.Net Training

C#.NET

Introduction to .NET Framework

.NET Framework

- 1. OverView
- 2. CLR.CLS
- 3. MSIL
- 4. Assemblies
- 5. NameSpaces
- 6. .NET Languages7. Dll's(Vs)Exe's

Basics:

- 1. Getting Started
- 2. Using Variables and Arrays
- 3. Methods and Parameters
- 4. Decision Structures and Loops
- 5. Handling Errors and Exceptions

OBJECT ORIENTED PROGRAMMING

- 1. Classes, structures and enums
- 2. Constructors
- 3. Destructors
- 4. Properties
- 5. Inheritance
- 6. Shadowing(new methods)
- 7. Overriding
- 8. Method Overloading
- 9. this and base Keyword
- 10. Sealed classes
- 11. Interfaces, Abstract Classes
- 12. Working with Delegates
- 13. Designing and Implementing Events
- 14. Generics
- 15. Sealed classes and Partial classes
- 16. C#.NET Application Architecture
- 17. Solution, Projects
- 18. Compiling, Debugging and Running in IDE

INTRODUCTION TO GUI PROGRAMMING

- 1. System. Windows. Forms Assembly
- 2. System.Drawing
- 3. The Form Class
- 4. Win Forms
- 5. Visual Inheritance
- 6. Programming with Controls
- 7. User Controls

WORKING WITH COLLECTIONS, IOSystem.IO

- 1. Readers and Writers
- 2. Streams

System.Collections

- 1. Hashtable
- 2. ArrayList

SERIALIZATION

Formatters

- 1. Binary Serialization
- 2. Formatters, Binary Formatter
- 3. SOAP Serialization
- 4. XML Serialization

ADO.NET I:

- 1. Introduction
- 2. Architecture
- 3. System.Data.Dll
- 4. System.Data.Oledb
- 5. System.Data.SqlClient
- 6. Data Readers
- 7. Command Object
- 8. Procedure Execution (PL/SQL)

ADO.NET II: Data Adapters and DataSets

- 1. Data Tables
- 2. Data Relations
- 3. Data Views

ASSEMBLIES

- 1. Strong Names
- 2. GAC
- 3. Private and Shared Assemblies
- 4. SFA
- 5. MFA

MULTITHREADING

- 1. Threading Introduction
- 2. System. Thrading NameSpaces
- 3. Thread Members
- 4. Thread States

GUI PROGRAMMING

CRYSTAL REPORTS WITH .NET

VB.NET

Overview of .NET

- 1. Drawbacks of the Existing System
- 2. Why .NET came into picture
- 3. Difference between Java and .NET
- 4. .NET Framework Architecture
- 5. Versions of .NET Framework

Visual Basic .NET

- 1. Disadvantages of Visual Basic
- 2. Programming in VB .NET

- 3. Operators
- 4. Conditional Statements
- 5. Arrays

OOPS

- 1. Abstraction
- 2. Encapsulation
- 3. Constructors
- 4. Inheritance
- 5. Overloading Methods and Constructors
- 6. Abstract Classes
- 7. Interfaces
- 8. Assemblies
- 9. Access Specifies

Exception Handling

- 1. What is Exception
- 2. Error Handling
- 3. Using Try, Catch, Finally and Throw
- 4. Defining our own exception classes
- 5. Debugging the Application

Windows Programming

- 1. Understanding Windows Programming
- 2. Class Hierarchy
- 3. Using Various Windows Components

ADO .NET

- 1. Client Server Architecture
- 2. Understanding Drivers and Providers
- 3. ADO .NET Architecture
- 4. Using OLEDB Providers
- 5. Data Readers
- 6. Using Oracle and SQL Server Managed Providers
- 7. Disconnected Architecture with Data sets
- 8. Data controls
- 9. Data Table and Data View difference and usage
- 10. Invoking Stored Procedures

Assemblies

- 1. Why Assemblies
- 2. Disadvantages of Com
- 3. Architecture of Assemblies
- 4. Creating Private and Shared Assemblies
- 5. Deploying Shared Assemblies in GAC

Custom Windows Controls (User Controls)

- 1. Creating and Using them in other applications
- 2. Defining properties to controls using Property Procedures
- 3. Defining Events to controls and invoke them

Multithreading

- 1. Difference between Multitasking and Multithreading
- 2. Advantages of Multithreading
- 3. Creating Multiple threads in application
- 4. Thread Synchronization

Windows Services

- 1. Understanding Windows Services
- 2. Creating Windows Services
- 3. Installing and Uninstalling Windows services

.NET Remoting

- 1. Understanding Distributed Architecture
- 2. Drawbacks of DCOM
- 3. Remoting Advantages
- 4. Remoting Vs web services
- 5. Creating & Using Remote Applications

Crystal Reports

- 1. Designing and Invoking Crystal Reports
- 2. Datasets and Crystals Reports

ASP.NET

ASP.NET

- 1. Basics
- 2. Web Programming
- 3. HTML, DHTML
- 4. JavaScript
- 5. IIS
- 6. ASP

ASP.NET INTRODUCTION

- 1. Difference Between ASP and ASP.NET
- 2. Architecture
- 3. Inline Technique & Code-Behind Technique
- 4. Code Render Blocks
- 5. Server Controls
- 6. Page Basics, Page lifecycle
- 7. Post back Request
- 8. View State, Directives

PROGRAMMING WITH SERVER CONTROLS

- 1. Html Server Controls
- 2. Web Server Controls
- 3. Basic Web Controls
- 4. List Controls, Data Controls
- 5. Adv Controls, User Controls

CUSTOM CONTROL Development

THEMES AND SKINS

MASTERPAGES AND SITE NAVIGATION

ADO.NET PROGRAMMING

- 1. Architecture
- 2. DataReaders and DataSets
- Command Object
 Transaction Programming
 Procedure Execution
- 6. Data Adapter and Data Set
- 7. Data Tables
- 8. Data Relation
- 9. Data Views

ADO.NET AND ASP.NET

- 1. Working with Data Controls
- 2. GridView
 - -Inserting, Updating, Deleting
 - -Sorting in Data Grid
 - -Paging in Data Grid
- 3. DataSource Controls
- 4. Dataset
- 5. DetailsView
- 6. FormView
- 7. Data List
- 8. Repeater Control
- 9. Crystal Reports

XML PROGRAMMING

XML

- 1. DTDs & XSDs
- 2. Parsers
- 3. SAX Model
- 4. DOM Model
- 5. XML Programming in .Net
- 6. XML Readers
- 7. XML Serialization

STATE MANAGEMENT WITH ASP.NET

- 1. Context
- 2. View State
- 3. Cookie State
- 4. Session State
- 5. Session Tracking6. Application Object
- 7. Session and Application Events

ASP .NET APPLICATION TUNING

- 1. Machine.Config & Web.Config.
- 2. App Setting
- 3. Compilation Settings
- 4. Custom Error Settings
- 5. Session State Settings
- 6. InProcess & OutProcess Sesstion States
- 7. State Server & SQL Server
- 8. Cookieless Session State
- 9. Application and Global.ASAX

CACHING

- 1. Introduction to Caching
- 2. Types of Caching
- 3. Page Caching
- 4. Diff. between Webuser Controls & Custom Controls
- 5. Page fragmentation Caching
- 6. Data Caching
- 7. Data Caching Application Object

TRACING

- 1. Page Level
- 2. Application Level

SECURITY

- 1. Authentication & Authorization
- 2. Windows Authentications
- 3. Forms Authentications
- 4. Passport Authentications
- 5. Memberships

WEB SERVICES

- 1. Architecture
- 2. WSDL, SOAP, UDDI
- Wobbl, GoAl , GbBl
 Publishing and Consuming Web Services
 Web Client
 Windows Client

- 6. Caching Web Services
- 7. Security in Web Services

WEBPARTS

- 1. Webpart Manager
- 2. Zone Types

Overview of Advanced .NET Technologies

- 1. ASP.NET-AJAX
- 2. WPF
- 3. WCF
- 4. Silverlight

Advanced .NET Content

WCF with C#

Introduction to WCF

- 1. Review the Challenges of Building Distributed Applications
- 2. Examine the Concept of Service Oriented Application
- 3. See a High Level Overview of Windows Communication Foundation
- 4. Build and Host your First WCF Service

Hosting and Calling WCF Services

- 1. Understand how to Host a WCF Service
- 2. Understand how Clients Communicate with Services
- 3. See how to Host and Call a Service using Multiple Bindings
- 4. See how to Configure Endpoint in Code and in Configuration Files

Bindings and Contracts

- 1. Understand how to Work with Bindings
- 2. Explore how to Create Service and Data Contracts
- 3. See the Implications of Modifying Service and Data Contracts

Exceptions, Diagnostics and Message Patterns

- 1. Learn how to Handle Exceptions in WCF Services
- 2. See Techniques for Diagnosing Services
- 3. Explore One-Way and Duplex Communication

Sessions and Transactions

- 1. See how to use Sessions to Maintain State in WCF Services
- 2. Explore Options for Controlling the Lifetime of a Service Instance

3. Learn how to Add Transactions Support to a WCF Service

WCF Security

- 1. Explore the Basics of WCF Security
- 2. See how to Authenticate Callers of a Service
- 3. See how to Authorize Callers Based on Roles

RESTful Services

Explore how to Build WCF Services that Support Representational State Transfer (REST)

WPF with C#

Introducing WPF

- 1. Understand the motivation behind WPF
- 2. Examine the various 'flavors' of WPF applications
- 3. Overview the services provided by WPF4. Examine the core WPF assemblies and namespaces
- 5. Work with the Window and Application class types
- 6. Learn the syntax of XAML
- 7. Understand the XAML / code relationship

WPF Controls

- 1. Survey the core WPF control types
- 2. Review the WPF control programming model
- 3. Learn to position controls using layout managers
- 4. Understand the role of WPF control commands

WPF Document Controls

- 1. Understand the scope of the WPF documents API
- 2. Distinguish between fixed documents and flow documents
- 3. Populate a document with inline and block elements
- 4. Work with the WPF document APIs

WPF Graphical Rendering Services

- 1. Understand the scope of WPFs graphical rendering services
- 2. Work with the Shape types
- Work with Brushes and Pens
 Apply graphical transformations
- 5. Understand the role of geometries and drawings
- 6. Work with the visual programming layer

WPF Resource Management

- 1. Learn to manage binary resources
- 2. Understand the role of logical resources
- 3. Work with resources in XAML and procedural code
- 4. Work with resource dictionaries
- 5. Understand the resource lookup mechanism
- 6. Know the role of dynamic resources
- 7. Learn how to make use of system resources

WPF Styles

- 1. Learn how to define and apply WPF styles
- 2. Learn to limit where a style can be applied
- 3. Build new styles based on existing styles
- 4. Understand the use of triggers

WPF Animation Support

- 1. Understand the scope of WPF's animation services
- 2. Define animations in code and XAML
- 3. Work with linear interpolation animations
- 4. Work with key-frame-based animations
- 5. Work with path-based animations

WPF Data Binding

- 1. Understand the WPF data binding mechanism
- 2. Bind to custom objects

WPF Templates and User Controls

- 1. Understand the relationship between WPF logical and visual trees
- 2. Learn to build custom control templates
- 3. Examine options for building custom controls

LINQ Training Outline

Language Extensions

- 1. Implicitly typed variables
- 2. Extension methods
- 3. Object initialization syntax
- 4. Anonymous types
- 5. Lambda expressions

Introduction to LINQ

- 1. LINQ expressions
- 2. Using via extension methods
- 3. Filtering
- 4. Sorting
- 5. Aggregation
- 6. Skip and Take operators
- 7. Joins

Deferred Execution

- 1. Benefits and drawbacks
- 2. IEnumerable vs IQueryable
- 3. Using across tiers

Data Projection

- 1. Single result value
- 2. Existing types
- 3. Anonymous types
- 4. Grouping

LINQ to XML

- 1. New XML classes
- 2. Generating XML
- Querying XML
 Using data projection
- 5. Combining with XPath

LINQ to SQL

- 1. Attributes and mapping
- 2. Creating a DataContext

- 3. Deferred loading
- 4. Saving changes
- 5. Inserts and deletes
- 6. Transactions
- 7. Concurrency
- 8. Handling exceptions

LINQ to Entities

- 1. ADO.NET Entity Framework
- 2. Differences from LINQ to SQL
- 3. Available providers
- 4. Defining an Entity Data Model (EDM)
- 5. Database-first vs. Model-first
- 6. Object Services
- 7. Change tracking
- 8. Using EntityClient
- 9. Using stored procedures
- 10. Plain-Old CLR Object support (POCO) [.NET 4.0 only]
- 11. N-tier and service-based applications

Thus, if you are looking for .net training classes, just contact us at info@shimpyinfotech.com to experience the best PHP training modules.