

#Learn_from_Home

Asp.Net Professional

Course Code: LFH/DOTNET/04

Duration: 90 hours

Course Syllabus

INTRODUCTION

This industry oriented course is developed by both the Software development division & Training division of **ipsr solutions limited**. IPSR is a **public limited IT company** with 20 years of expertise in [Software product development](#), [Training services](#), [Placement services](#) & [Digital Marketing services](#). During the past 2 decades, IPSR has trained candidates from **50+ countries** and helped **40000+ candidates** to build their IT career. Our IT services division is a pioneer in development of **Academic solution products**, incorporating cutting edge technologies like Artificial Intelligence, Data Analytics and Machine learning. Live industry experts from this IT division contribute a major role in delivering this course. Our placement division is having **1500+ placement tie-up companies** and we are conducting [recruitment on all days](#).

The Course curriculum is designed and developed by a team of expertise panel lead by following academicians

- ❑ **Dr. Mendus Jacob, M.Sc., M.Phil., Ph.D., MloD**
 - ❑ M.D & C.E.O - IPSR & Valin Technologies, U.K.
 - ❑ Director - MCA, Marian College, Kuttikkanam (Autonomous)
 - ❑ Former Director of School of Applicable Mathematics, M.G. University.
 - ❑ Academician and Entrepreneur with 30+ years experience
- ❑ **Dr. Sunil Job K.A, M.Sc, M.Ed, M.Phil, Ph.D., RHCE**
 - ❑ Chief of Academic Solutions - IPSR
 - ❑ Former college Principal and a Specialist in Data Analytics & Machine Learning
 - ❑ Blogger and a Resource person for National conferences
 - ❑ Academician with 25+ years experience

What you'll learn

- ✓ .Net Framework Architecture, C# Language Basics, Functions, Arrays, Collections, Generics, OOPS
- ✓ Web Development Basics – HTML, CSS, JavaScript
- ✓ SQL Server, Server Controls, DB Programming with SQL Server, File Operations, Ajax Server Controls.
- ✓ MVC Architecture, Entity Framework, Razor View Engine, Ajax JQuery, Code first Approach.

Description

This course covers the basic C# programming, web development technologies such as HTML, CSS and JavaScript, web application development using Asp.Net and MVC architecture, how to use strongly typed models in your views; how to build models with Entity Framework; and how to create your own custom validation attributes and develop dynamic applications in Code First Approach.

Course Outcome (CO)

While successfully completing this course, the learner will be able to:



→ Build and maintain applications with ASP.NET MVC in Code First Approach.

What does this course give you?

- Skills need to become a C# programmer
- Skills need to develop web applications using Asp.Net
- Skills need to develop dynamic web applications using ASP.NET MVC framework that enables a clean separation of concerns, fast development, and TDD friendly.

Course content

MS.NET Framework Introduction

- The .NET Framework - an Overview
- Framework Components
- MS.NET Base Class Library
- MS.NET Namespaces
- The Common Language Runtime (CLR)
- MS.NET Memory Management / Garbage Collection
- Common Type System (CTS)
- Common Language Specification (CLS)

VS.NET and Entry Point Method –Main

- Introduction to Project and Solution in Studio
- Entry point method - Main.



- Compiling and Building Projects

Language Syntax

- Basic C# Syntax
- Comments
- Data Types, Variables
- Value type and Reference Type
- Operators
- Flow Control and conditional statements

Arrays

- Initializing Arrays
- Accessing Array Elements
- Different Type of Arrays
- Array Functions

Methods

- Defining Methods in C#
- Calling Methods in C#
- Recursive Method Call .
- Passing Parameters to a Method
- Passing Parameters by Value

Strings

- Creating a String Object
- Properties of the String Class



- Methods of the String Class

Collections

- ArrayList
- SortedList
- Hash Tables
- Stack
- Queue

Generic Collections

- List<T>
- Dictionary<TKey,TValue>

OOPs-Concept

- OOP's Overview.
- Classes and Objects
- Constructor –Types of Constructor
- Types of Inheritance
- Polymorphism
 - Overloading and Overriding
- Encapsulation
- Overview of Abstract Class & Interface
- Interface and abstract class with examples

Web Development Basics

- HTML
- CSS
- JavaScript



Web Application

- Creating Web form application
- Web Control Class
- Managing Server Controls
- Standard Webcontrols and Events
- Handling images
- Navigating Between Pages
- ListControls
 - Dropdownlist
 - Listbox
 - CheckboxList etc
- Creating
- Using file upload control and Restrictions

Validation Controls

- Asp.net validation controls
- Configuring validation controls

DATABASE Programing with SQL Server

ADO.NET (Working with Database)

- Overview of ADO.NET
- Connection object



- Command object
- Execution Methods
- Data Readers
- Forms with database connectivity

Disconnected Architecture

- SqlDataAdapter
- Dataset
- Datable
- Working With DataControls(Gridview)
- GridView Operations

State management

- Preserving state in web applications
- Client and Server side StateManagement
- Create a simple Registration Form using StateManagement

MasterPage and Themes

- Configuring Master Page creating Themes
- Applying Themes
- Applying External Style Sheet
- Working with Template

DataBase Connection with Different Architecture

- Introduction of Two tier Architecture
- Working with Two Tier Architecture
- Introduction of Three tier Architecture



- Working with Three Tier Architecture
- Working with Stored Procedure

File Operation

- File I/O Streams
- Working with Directory and Files
- Read and Write File

Ajax Server Controls

LINQ

- Introduction to LINQ
- LINQ to DataSet
- LINQ to SQL
- LINQ to XML

MVC

- MVC Architecture
- Understand the MVC design pattern and how it's applied in ASP.NET MVC

- MVC folders
- MVC layout
 1. Html helpers
 2. Razor
 3. Template Integration
 4. The _viewstart file
- Adding a Model
- Adding a View
- Adding a Controller



- Routing
- Types of ActionMethods
- Passing data from controller to view
 1. ViewData
 2. ViewBag
 3. TempData
- Entity Framework
 - Code first approach
 - a. DB Program using Entity Framework(CRUD Operations)
 - b. Sessions
 - c. Ajax and jQuery
 - d. Image/File uploading,

Contact Us

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We have branches at Kochi, Thiruvananthapuram, Calicut and Bengaluru.