

## **.NET FRAMEWORK**

### **Module 1: Introduction to .NET Programming**

#### **Objective of this module**

#### **.Net Concepts**

- **Framework**
- **Common Language Runtime**
- **Base Class Library**
- **Common Type System (CTS)**
- **Intermediate Language**
- **Assemblies**
- **Namespaces**

#### **Programming with C#**

- **Variables**
- **Comments**
- **XML Documentation**
- **Constants**
- **Keywords**
- **Data Types**
- **Reference Types**
- **Control Statements**
- **Conditional Statements**
- **Switch Statement**
- **Loops**
- **Jump Statements**
- **Goto**
- **break**
- **Continue**
- **Return**
- **Arrays**

#### **Programming with VB.NET**

- **Variables**
- **Comments**
- **Constants**
- **Keywords**
- **DataTypes**
- **Control Statements**
- **Conditional Statements**
- **If Statement**

- **Select Case Statement**
- **Loops**
- **The For Loop**
- **The while Loop**
- **The do...Loop**
- **The For Each Loop**
- **Arrays**
- **Option Explicit**
- **Option Strict**

## **Exception handling in C#/ VB.NET**

- **Important Classes**

## **Object Oriented Programming (OOP)**

- **Class**
- **Object**
- **Encapsulation**
- **Inheritance**
- **Polymorphism**
- **Abstract Class and Function**
- **Interface**
- **Constructors**

## **Module 2: Developing Windows Forms Applications**

### **Objective of this module**

#### **Windows Forms**

- **Why Windows Forms?**
- **Windows Form Layout options**
- **Walkthrough: Creating Simple Windows Form application**
- **Form Members**
- **Form Code Behind**
- **Startup Form**
- **Modal and Modales Forms**

#### **Standard Controls - Windows Application**

- **Labels**
- **Textboxes**
- **RichTextBox**
- **Button**
- **CheckBox**
- **RadioButton**

- **ComboBox**
- **PictureBox**
- **ListBox**
- **ImageList**
- **ListView**
- **TabControl**
- **MenuStrip**
- **DataGridView**
- **DatePicker**

## **Event Handlers**

- **Creating Event Handlers**
- **Default Event Handlers**
- **Associating Event Handlers at Run Time**

## **Order of events**

## **MDI Forms**

## **Dialog Forms**

## **Visual Inheritance**

- **Inheriting a Form**

## **Custom Controls**

## **Walkthrough: Creating Address Control**

## **Module 3: Developing Web Applications using ASP.NET 2.0**

### **Objective of this module**

### **First things first**

### **Creating ASP.NET Application**

### **Components an ASP.NET Application**

### **ASP.NET Page Processing**

### **Server Controls**

### **State Management**

### **Master Pages**

### **User Controls and Custom Controls**

## **Site Navigation**

### **Themes**

- **Themes**

### **Caching**

### **Configuration**

### **Globalization and Localization**

## **Module 4: Data access with ADO.NET and XML**

### **Objective of this module**

### **First things first**

### **Introduction to ADO.NET**

### **Data Structures and Data Access Components**

### **Data Binding**

### **Data Access using XML**

## **Module 5: Web Services and Windows Services**

### **Objective of this module**

### **First things first**

### **Introduction to ADO.NET**

### **Data Structures and Data Access Components**

### **Data Binding**

### **Data Access using XML**

## **Module 6: Security, Deployment, Introduction to .NET 3.0**

### **Objective of this module**

### **Security**

- **Authentication**
- **Authorization**

- **Impersonation**
- **Code Access Security**

## **Deployment**

### **Introduction to .NET Framework 3.0**

- **Windows Presentation Foundation**
- **Windows Communication Foundation**
- **Windows Workflow Foundation**
- **Windows Card Space**

### **Module 7: Introduction NET Framework 4.0**

- **Major Changes in .Net 4.0**
- **Control Rendering Compatibility Version Setting in the Web.config File**
- **Client ID Mode Changes**
- **Html Encode and Url Encode Now Encode Single Quotation Marks**
- **ASP.NET Page (.aspx) Parser is Stricter**
- **Browser Definition Files Updated**
- **System.Web.Mobile.dll Removed from Root Web Configuration File**
- **ASP.NET Request Validation**
- **Default Hashing Algorithm Is Now HMACSHA256**
- **Configuration Errors Related to New ASP.NET 4 Root Configuration**
- **ASP.NET 4 Child Applications Fail to Start When Under ASP.NET 2.0 or ASP.NET 3.5 Applications**
- **ASP.NET 4 Web Sites Fail to Start on Computers Where SharePoint Is Installed**
- **The HttpRequest.FilePath Property No Longer Includes Path Info Values**
- **ASP.NET 2.0 Applications Might Generate Http Exception Errors that Reference eurl. axd**
- **Event Handlers Might Not Be Not Raised in a Default Document in IIS 7 or IIS 7.5 Integrated Mode**
- **Changes to the ASP.NET Code Access Security (CAS) Implementation**
- **Membership User and Other Types in the System.Web.Security Namespace Have Been Moved**
- **System.Web.Security Types for Passport are Obsolete**
- **The Menu Item. Pop Out Image Url Property Fails to Render an Image in ASP.NET4**
- **Menu. Static PopOut Image Url and Menu. Dynamic PopOut Image Url Fail to Render Images When Paths Contain Backslashes**
- **Disclaimer**