

Course Content

MICROSOFT .NET OVERVIEW

- Why .Net?
- Introduction to .Net Framework
- Basic functionality of CLR
- MSIL
- CTS &CLS
- .Net Languages
- System Requirements

INTRODUCTION TO VB.NET

- Features of VB.Net
- Writing Programs in VB.Net
- Compiling and executing from command prompt
- Introduction to assemblies and Namespaces
- Base class Libraries
- Data types
- Option statements
- Boxing and un-boxing
- Array
- Sub programs

INTRODUCTION TO VISUAL STUDIO .NET

- File structure created by VS.Net application
- Types of projects
- Creating Demo console application

OBJECT ORIENTED PROGRAMMING

- Structure Vs Class
- Access
- Properties
- Method Overloading
- Constructors
- Shared modifiers
- Inheritance
- Overloading & Overriding
- 'My Base' Keyword
- Shadowing abstract class
- Interface Polymorphism Early-binding and Late-binding
- Destructor and Garbage collector

GUI APPLICATION DEVELOPMENT

- Basic controls and event driven programming
- Advance controls rich textbox, dialog
- Boxes, toolbar
- Working with context menus
- Main menu and MDI form
- Visual Inheritance

DOT NET Industrial Training Module

Highlights

- 100% Practical Training only
- Training Targeting Industrial Projects Development
- Training BY IT Industry working & Certified Trainers (5-6 Year of Exp.)
- All Courses are integrated with Advanced Technologies and Contents.
- Live Project work Under Great Supervision
- Small Batches (10 Students)
- Individual Attention to Each Trainee
- 2 Month written work Exp. Certificate*
- 100% Placement Assistance with 2-3 Interviews
- Guest lectures on Latest IT Trends & Tools From Corporate Persons
- Focus on improving your Logic to make you a better Developer.
- Experience of Live hosting and Server Management.

WINDOWS CONTROL LIBRARY

- Creating User controls
- Creating custom controls
- Creating Custom Controls

DELEGATES

- Introduction to delegate concept
- Event handling architecture with delegate
- Handlers, Add handler and Remove handler

ASSEMBLIES

- Introduction to COM Architecture
- Disadvantages of COM
- Introduction to assemblies
- Private Vs shared Assemblies
- Creating private assembly
- Probing and preparing configuration file
- Strong name utility
- Creating shared assembly
- CLR Architecture
- Native generator utility
- Assembly versioning
- Compatibility of assembly
- Configuration files for shared assembly

DATA ACCESS WITH ADO.NET

- Introduction to data access libraries, DAO
- RDO and ADO
- Drawback of ADO
- ADO.net managed data providers
- Introduction to System.Data.OleDb
- Data reader
- Introduction to system.Data.SqlClient
- Prepared statement
- Transaction handling
- Introduction to system.Data.OracleClient
- Dataset and DataAdapter
- Databinding
- Datagrid programming
- Dataview
- Data relation

MULTI-THREADING

- Thread class
- Sleep, Suspend and resuming thread
- Asynchronous connection
- Synchronization of thread

- Introduction to Windows services
- Creating your own windows services

WEB TECHNOLOGIES

- HTML
- Server side scripting languages
- Client side scripting languages (Java Script, JQuery)
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ASP.NET

- ASP Vs ASP.NET
- What is ASP.NET
- IS Architecture
- Post back technique
- Event driven programming support
- Page life cycles
- Code behind Technique

CONTROLS

- Client side controls
- Server side controls
- Data controls
- User controls
- Custom controls
- Inline coding in controls
- Validation controls

VALIDATION CONTROL

- RequiredFieldValidation Control
- CompareValidator Control
- RangeValidator Control
- RegularExpressionValidator Control
- CustomValidator Control

STATE MANAGEMENT

- Cookies
- Session state
- Application state
- View state
- Maintaing Viewstate in page and controls
- About global.aspx page
- Scope of viewstate, session and application variables
- Writing Session and Application events

CACHING

- Importance of caching
- Output caching or page caching
- Fragment caching Data caching

WINDOWS SERVICES

ASP.NET CONFIGURATION

- WEB.CONFIG File
- Compilation settings
- Custom error settings
- Application settings

ADO.NET

- Data Providers
- Data binding with data controls
- Programming with data grid
- Programming with data repeater
- Programming with Data list
- Programming with Data view
- Inline coding supports in page and data controls

ASP.NET TRACING

SECURITY IN ASP.NET

- Authentication
- Authorisation
- Authentication modes

XMLPROGRAMMING

- Introduction to XML
- Creating and reading XML document
- XML parsers
- Data transformation using XML

WEB SERVICES

- What is Web service
- WSDL Utility
- Session state with Web services
- Caching with Web services
- Proxy with Asynchronous methods
- Securing Web Services
- SSL
- SOAP Headers

CRYSTAL REPORTS

SSRS (SQL Server Reporting Services)

MS-Reports

LINQ: NET Language-Integrated Query

- NET Language-Integrated Query
- Getting Started with Standard Query Operators
- Language Features Supporting the LINQ Project
- More Standard Query Operators
- Query Syntax
- LINQ to SQL: SQL Integration

WCF: Windows Communication Foundation

- What Is Windows Communication Foundation?
- Fundamental Windows Communication Foundation Concepts
- Windows Communication Foundation Architecture
- Guide to the Documentation

WPF: Windows Presentation Foundation

- Getting Started (WPF)
 - Application Development
 - WPF Fundamentals
 - Accessibility
 - Controls
 - Data
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Introducing SQL Server 2008

- What's New in SQL Server?
- SQL Server Editions
- Installing SQL Server

Basics of Database Design

- Normalization
- Denormalization
- Tools for Normalization in SQL Server
- Introducing SQL Server Management Studio
- Creating a Database
- Adding Tables
- Creating Indexes and Constraints
- Building Relations

T-SQL Basics

- What is T-SQL?
- Syntax Conventions
- Introducing AdventureWorks2008
- Executing SQL Statements
- Identifiers
- Creating Data Types
- Operators
- Variables
- Functions
- Using T-SQL to Build and Alter Objects

SELECT Queries

- The SELECT Clause
- The FROM Clause
- The WHERE Clause
- The ORDER BY Clause
- Using GROUP BY and HAVING
- Using TOP N and TOP N PERCENT
- UNION Queries
- Full-Text Search

Action Queries

- SELECT INTO queries
- DELETE queries
- TRUNCATE TABLE queries
- INSERT queries
- UPDATE queries
- MERGE queries

Locking and Execution Plans

- What is Locking?
- Monitoring Locks
- Tuning Locking
- Deadlocks
- Tuning Queries
- Management Data Warehouse
- Performance Studio

Views, Stored Procedures, and Functions

- Using Views
- Using Stored Procedures
- Using Functions

Advanced Transact-SQL

- Transactions
- Rowset Functions
- Ranking Functions
- Cursors
- Structured Error Handling

XML and SQL Server

- XML Columns and Indexes
- Querying and Modifying XML Data
- Using OPENXML
- Using FOR XML

Triggers

- Creating DML Triggers
- Altering DML Triggers
- Using the Inserted and Deleted Tables
- Checking Updated Columns
- Recursive and Nested Triggers
- Creating DDL Triggers

.NET inside of SQL Server

- Creating CLR User-Defined Functions
- Creating CLR Stored Procedures
- Using the Sql Namespace
- Creating CLR Triggers
- Creating CLR User-Defined Types
- Choosing When To Use CLR Objects

SMO and RMO Programming

- Retrieving Server Information
- Working With Database Objects
- Generating Scripts
- Viewing and Modifying Server Configuration
- Understanding RMO

Data Protection/Tracking

- Understanding Change Data Capture
- Data Capture Schema and Tables
- Transparent Data Encryption

SQL Server 2008 Analysis Services

- Understanding Analysis Services
- Introducing Business Intelligence Development Studio
- Creating a Data Cube
- Exploring a Data Cube

Service Broker

- Service Broker Terminology
- Creating a Service Broker Application
- Processing Messages with Stored Procedures
- Using Service Broker Across Servers

SQL Server 2008 Integration Services

- The Import and Export Wizard
- Creating a Package
- Working with Connection Managers
- Building Control Flows
- Building Data Flows
- Creating Event Handlers
- Saving and Running Packages

SQL Server 2008 Reporting Services

- The Reporting Services Architecture
- Using Report Designer
- Publishing a Report
- Using Report Builder
- Using Report Manager

Security and SQL Server

- Choosing Service Accounts
- Authentication Modes
- Roles and Users
- Permissions
- Object Ownership