enosis learning
Creating Software Professionals

FullStack.Net Course Contents

The Course Content Includes

1. Introduction To Microsoft.Net
2. C#.Net Along with OOPs Concepts
3. SQL SERVER
4. ADO.NET
5. HTML / HTML 5,CSS /CSS3 & JAVASCRIPT, Bootstrap
6. ASP.NET
7. ASP.NET MVC WITH ENTITY FRAMWORK & ADO.NET
8. WEB API
9. JQUERY

Imp Notes

- Assignments & Tests will be conducted after each topics
- Two Projects
  o One using C#,SQL SERVER, ADO.NET, HTML, CSS, BOOTSTRAP, ASP.NET
  o One using ASP.NET MVC, EF, WEB API, JQUERY

.Net & C# with OOPs Course Contents

C#	
Chapter 1 : Introduction to Micorosoft.Net (Day 1,2)	**Chapter 2 : Language Fundamentals (Day 3,4)**
• Evolution of Microsoft.NET • Architecture of Microsoft.Net • Introduction to .Net Framework 4.0 • What is MSIL? • CLR • .NET Languages • Assembly in .Net –Types of Assembly • The Framework Class Library • Introduction to Visual Studio .NET • Different Types of Projects • Understanding Project & Solution in VS.Net • Entry Point Main Method • Compiling & Building a Project	• Comments and Documenting • Syntax comparison of C# and VB.NET • Data Types (Value types ,Reference Types) • Variables • Operators • Conditional Statements • Switch Case statements • Looping Statements • Functions • Console IO **Assignment1**

Chapter 3: Language Features (Day 5)
- Boxing and Unboxing
- Iteration and Flow of Control
- Arrays(One Dimensional, Two Dimensional, Multidimensional)
- Array Methods
- Structures
- Enumerations

Assignment 2

Chapter 4: OOPs Concepts (Day 6,7)
- Object Oriented Programming
- Classes & Objects
- Methods, Properties
- Constructors
- Property
- Types of Constructors
- Inheritance
- Types of Inheritance
- Polymorphism (Overloading ,Overriding)
- Abstraction
- Encapsulation
- Interfaces
- Abstract Class

Assignment 3

Evaluation 1 : TEST / EXAM TO GAUGE THE PERFORMANCE   (Mockup Interview)

Chapter 5: Types of Classes, DLL (Day 8,9,10)
- Partial Classes, Partial Methods
- Sealed Class
- Static Class
- Extension Methods
- Namespaces
- DLL
- Creating a dll file
- Advantage of DLL
- Using DLL in different application

Assignment 4

Chapter 6: Exception Handling (Day 11,12)

- Defining Exception
- Understandings try and catch keywords
- Using "finally" block
- "using" statement
- Throwing exceptions
- Creating User defined/Custom Exception class

Assignment 5

Chapter 7 : File Handling(Day 13,14)

- Understanding Streams
- Working with System.IO namespace
- Creating and Reading Text Files
- Working with DriveInfo class
- Working Directory Class

Chapter 8: Collection Framework (Day 15,16)
- Introducing Collections.
- Benefits of Collection Classes.
- Understanding and using commonly used collections.
- ArrayList, HashTable, Lists

• Working with File Info class **Assignment 6**	• Constraint on Type Parameters. **Assignment 7**

Chapter 9 : Delegates & Events (Day 17)	**Chapter 10 : Threading (Day 18)**
• What is Delegate & Why Delegate • Creating a Delegate – • Singlecast Delegate • Multicast Delegate **Assignment 8**	• Understanding Thread & Process • Difference between Single & Multi Thread Application • Creating Threads ,Thread Methods **Assignment 9**

Evaluation 3 :TEST / EXAM TO GAUGE THE PERFORMANCE   (Mockup Interview)

ADO.Net

Chapter 11 : Introduction to Ado.net (Day 19)	**Chapter 12 : Advanced Ado.net (Day 20)**
• ADO.NET Overview • .Net Data Providers • Creating Connections with Databases • Understanding Commands • Creating Commands • Executing Commands • Execute Insert, Update , Delete **Assignment 10**	• Connected & Disconnected Architecture • Data Readers • Datasets • Data Tables • Data Adapters • Reading Data using Connected Architecture • Reading Data using Disconnected Architecture • Working with Transactions **Assignment 11**

Evaluation 4 :FINAL TEST / EXAM TO GAUGE THE PERFORMANCE   (Mockup Interview)

3. ASP.NET

ASP.Net

enosis learning
Creating Software Professionals

Chapter 1: Introduction to ASP.NET (Day 1,2,3)	**Chapter 2: Understanding & Using Asp.Net Controls (Day 4,5,6)**
• Introduction to Client side & Server side programing • What is ASP.NET • What is Page in ASP.NET • Page Layout • Understanding Asp.Net Page • Understanding Design View & Code Behind • Relating Design View with Code Behind • Events of Asp.Net Page • Page Life Cycle • Page Postback • Static & Dynamic Controls • Introduction to Asp.Net Controls • Understanding attributes of Asp.Net Controls • Events of Asp.Net Controls • Understanding & Using Label Controls • Understanding & Using Textbox Controls • Understanding & Using Button Controls **Assignment1**	• Understanding & Using Hyperlink Controls • Understanding & Using Checkbox Controls • Understanding & Using Radio Button Controls • Understanding & Using File Upload Controls • Understanding & Using DateTime Controls • CURD Operation using Asp.Net Controls • Creating Registration forms and submitting data into databases • DropDownList • Binding DropDownList with Databases • Events of Dropdown List • Navigation controls **Assignment2**
Evaluation 1 : TEST / EXAM TO GAUGE THE PERFORMANCE	**(Mockup Interview)**
Chapter 3 : Validation (Day 7)	**Chapter 4: GridView (Day 8,9)**
• Introduction to Validation • Use of Validation • Client Side Validation and Server Side Validation • Validation controls in Asp.Net • RequiredFieldValidator • CompareValidator • RangeValidator • RegularExpressionValidator • Validation Summary in Asp.Net **Assignment3**	• Use of GridView • Binding of GridView • Events of GridView • Edit, Delete Database Operations using GridView **Assignment4**
Chapter 5 : UI Designing (Day 10.11) • Adding Style Sheets to Web Pages	**Chapter 6 : State Management(Day 12,13)** • Introduction to State Management • Understanding & Using Query Strings

• Creating Layouts , Menus • Creating Master Pages • Creating Child Pages • Creating User Controls **Assignment5**	• Understanding & Using View States • Understanding & Using Sessions • Understanding & Using Application objects • Understanding & Using Cookies **Assignment6**
Chapter 7: Exception Handling, Caching (Day 14,15) • Page Level Exceptions • Site Level Exceptions • Custom Error Pages • Tracing • Caching in Asp.Net • Page Output Caching • Data Caching, Page fragment caching **Assignment 7**	**Chapter 8 : Security in Asp.Net (Day 16,17)** • Introduction to Authentication & Authorization • Types of Authentication • Permission to Users & Roles **Assignment8**
Evaluation 2 : TEST / EXAM TO GAUGE THE PERFORMANCE (Mockup Interview)	
Chapter 9 : Configuration (Day 18) • Introduction to Config Files • Use of Config files in asp.net • Setting Configuration in web.config • Reading configuration from web.config	**Chapter 10 : IIS (Day 19)** • Understanding IIS • Architecture of IIS • Deployment of asp.net application in IIS • View Asp.net Application through Browser • Application Pools of IIS • Resetting IIS
Evaluation 3: FINAL TEST / EXAM TO GAUGE THE PERFORMANCE (Mockup Interview)	
PROJECT IMPLMENTATION USING C#,SQL SERVER, ADO.NET ,ASP.NET, HTML, CSS, BOOTSTRAP	

ASP.NET MVC

Asp.Net MVC Course Contents

Introduction to MVC

- What is MVC
- Introduction to Asp.Net MVC
- Difference between Asp.Net & Asp.Net MVC
- Why .Net Introduced Asp.Net MVC
- History of MVC
- Understanding MVC
- Understanding Model in MVC
- Understanding Controller in MVC
- Understanding View in MVC
- Understanding Architecture of MVC
- Flow of MVC Application
- Advantages of MVC

Exploring Controllers

- Viewdata, View bag & Tempdata
- Difference between Viewdata, Viewbag & Tempdata
- Sending data from Controller to View
- Sending data from View to controller
- Controller Action Methods
- Controller Action Method Parameter
- Controller Action Filters
- Controller Action Custom Filters

Creating MVC Application

- Creating MVC Application
- Understanding Linking of Model-View-Controller
- Creating View using html controls
- Creating Database Application using SQL Server
- Creating CRUD Application using MVC & SQL Server

Using HTML HELPER Controls in MVC

- Using Html Helper Controls

- o Label
- o Editor
- o TextBox
- o CheckBox
- o RadioButton
- o DropDownList
- o FileUpload
- o FileDownLoad
- o Grids
- Understanding Strongly Typed Helpers
- Html Helper Model Binding
- Html Helper Display and Editors Methods
- Html Helper Viewdata Binding

Validation and Annotation

- Model Validation
- Unobtrusive Client Validations
- Metadata Validation
- Client Side Validation
- Server Side Validation

Entity Framework and Linq

- Introduction to LINQ
- LINQ Syntax
- LINQ to SQL
- Introduction to Entity Framework
- Creating Application using EF in MVC
- Working with Database first Approach in MVC
- Auto generation of Model, Controller & View in MVC Using EF
- Working with Code first in MVC
- Understanding Model first approach
- MVC and EF Crud Operations
- MVC and EF Crud Operation Using BO Class
- MVC and EF Crud Operations Using Generic BO Class

Areas
- Understanding Areas in MVC
- Creating Areas in MVC
- Linking Areas in MVC

Filters
- Working with MVC Filters
  - o What are Filters?

   o Implementing Filters.
   o Authorize Filter.
   o Overriding filtering.
   o Customization of Filters.

Layouts in MVC

Partial View in MVC

Bundling and Minification

URL Routing

Security

- Authentication and Authorization
- Windows Authentication
- Forms Authentication
- Role Based Authentication
- Anti-Forgery Token

WEB API
- Introduction to WEB API
- Developing Single Page Application in MVC using Web API.
    - o WEB API Structure.
    - o Understanding WEB API.
    - o Using WEB API. For CRUD Operations.

JQuery and Ajax

- Introduction to JQuery
- Using JQuery from CDN
- Integration of JQuery with MVC
- Applying JQuery on the Page
- Working with JQuery Selectors
- JQuery Events
- Applying JQuery Validations
- Different types of Validations
- JQuery UI Controls
- Dialog Boxes of JQuery
- JQuery Ajax Helper Methods Controller

- Calling Actions from JQuery