

Full Stack Dotnet (.NET) Training

Duration: 6 Months

Course Overview:

Dot NET 4.5 is a software development platform developed by Microsoft. Using .NET there is no need to learn new programming language. It supports 48 programming languages like as C, C++, C#, J#, VB etc.

After completing this module, you are ready to:

- Appear exams on MS .NET Framework under any technical university of India.
- Develop **Desktop applications** in C# by using ADO .NET and SQL Server.
- Develop **Web applications** in ASP .NET by using C# .NET, ADO .NET and MS SQL Server.
- Design **Responsive Webpages**.
- Eligible for designing database Table by MS SQL Server query.
- Appear any types of software company **interview** and **get Job** as a DOT NET developer
- Update yourself with DOT NET frameworks of Microsoft.

Web Designing :(HTML5, CSS3, JavaScript, jQuery, Bootstrap).

MS.NET Framework Introduction (The .NET Framework - an Overview, Framework Components, Framework Versions, Types of Applications which can be developed using MS.NET, MS.NET Base Class Library, MS.NET Namespaces, MSIL / Metadata and PE files., The Common Language Runtime (CLR), Managed Code, MS.NET Memory Management / Garbage Collection, Common Type System (CTS), Common Language Specification (CLS), Types of JIT Compilers, Security Manager).

SYNTAX & DATA TYPES, LANGUAGE FUNDAMENTAL: (Data type and Control Constructs, Value and Reference Types, Declaring and Initializing Variables, Unicode Characters and Strings, Implicitly Typed Local Variables, Conditional Syntax, C# Operator, Looping Syntax, Structure)

ARRAY & STRING :(Declaring of different type Arrays, Initializing Arrays, accessing element of different type Array Members, Arrays of Objects, using foreach with Arrays, Understanding System. String class and its various operations)

OOPS CONCEPTS CLASSES :(Encapsulating Attribute, Class & Object Creation, Define Constructor, Type of Constructor, Define Methods and their Type, Overloading Methods and Constructor overloading, Define Property and their Types, The Memory Allocation with New Keyword, Passing Initial Values with Constructor, Invoking Property and Methods)

INHERITANCE :(Implementing Inheritance Hierarchies, Class Access Modifiers, Overriding and Hiding Concepts, run time polymorphism, Abstract and Sealed Class, Exposing Interface, Implementation Interface in a Class, Play with Namespaces, Interface Polymorphism, Operator Overloading, Partial Class)

EXCEPTION HANDLING :(Means of Error, Bug and Exceptions, Role of .Net Exception Handling, System Level Exception, Application-Level Exception, Try and Catch Block, Handling Multiple Exception, Finally Block, Throw Exception on Request Custom Exception)

EVENTS AND DELEGATES:(Event Driven Programming, Delegate, Event and its association, Synchronous and asynchronous operation with delegate, User Defined events and delegates)

MULTITHREADING :(Understand multithreading process, The System Threading namespace, The Thread and Thread Start class, Thread life cycle)

Input/Output OPERATIONS WITH FILE SYSTEMS :(File and Directory Class, File Info and Directory Info, Stream Object with Files: Stream Reader, Stream Writer, File Stream and Memory Stream)

INTRODUCTION TO ADO.NET:(How ADO.NET works, Evolution of ADO.NET, data Provider)

DATA SET :(Creating Tables in Dataset, Data Column, Data Row, Data Table, Updating, Inserting and Modification in Data Table, Saving Changes into Data Base using Command Builder, Working with Command and Connection)

ASP.NET

INTRODUCTION TO WEB FORM :(Need of Web Application, HTTP Protocol, Static and Dynamic Page, Concept Working of IIS and Browser, Differences between ASP and ASP.NET)

INTRODUCTION TO HTML CONTROLS :(Creating a Simple HTML Page, HTML Tags, hosting a HTML Page, IIS virtual Directory, Request Transfer Throws Get and Post Methods)

SERVER PAGES USING ASP.NET :(Creating sever pages, Architecture of handling request In Web server, HTTP request object, HTTP response object, Understanding post back)

UNDERSTANDING PAGE LIFE CYCLE :(Understanding of Application Life Cycle, Page Life-cycle Stages, Life-cycle Events)

STATE MANAGEMENT :(Client-side State Management, Introduction of stateless process, HTTP Cookies, Query String Method, View State, Server-Side State Management, HTTP Session, HTTP Application, Global.asax, Web.config)

SERVER CONTROL FORM VALIDATION :(Working with Range, Regular Expression & Compare, Required Field Validator Controls)

WEB FORM CONTROL:(Textbox, Check Box, List Box, Dropdown List Control, Add Rotator Control, File Upload Control, Multi View Control, Login Control, Image control, Radio button control)

DATA BINDING SERVER CONTROLS :(Use of Data Binding Control, Type of Data Binding Control (Formatted and Unformatted))

Working with Grid View Control : (Data binding with Grid View(Working with Column Collection, Using Paging, Sort), Working with Data List Control(Working with Template, Working with Data List Events)

MASTER PAGES :(Introduction and Need of Master Page, Creating a Master Page, Default Contents, Master page with CSS and table layout, Applying Master Page through Configuration File)

ASP.NET WEB SECURITY: (Windows, Forms, Passport)

ASP.NET AJAX :(Introduction of AJAX, Role of script manager, Understanding and working with update panel, Understanding and Working with Update progress control, Understanding and Working with Timer control, Creating AJAX enabled website, creating an AJAX enabled web service)

SKIN & THEME :(Cascading Style Sheets, Scoping Themes, Themes Vs Cascading Style Sheets, create a Skin, Apply a theme to a Web Site)

MORE DATA BINDING SERVER CONTROLS :(Working with Form View Control (Working with Template, Working with Form View Events), Working with Details View)

.NET REMOTING :(Introduction of Remoting, Remoting Architecture & scenario, Creating .NET Remoting object, Hosting a Remote Object, Activation type, Singleton, Single call, Implementations of a remote base application)

ASP.NET CACHING :(Introduction, Need, Type of caching, Page output Caching, Declarative output caching, Time duration and location setting, Parameter caching settings, Page fragment Caching, Time duration setting, Parameter caching Setting)

COLLECTION CLASSES :(Array list, Hash table, Stack, Queue, Sorted List, Name value Collection, Dictionary Entry structure, Interfaces, ICollection, IList, IEnumerable, IEnumerator, ICloneable, IComparable)

REFLECTION(System. Reflection namespace, Core reflection classes, Accessing assembly through reflection, Method info, Member info, Property info, Browsing and Querying members, Invoking methods and property and runtime, Reflection on shared assembly)

ASSEMBLIES & DEPLOYMENT :(Role of .NET assembly, Building and consume a single file assembly, Building and consume a multi file assembly, Private assembly, Shared assembly, Creating multiple version of a single assembly, Removing .DLL hell problem)

CRYSTAL REPORT :(Crystal report overview, Getting starts with Crystal Report, Creating Basic Report, working with sub report, Integration with Windows Application, Customizing Appearance and Layout of Report Viewer, Creating XML Report Web service, working with .Net Data, adding a Database or Table to a Report, Working with ADO.Net, Formulas and Logic, Report Formatting, Integration with Web Application, Working with Crystal Report Engine)

MVC :(Model-View-Controller and ASP.NET, MVC Architecture, Understanding Routes and URLs, Routing Compared to URL Rewriting, The Controller Class and Actions, Working with Parameters, Working with Multiple Parameters, specifying a View, Strongly Typed Views, Using HTML Helper Methods)

SQL Server 2008 Database: -Introduction of SQL Server 2008/2012, Data Type,

Data Definition Language – create Database/Table, Drop Database/ Table, Rename Database/Table,

Constraint's key (primary key, foreign key, Not Null, Chek, unique, Default), On Cascade Update on Cascade Delete,

Data Manipulation Language-bulk Insert, Update, Delete, select, Truncate

Where clause operator – Arithmetic, Relational, Logical, NOT, IN, BETWEENLIKE, ORDER BY, GROUP BY, HAVING,

Join, views, Indexing, Triggers-DDL (Database, server), DML, T- SQL-Stored procedure, Cursor, Transaction Control

(Begin, Commit, Rollback), Exception Handling (Try- Catch), Database Security & Integrity, Login – SQL Server

Authentication, Permission-Grant, Revoke, Database- Import, Export, Attach, Detach, Scripting.

After This Training our students are eligible for doing these types work.

- ⇒ Create a database, Table, Insert Data, Retrieve Data, Update Data, Delete Data in SQL Server using ASP.NET and C# .NET
- ⇒ Good knowledge for Making Windows Application or Desktop Application
- ⇒ Good knowledge for Making Dynamic and Static Website
- ⇒ Learn How to create constant layout through Master Page.
- ⇒ Learn how to create different types of login options
- ⇒ Learn how to insert, update, delete, view records though windows form.
- ⇒ Learn how to insert, update, delete, view records though web form
- ⇒ C# .NET and ASP .NET login And Signup Form with Session Using SQL Server.
- ⇒ Check duplicate userid or email ID before register C# .NET and ASP .NET,
- ⇒ How to change password in C# .NET and ASP .NET,
- ⇒ Forgot password C# .NET and ASP .NET,
- ⇒ insert image in SQL Server database using C# .NET and ASP .NET,
- ⇒ retrieve image from SQL Server database using C# .NET and ASP .NET,
- ⇒ upload file in using C# .NET and ASP .NET,
- ⇒ how to send mail in C# .NET and ASP .NET
- ⇒ create Search option or feature in C# .NET and ASP .NET,
- ⇒ send SMS message in C# .NET and ASP .NET,
- ⇒ integrate OTP (One Time Password) in C# .NET and ASP .NET,
- ⇒ Count number of rows in a table using C# .NET and ASP .NET,
- ⇒ insert multiple checkbox value in database C# .NET and ASP .NET,
- ⇒ Show Transaction history between two date range C# .NET and ASP .NET,
- ⇒ How to create folder or directory in sever JSP, C# .NET and ASP .NET
- ⇒ Export data from database as csv file C# .NET and ASP .NET.

Note: Project work is mandatory after the completion of the training program.