SETC Training Corporate Logo

.NET Training: New Technologies for Professional Developers (NFNTech, 4 jours)

Description

The course New Technologies for Professional Developers (.NET Training) provides a good general overview of modern .NET APIs for the full .NET Framework or .NET Core. The training begins with a review of Object Oriented programming with C# .NET including inheritance, polymorphism & interfaces. The course explores the development of a Data Access Layer using the ADO .NET Entity Framework & LINQ for SQL. This is followed by an exploration of the new GUI APIs including Windows Presentation Foundation (WPF) with MVVM & ASP .NET MVC. Service framework development is also studies using Windows Communication Foundation (WCF) for messaging applications & Workflow Foundation (WF) for workflow implementations. The course concludes with an exploration of ASP .NET AJAX for asynchronous web communications.

Tarifs

- Tarification: $3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

Exploring the .NET Framework

- .NET Namespaces and Assemblies
- Overview of the new APIs
- A New paradigm for .NET Programmers
- Windows GUI: Overview of Windows Presentation Foundation (WPF)
- Web Interfaces and MVC: ASP .NET
- Microsoft ORM: Language Integrated Query for SQL (LINQ for SQL)
- Implementing Workflows: Windows Workflow Foundation (WWF)
- Remote Messaging: Windows Communication Foundation (WCF)
- Exploring XML: Language Integrated Query for XML (LINQ for XML)
- Exploring AJAX: ASP .NET AJAX

Advanced OO Programming : Preparing for MVC

- Creating Classes
- Using Interfaces
- Working with Generics
- Operator Overloading
- Custom Type Conversions
- Using the Microsoft Enterprise Library

LINQ Essentials

- About Language Integrated Query (LINQ)
- LINQ Basic Syntax
- Filtering Objects with the Where Clause
- Specifying Returned Objects with Select
- Working with Advanced Functions

Accessing Data : LINQ for SQL

- ADO .NET Overview
- Creating a DB Independent Data Access Layer
- Exploring System.Data.Linq
- Creating a Data Model for LINQ
- Introduction to LINQ for SQL

Advanced LINQ for SQL
LINQ for SQL and Inheritance
Common LINQ for SQL Examples

Building Windows Applications

A New Approach : Windows Presentation Foundation
Creating a WPF Form
Working with the Layout
Adding Basic Controls
Modifying Behavior Adding Event Handlers
Working with Menus and Toolbars
Working with Advanced Controls
Pulling the Application Together

Building ASP .NET Applications

The Need for MVC in ASP .NET Applications
Applying MVC to ASP .NET
MVC Architecture versus Traditional ASP .NET
Building the Interface
Adding Controls to the Form
Building the Actions
Implementing Page Flows
Dealing with Exceptions and Validation
Integrating Data Access
Pulling the Application Together

XML Essential Concepts

XML Terminology: Valid and Well-Formed
About Namespaces and Schemas
The Role of XML in Application Configuration
The Role of XML in Application Development
The Role of XML in Enterprise Application Integration

Accessing Data : LINQ for XML

The System.Xml Namespace
The System.Xml.Linq Namespace
Using the XDocument and XNamespace Classes
Introduction to LINQ for XML
Advanced LINQ for XML
Integrating LINQ for XML in your Applications

Windows Workflow Foundation

Introducing Windows Workflow Foundation
Windows Workflow Foundation Architecture and Components
Types of Workflows
Defining the Business Process
Defining Inputs and Outputs
Defining Transactions
Working with Events
Integrating a Workflow into your Application

Accessing Remote Objects

Introducing Windows Communication Foundation (WCF)
Creating a WCF Service
Creating a WCF Client
About Object Serialization and Marshalling

WCF Security and Data Considerations
Integrating WCF into an Application
Creating Web Services
XML Web Service Concepts and Terminology
Defining the Interface: Exploring WSDL and SOAP
Creating a Web Service
Creating a Web Service Client
Securing a Web Service
Ensuring Web Service Compatibility with Bindings
Web Services and Windows Applications
Web Services and Web Applications
Using ASP .NET AJAX
ASP .NET AJAX Overview
AJAC Technology and Considerations
Using the ScriptManager and UpdatePanel Controls
Invoking Asynchronous Methods
Integrating AJAX into your Applications
Deployment Considerations
About .NET Framework Versions and Capabilities
Private versus Public DLLs
Deploying Smart Clients
Other Deployment Considerations