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|  | **Course Objective** |
|  | .NET(Network Enabled Technologies) is a world-shattering advance in programming technology platform that greatly simplifies any kind of application development like Windows Desktop, Mobile, Internet **Web Application Development**, etc., .NET is very essential for those who want to be into application development Our training method with a realistic, hands-on, in depth knowledge and skills to develop Rich Internet Web applications by using C#-Programming, OOPs using C#, ASP.NET, ADO.NET ,Linq To Sql (ORM) using Microsoft Visual Studio 2015.This advanced Microsoft visual studio .net c sharp training course teaches a deep exploration of .NET development philosophy and practical advice. This best advanced visual c# .net training also examines the fundamentals of C# essential for writing ASP.NET programs.This Best .net training is also designed to help you prepare for interviews with experience in your hand. |

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|  | **Pre-requisite** |
|  |  We prefer candidates have a basic knowledge of any one programming language like C, C++, Pascal or any other programming language basics. This will help in understanding the subject in simple way. The seeker need not know object orientation as this will be thought from the scratch |

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|  | **Course Target** |
|  | This training program targets participant to Job DescriptionWeb Application Development using ASP.NET with 3 Tier Architecture**Concepts:**C# - Programming, OOPs using C#Advanced Client Side technologies ( html-1, css-1, javascrpt-1, jquery-2, ajax-1, angularjs-5)Web Application development using ASP.NET with 3 Tier Architecture ( 20+ )Database Concepts using Sql Server ( 2classes )Database communication using ADO.NET and ORM(Linq To Sql)Soap based Web Services |

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|  | **.NET Introduction****&****Architecture**  | Introduction to .NET, Architecture, Framework.NET File execution, CLR with their components.Visual studio versions, framework versions.Understand Project and solutionsDifferent versions of .NET Framework |
| 1 | **Programming****using****C#.NET** | Introduction to C#.NETBuilt in Class libraries, Writing C#.NET program, Working with Console class, String class, Covert class, DateTime, Math, StringBuilder classes etc., |
| 2 | CTS (Common Type system)Working with value types like int, char, double, bool, etc.,Reference types like object, delegate, pointer, etc.,Type conversions, ASCIIWorking with Placeholders, read different types of data |
| 3 | Control structures if, switch, Different operators like mathematical, relational, logical, increment and decrement, ternary operator, etc., |
| 4 | Loops ( while loop, for loop, do..while, foreach loop )Keywords: break, continue, etc., |
| 5 |  | Understand Arrays.Working with Single Dimension, Double Dimension and **Jagged Array** |
| 6 | **OOPs using C#** | Oops concepts ( Encapsulation, Abstraction, Inheritance, Polymorphism) |
| 7 | OOPS using C#.NET (Abstract classes, Interfaces, POCO Classes) |
| 8 | Methods Parameterized methods ( ref, out, params) |
|  | Abstract class, interface, Static class, partial class, sealed class |
|  | Exception Handling |
| 9 | Collections & Generics |
| 10 | Assemblies & Class libraries |
| 11 | **SQL Server Concepts** | Introduction to RDBMS |
| 12 | Working with DDL, DML commands  |
| 13 | Crud operations using Queries |
| 14 | Crud operations using Stored Procedures |
| 15 | Examples to perform CRUD operations |

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|  | **Web Application Development using Client side technologies** |
|  | Overview of HTML Concepts |
|  | Overview of CSS Concepts |
|  | AJAX Concepts |
|  | Standard Data formats: XML and Json, csv format |

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| **ASP.NET WebForms Contents** |
| 1 | ASP.NET | Introduction to Web Application, WebSite, Web Server, Web Browsers, Web Page, WebForm.Different between Client side and Server side scripting.GET and POST methodsHttpRequest and HttpResponse objects |
| 2 |  | HTTP protocol, URL, response object, request object.Asp.net Page Submission process, ASP.NET page level events. |
| 3 | Web Server Controls | Creating Web application, Using Server Side Tools, Sample programs using controls like (Textbox, Label, Literal, Calender, Checkbox, RadioButton, etc.,) |
| 4 | LIST Controls | Dynamic Polymorphism, Real-time examples using List Controls(CheckboxList, RadioButtonList, BulletedList, DropDownList, ListBox). |
| 5 | Postback | Working with Postback, IsPostBack, AutopostBack, CrossPagePostback. Demo |
| 6 | Validation Controls | RequiredFieldValidator, RangeValidator, RegularExpressionValidator, CompareValidator, CustomValidator, ValidationSummary |
| 7 | Page Redirection(Navigation Techniques) | LinkButton, HyperLink, PostBackURL propertyResponse.Redirect |
| 8 | Master Pages | Introduction, Sample Example |
| 9 | ADO.NET (3 classes) | IntroductionConnection and Disconnection Oriented Model differencesClasses used in SQL Server (System.Data.SqlClient)ConnectionString, Establishing DB ConnectionCRUD Operations using SqlCommand class methodsExecuteReader(),ExecuteScalar(), ExecuteNonQuery |
| 10 | DataBound Controls | DataBoundControls (GridView, FormView, DetailsView)DataSource Controls (SqlDataSource, XMLDataSource, ObjectDataSource, etc.,) |
| 11 | Working with POCO classes | Handling objects/entities using LinqLinq To SQL |
| 12 | Business Object | Create POCO ClassImplement DB operations of particular table in database |
| 13 | Linq  | Linq ArchitectureLinq type querySql Like Queries |
| 14 | ORM using LinqToSql (DLinq) | To interact with Sql Server databaseSimplify database interaction. |
| 15 | State Management Techniques | Introduction, Default HTTP State, Introduction, Default HTTP State, Working with viewstate, Querystring, session, cookies, Cache, ApplicationWorking with web.config file |
| 16 | Web Services | SOA Introduction, Advantages, SOAP, WSDL, UDDI Creating a Web Service, Consuming Web Service. |
| 17 | MVC.NET introduction | Introduction and architecture of MVCSample Application using EFW |

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|  | **Real Time Project Development Concepts** |
|  | Project | Introduction (Banking Application)Understand agile methodologyEssential conceptsCoding standardsWeb site development cycle |
|  | N Tier Architecture | Introduction with real time exampleSample Application with CRUD Operations |
|  | Web ServerIIS | Working with IIS, Installation of IIS,Hosting application in IISDifference between IIS and IISExpressApp Pool, App Domain |
|  | ASP.NET Security | Authentication and AuthorizationExamples on Anonymous Authentication, Windows Authentication, Forms(Web) Authentication and authorization |

Sir Mentioned to us that he will explain this topics further

MVC.NET 1 week

 Project

 Scaffold

 EFW

Hosting Application into IIS ( make your application available in the network)

Web Services (SOAP based services)

RESTful Services ( WEB API)

WCF Concepts

Design Patterns