail from your ASP.NET web application and how to read from text files.

ASP.NET AJAX

Microsoft ASP.NET AJAX allows you to create good-looking, flicker-free web pages that close the gap between traditional desktop applications and web applications. In this chapter you learn how to use the built-in Ajax features to enhance the presence of your web pages, resulting in a smoother interaction with the web site.

jQuery

jQuery is a popular, open source and cross-browser JavaScript library designed to make it easier to interact with web pages in the client's browser. In this chapter you learn the basics of jQuery and see how to add rich visual effects and animations to your web pages.

Introducing Databases

Understanding how to use a database is critical to building web sites, as most modern web sites require the use of a database. You'll learn the basics of SQL, the query language that allows you to access and alter data in a database. In addition, you are introduced to the database tools found in Visual Web Developer that help you create and manage your SQL Server databases.